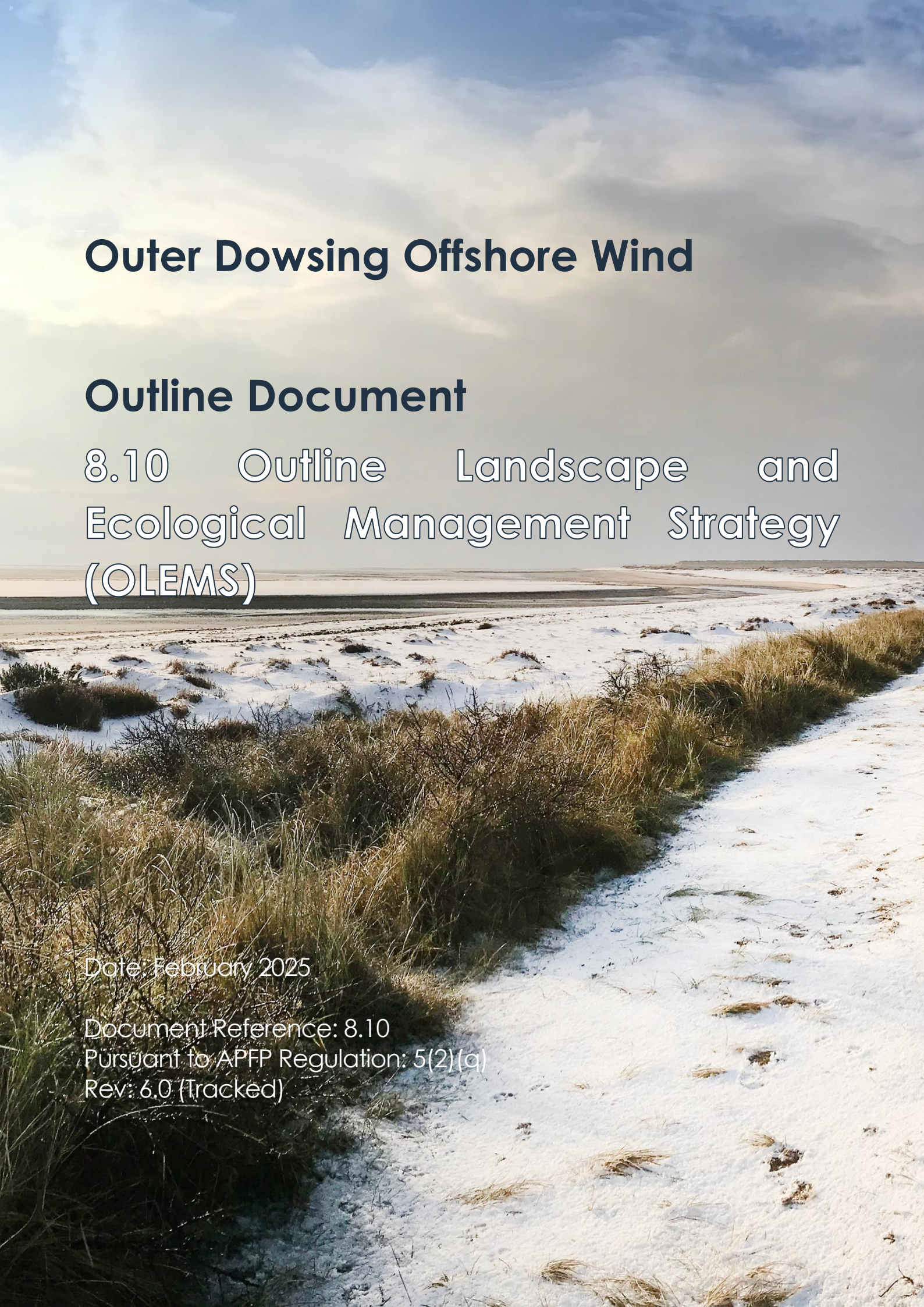

Outer Dowsing Offshore Wind

Outline Document

8.10 Outline Landscape and Ecological Management Strategy (OLEMS)

Date: February 2025

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Acronyms & Terminology

Acronyms

Acronym	Description
APHA	Animal and Plant Health Agency
BAP	Biodiversity Action Plan
BCT	Bat Conservation Trust
BMV	Best and Most versatile
bTB	bovine Tuberculosis
CFGM	coastal and floodplain grazing marsh
CIEEM	Chartered Institute of Ecology and Environmental Management
CoCP	Code of Construction Practice
CSCS	Construction Skills Certification Scheme
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
ECC	Export Cable Corridor
EcIA	Ecological Impact Assessment
ECoW	Ecological Clerk of Works
EMP	Ecological Management Plan
EnMS	Environmental Management System
eDNA	Environmental DNA
EPS	European Protected Species
EPSL	European Protected Species Licence
ES	Environmental Statement
FC	Forestry Commission
FLL	Functionally Linked Land
GCN	Great Crested Newt
GT R4 Ltd	The Applicant. The special project vehicle created in partnership between Corio Generation (a wholly owned Green Investment Group portfolio company), Gulf Energy Development and Total Energies
HDD	Horizontal Directional Drilling
INNS	Invasive Non-Native Species
JNCC	Joint Nature Conservation Committee
KPI	Key Performance Indicator
LCC	Lincolnshire County Council
LEDPP	Landscape and Ecology Design Principles Plan
LMP	Landscape Management Plan
LPA	Local Planning Authority
LWS	Local Wildlife Site
LWT	Lincolnshire Wildlife Trust
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MS	Method Statement
NE	Natural England

Acronym	Description
NERC	Natural Environment and Rural Communities
NGSS	National Grid Onshore Substation
NNSS	Non-Native Species Secretariat
ODOW	Outer Dowsing Offshore Wind (The Project)
OHPL	Overhead Power Line
OLEMS	Outline Landscape and Ecological Management Strategy
OnSS	Onshore Substation
PEA	Preliminary Ecological Appraisal
PEIR	Preliminary Environmental Information Report
PPEIRP	Pollution Prevention and Emergency Incident Response Plan
PRF	Potential Roost Feature
PRoW	Public Right of Way
RAMs	Reasonable Avoidance Measures
RPA	Root Protection Area
RSPB	Royal Society for the Protection of Birds
SPA	Special Protection Areas
SSSI	Site of Special Scientific Interest
TJB	Transition Joint Bay
UK	United Kingdom

Terminology

Term	Definition
400kV cable	High-voltage cables linking the OnSS to the NGSS.
400kV cable corridor	The 400kV cable corridor is the area within which the 400kV cables connecting the onshore substation to the NGSS will be situated.
The Applicant	GT R4 Ltd. The Applicant making the application for a DCO. The Applicant is GT R4 Limited (a joint venture between Corio Generation, TotalEnergies and Gulf Energy Development (GULF)), trading as Outer Dowsing Offshore Wind. The Project is being developed by Corio Generation (a wholly owned Green Investment Group portfolio company), TotalEnergies and GULF.
Avoidance	Avoidance is used where an impact has been avoided, e.g., through changes in the Project design.
Baseline	The status of the environment at the time of assessment without the development in place.
Biodiversity Net Gain	An approach to development that leaves biodiversity in a measurably improved state than it was previously. Where a development has an impact on biodiversity, developers are encouraged to provide an increase in appropriate natural habitat and ecological features over and above that being affected, to ensure that the current loss of biodiversity through development will be halted and ecological networks can be restored.

Term	Definition
Cable ducts	A duct is a length of underground piping which is used to house the Cable Circuits.
Compensation	Compensation describes measures taken to offset residual effects, i.e., where mitigation *in situ*. is not possible.
Connection Area	An indicative search area for the NGSS.
Cumulative Effect	The combined effect of the Project acting cumulatively with the effects of a number of different projects, on the same single receptor/resource.
Cumulative Impact	Impacts that result from changes caused by other past, present or reasonably foreseeable actions together with the Project.
Damage	Damage here means any form of impact such as loss of habitat, soil compaction, changes in hydrology, nutrient enrichment, pollution, disturbance of species, spread of invasive species, etc.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP) from the Secretary of State (SoS) for Department for Energy Security and Net Zero (DESNZ).
Effect	Term used to express the consequence of an impact.
Enhancement	Enhancement is the provision of new benefits for biodiversity that are additional to those provided as part of mitigation or compensation measures, although they can be complementary.
Environmental Statement (ES)	The suite of documents that detail the processes and results of the Environmental Impact Assessment (EIA).
Haul Road	The track within the onshore ECC which the construction traffic would use to facilitate construction.
Impact	An impact to the receiving environment is defined as any change to its baseline condition, either adverse or beneficial.
Indicative Working Width	The indicative working width within the Export Cable Corridor (ECC), required for the construction of the onshore cable route.
Intertidal	Area where the ocean meets the land between high and low tides.
Joint Bays	A joint bay provides a secure environment for the assembly of cable joints as well as bonding and earthing leads. A joint bay is installed between each length of cable.
Landfall	The location at the land-sea interface where the offshore export cable will come ashore.
Link Boxes	Underground chambers or above ground cabinets next to the cable trench housing electrical earthing links.
Minimisation	Minimisation is a measure to reduce a specific negative impact *in situ*.
Mitigation	Mitigation measures, or commitments, are commitments made by the Project to reduce and/or eliminate the potential for significant effects to arise as a result of the Project. Mitigation measures can be embedded (part of the project design) or secondarily added to reduce impacts in the case of potentially significant effects.

Term	Definition
National Grid Onshore Substation (NGSS)	The National Grid substation and associated enabling works to be developed by the National Grid Electricity Transmission (NGET) into which the Project's 400kV Cables would connect.
Onshore Export Cable Corridor (ECC)	The Onshore Export Cable Corridor (Onshore ECC) is the area within which the export cable running from the landfall to the onshore substation will be situated.
Onshore Infrastructure	The combined name for all onshore infrastructure associated with the Project from landfall to grid connection.
Onshore substation (OnSS)	The Project's onshore substation, containing electrical equipment to enable connection to the National Grid.
Order Limits	The area subject to the application for development consent. The limits shown on the works plans within which the Project may be carried out.
Outer Dowsing Offshore Wind (ODOW)	The Project
Pre-commencement and post-construction	The phases of the Project before and after construction takes place.
Preliminary Environmental Information Report (PEIR)	The PEIR was written in the style of a draft Environmental Statement (ES) and provided information to support and inform the statutory consultation process in the pre-application phase. The PEIR documentation is superseded by Project's ES that will accompany the application for the Development Consent Order (DCO).
Priority Habitats	The list of habitats of principal importance in England includes 56 habitats first identified as Priority Habitats in the UK Biodiversity Action Plan (UK BAP) and subsequently adopted under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.
The Project	Outer Dowsing Offshore Wind including proposed onshore and offshore infrastructure
Receptor	A distinct part of the environment on which effects could occur and can be the subject of specific assessments. Examples of receptors include species (or groups) of animals or plants, people (often categorised further such as 'residential' or those using areas for amenity or recreation), watercourses etc.
Study Area	Area(s) within which environmental impact may occur – Area within which the desk-based studies for habitats and species have been undertaken. Habitats and species have bespoke study areas which are described within this chapter. See also Zone of Influence.
Survey Area	Area within which the field-based surveys for habitats and species have been undertaken. Habitats and species may have bespoke survey areas
Transition Joint Bay (TJBs)	The offshore and onshore cable circuits are jointed on the landward side of the sea defences/beach in a Transition Joint Bay (TJB). The TJB is an underground chamber constructed of reinforced concrete which provides a secure and stable environment for the cable

Term	Definition
Trenched technique	Trenching is a construction excavation technique that involves digging a narrow trench in the ground for the installation, maintenance, or inspection of pipelines, conduits, or cables.
Trenchless technique	Trenchless technology is an underground construction method of installing, repairing and renewing underground pipes, ducts and cables using techniques which minimize or eliminate the need for excavation. Trenchless technologies involve methods of new pipe installation with minimum surface and environmental disruptions. These techniques may include Horizontal Directional Drilling (HDD), thrust boring, auger boring, and pipe ramming, which allow ducts to be installed under an obstruction without breaking open the ground and digging a trench.
Zone of Influence	The area(s) over which ecological receptors may be affected by the biophysical changes caused by the Project and associated activities.

Reference Documentation

Document Number	Title
~~APP-058~~ 1.3 (Version 2)	Project Description
~~APP-059~~ 6.1.4 (Version 2)	Site Selection and Consideration of Alternatives
APP-076	Onshore Ecology
APP-077	Onshore Ornithology
~~APP-081~~ 6.1.26 (Version 2)	Noise and Vibration
~~APP-083~~ 6.1.28 (Version 3)	Landscape and Visual Assessment
8.1 ~~(Version 2)~~ (Version 6)	Outline Code of Construction Practice
8.1.3 ~~(Version 2)~~(Version 5)	Outline Soil Management Plan

1 Introduction

1.1 Background

1. This Outline Landscape and Ecological Management Strategy (OLEMS) has been prepared on behalf of GT R4 Limited, trading as Outer Dowsing Offshore Wind ("the Project"), and hereafter referred to as the 'Applicant'.
2. It sets out in-principle measures designed to avoid, reduce, mitigate or compensate for potential impacts on landscape and biodiversity resources arising from the onshore elements of the Project, identified within the relevant chapters of the Environmental Statement (ES):
   - Volume 1, Chapter 3: Project Description (Document Reference APP-058);
   - Volume 1, Chapter 21: Onshore Ecology (Document Reference APP-076);
   - Volume 1, Chapter 22: Onshore Ornithology (Document Reference APP-077); and
   - Volume 1, Chapter 28: Landscape and Visual Assessment (Document Reference APP-083).
3. This OLEMS relates to the construction of the Landfall, Onshore Export Cable Corridor (ECC),400kV cable corridor and Onshore Substation (OnSS). A full description of the Project is provided in ES Volume 1, Chapter 3: Project Description (Document Reference APP-058) and the indicative onshore infrastructure is shown in ES in Volume 2, Chapter 3, Figure 3.4 (document reference APP-089), however in summary:
   - The Landfall is where the offshore export cables will come ashore utilising Horizontal Directional Drilling (HDD) and will connect to the onshore export cables at the Transition Join Bay (TJB) area located in agricultural land west of Roman Bank road.
   - The onshore ECC and 400Kv cable corridor would be constructed primarily utilising open cut trenching techniques which are the standard means of cable installation. Where an open trenching approach is not possible or the Project have committed to avoiding certain features, for example, designated sites and certain roads and watercourses, trenchless techniques would be employed.
   - The OnSS construction would involve earthworks, including grading and drainage; the foundations would be piled or ground bearing, based on the prevailing ground conditions.
   - The OnSS would be connected to a National Grid Onshore Substation (NGSS), via a 400kV cable corridor and the OnSS construction would involve earthworks, including grading and drainage; the foundations would be piled or ground bearing, based on the prevailing ground conditions.
4. The Project is shown in Figure 3.5 of Volume 2 Chapter 3 Project Description (Document Reference APP-089), which illustrates the indicative locations of onshore infrastructure development within the Order Limits, as referred to in this document.

1.2 Purpose of this OLEMS

5. This OLEMS sets out the key landscape and ecology principles to inform the Landscape Management Plan (LMP) and Ecological Management Plan (EMP) which require to be submitted to the relevant planning authority for approval prior to construction in accordance with the requirements of the Development Consent Order (DCO).
6. The purpose of this OLEMS is to:
   - Set out the key measures to avoid, reduce, mitigate, or compensate for potential impacts on landscape and biodiversity resources, that may be required prior to, during and post construction (where applicable);
   - Provide an outline of the management required to ensure that both created and enhanced habitats achieve target condition, and that populations of species are maintained at favourable conservation status; and
   - Ensure compliance with the relevant legislation relating to ecology.
7. The LMP and EMP will be drafted in accordance with this OLEMS and will set out the measures that the Applicant and their contractors would be required to adopt. The LMP will be submitted to Lincolnshire County Council (LCC) in consultation with and the relevant local planning authorities (LPAS) and the EMP will be submitted to LCC in consultation with the relevant LPAs and the relevant statutory nature conservation body for approval prior to construction.
8. As required by the DCO, the EMP will include the following specific plans:
   - A protected species mitigation management plan;
   - A nesting birds management plan; and,
   - A non-native invasive species management plan.

1.3 Structure of this OLEMS

9. The OLEMS is divided into two main sections, Section 2 relating to landscape and Section 3 relating to onshore ecology and ornithology. Although presented separately, most habitat creation measures presented within the landscape section will serve to mitigate impacts upon ecological receptors, and an integrated approach to the development of designs has been taken. For example, the design of landscape planting has taken account of ecological principles such as the use of locally representative species.
10. Both sections take a chronological approach to structure, setting out measures required from enabling works, and progressing through the construction stages, finally to reinstatement and monitoring/management.

1.3.1 Document Version

11. The OLEMSs is a dynamic document designed to evolve in parallel with changes in the project's detailed design, stakeholder input, and any pertinent information that may arise throughout the project lifecycle.

12. Annex A to this document focuses on the mitigation measures and rationale for their adoption concerning the following species: bats, great crested newt (GCN), otter and water vole. A separate, confidential annex (Annex B) considers badgers.
13. In light of Natural England's feedback concerning reptiles (H63) and ancient trees (H94) (Natural England, 2024), references to Natural England's Standing Advice have been integrated within Section 3.6.1, which pertains to ancient trees, and Section 3.7.4, which addresses reptiles.

1.4 Related Documents

14. This OLEMS makes reference to Chapter 3 Project Description (Document Reference APP-058), Chapter 21 Onshore Ornithology (Document Reference APP-076), Chapter 22 Onshore Ecology (Document Reference APP-0772) and Chapter 28 Landscape and Visual Assessment (LVIA) (Document Reference APP-083).
15. Chapter 28 (Document Reference APP-0838) consider the potential effects of the removal of features in the landscape including vegetation cover such as hedgerows, ditches, trees and woodlands.
16. Chapter 21 (Document Reference APP-076) and Chapter 22 (Document Reference APP-077) consider the impacts of the Project on onshore ecology and onshore ornithology.
17. Specific details of some notable or sensitive ecological receptors (e.g. badger setts) have been omitted due to the potential risk to these species if locations were to enter the public domain. This information is provided in a confidential Volume 3, Appendix 21.5 CONFIDENTIAL Badger Desk Study and Field Survey (Document Reference APP-194).

2 Landscape Mitigation Strategy

2.1 Primary Landscape Mitigation

18. In respect of the onshore elements of the Project, primary mitigation has involved careful site selection and the sensitive siting and design of the onshore infrastructure, in order to reduce or avoid potential impacts.
19. The site selection process considered a range of environmental and technical constraints, including ensuring a good separation from settlement and rural properties, avoiding landscape elements, such as woodlands, trees and hedgerows, and considering issues such as flood risk (Volume 1, Chapter 4: Site Selection and Consideration of Alternatives (Document Reference APP-059)). The sensitivity of the surrounding landscape and of residents, road-users, workers and recreational users of the landscape was also a key consideration.
20. The capacity of the landscape to accommodate the onshore elements of the Project is assessed in relation to the natural screening afforded by landform, woodlands and trees and the degree to which other surrounding infrastructure and buildings influence visual screening. As screening is limited in this landscape, especially in respect of the area around the OnSS, the approach has been to locate the onshore ECC and the OnSS with the maximum separation from nearby settlements and rural properties as is practicable.
21. The close proximity of existing electricity overhead lines in the area around the OnSS provides a context of electrical infrastructure across the local and wider landscapes. There is also a more distant influence from the Spalding Energy Facility, located to the south of the OnSS.
22. Mitigation measures that were identified and adopted as part of the evolution of the project design (embedded into the project design) and that are relevant to Chapter 28 (Document Reference APP-083) are presented at Section 2.4 and Section 2.5.

2.2 Construction Phase Mitigation

23. Mitigation opportunities during the construction phase of works will primarily relate to the restrictions imposed on the working areas and measures identified in the Outline Code of Construction Practice (CoCP) (Document Reference APP-268).
24. This OLEMS and the Outline CoCP (Document Reference APP-268) seek to stipulate measures to avoid, reduce or offset environmental effects of the construction works, including those related to landscape elements, landscape character and visual amenity. The Outline CoCP (Document Reference APP-268) sets out measures to protect trees and hedgerows by using protective barriers such as fencing in areas where construction will take place.
25. Sensitive siting of the construction compound areas associated with the landfall, onshore ECC and the OnSS, combined with the commitment to using trenchless techniques along the onshore ECC have been important in reducing the loss of existing trees and hedgerows during the construction phase. The detailed design of these compounds and access into them will also look to avoid losses and protect existing trees and hedgerows during the construction phase.

2.3 Operational Phase Mitigation

26. Once the construction phases of the onshore elements are complete, replacement planting, ~~and~~ new planting and habitat reinstatement will be implemented at the landfall, onshore ECC, 400kV cable corridor and around the OnSS. Opportunities to implement planting on completion of the construction of phased elements in the Project will be optimised, for example replacement planting undertaken on completion of construction works at each segment of the onshore ECC and 400kV cable corridor and in outlying areas around the OnSS.
27. Planting will form the principal landscape mitigation measure and landscape and visual effects will change over time as mitigation planting establishes and matures. The planting and restoration of habitat types forms part of the implementation of the onshore elements of the Project.
28. A standard 5-year maintenance period will be applied. This will include measures to ensure the successful establishment of the mitigation planting including watering, weeding, removing tree guards and replacing failed planting. The details of the maintenance operations will be presented in the final LMP.

2.4 Landfall, Onshore ECC and 400kV cable corridor Landscape Mitigation

Principles

29. For the ES, the onshore ECC ~~is~~ has been refined down to a typical 80m working width and a typical 60m permanent corridor, as presented in Figure 3.3 (Document Reference: APP-089). This process involved the careful siting of the route to ensure a good separation distance from settlements and rural properties. Furthermore, the design of the onshore ECC and 400Kv cable corridor includes approximately 216 locations along the approximate 70km route (See ES Volume 2, Figure 3.4: Document Reference APP-089) , where trenchless techniques will be used, thus avoiding the physical and visual effects associated with open cut trenching across a substantial length of the route.
30. The landscape mitigation strategy for the onshore ECC and 400kV cable corridor has helped in the refinement of the route and in identifying where trenchless techniques are required to avoid sensitive landscape features such as woodlands and hedgerows. The landscape and visual strategy, that has guided the design of these onshore components, is as follows:
    - Achievement of the best environmental fit of the 80m working width cable route where practicable, particularly in relation to maintaining separation from settlement and rural properties;
    - Utilising and locating trenchless techniques for the installation of the onshore ECC to reduce the loss of hedgerows, trees and woodland along the cable route;
    - Reinstatement of removed sections of hedgerows, or suitable replacement hedgerows provided for displaced or severed sections of hedgerows where practical;

- Sensitive siting of construction compounds and cable installation compounds such that the locations have been carefully selected, taking into account landscape and visual receptors to reduce impacts during the construction period where practicable;
- Restoration of all temporary works and construction areas in relation to re-establishment of suitable habitats and ground cover vegetation, as soon as is reasonably practicable;
- Protection of all retained trees during the construction phase where practicable; and,
- Footpaths or cycleways that are temporarily disrupted by the onshore ECC, 400kV cable corridor or landfall will be temporarily diverted and then reinstated as part of the mitigation strategy as set out in the final ~~-~~Public Access Management Plan (PAMP) which will be in accordance with the Outline PAMP (Document Reference APP-291).

31. Following construction of the landfall, onshore ECC and 400kV cable corridor, disturbed landcover and habitats would be reinstated. The overall aim of the reinstatement would be the re-establishment of existing ground cover, or returning the disturbed ground to its original agricultural use and habitat type. ~~Where possible~~, E~~e~~xcavated soils will be carefully stored and where possible reinstated as soon as possible. Hedgerow replacement will comprise species rich and locally representative species, and where trees are removed, they will be replaced with heavy standards at a ratio of 3:1.

2.5 OnSS Landscape Mitigation

2.5.1 Baseline Context

32. The OnSS will be located at Surfleet Marsh, an area which comprises predominantly arable farmland in a flat, reclaimed landscape. The fields are open and exposed with only occasional enclosure from hedgerows and tree belts, albeit with clusters of trees typically occurring around farmsteads and other rural properties.
33. The area in which the OnSS is located is bound to the southwest by the Overhead Line (OHL), to the northwest by the A16, and to the southeast by the rural road, Marsh Drove. To the northeast the landscape is relatively open, and it is from this direction that the onshore ECC will approach to meet the OnSS. Within the wider landscape, the River Welland lies further to the southeast, defined by the steep enclosing banks which contrast with the flat and low-lying farmland. There is a distinct lack of hedgerows and tree cover in this landscape, with the exception of planting associated with the A16, and occasional trees associated with farmsteads and other rural properties.

2.5.2 Outline Planting Principles

34. The purpose of the mitigation planting associated with the OnSS is two-fold;
    - to create an effective screen that will reduce and/or eliminate significant effects on landscape character and visual amenity; and,
    - to enhance biodiversity.

35. Despite the Lincolnshire Fens being characterised by an open and denuded landscape, the importance of reintroducing trees is recognised. At just 4%, and compared to the England average of 10%, Lincolnshire has one of the lowest tree coverage rates in the country. Lincolnshire County Council (LCC) recognises the importance of increasing tree coverage in light of the twin Climate and Nature Crises. LCC have been supporting tree planting projects and hope ultimately to reach the target of 750,000 new trees planted in the next couple of years.
36. The proposed mitigation planting for the OnSS is shown in Figure 2 of this report. This shows a framework comprising bands of planting that connect to form an effective screen, as well as a network of corridors for nature. The bands of planting comprise woodland belts where possible, and hedgerows where restrictions over, or under cables apply.
37. The bands of planting are mostly located along field boundaries or along roadsides. There are benefits to this approach in respect of both land use and screening. The OnSS is located in best and most versatile (BMV) agricultural land. Rather than introducing woodland blocks or belts that would occupy fields or fragment fields and make them unusable for farming, the containment of planting along the field boundaries would minimise the disruption and enable farming to continue across most of the land surrounding the OnSS. Furthermore, the belts of woodland planting will create shelter from the winds that affect this exposed landscape and in so doing may help increase crop productivity.
38. In terms of screening, this is most effective when the planting is close to the visual receptors, such as road-users or residents, for example along roadsides and around associated rural properties, as it will create a screen in a shorter period, than if planted further away from the visual receptors and closer to the OnSS. Furthermore, the framework establishes layers of planting at different ranges between the OnSS and the surrounding visual receptors. The combined effect is a more substantial screen in which gaps in one layer are typically filled by another layer at a different range.
39. The landscape framework has been made possible by combining bands of planting along field boundaries and roadsides within the Order Limits around the OnSS. The extent of the mitigation planting shown around the OnSS is notably wide ranging and this has enabled an especially effective screen that will help to mitigate landscape and visual effects within 5 to 15 years of the approximately 35 year operational life of the Project.
40. Photomontages illustrating the effect of the mitigation planting in respect of the representative viewpoints are shown in the set of visualisations in Onshore Substation Visualisations (Computer Generated Indicative Model) (document reference APP-125to APP-137). These show the mitigation planting following 15 years of growth, with the calculation of growth rates discussed further below.

2.5.3 Proposed Planting

41. The proposed mitigation planting for the OnSS comprises native woodland, hedgerow and grassland species. The key aims of the proposed mitigation planting will be as follows:
    - To create screening from key visual receptors in the surrounding area such as rural farmsteads and properties, rural roads and Public Rights of Way (PRoWs);

- To improve the appearance of the OnSS by reducing the perceived scale and mass of the OnSS and presenting a natural and organic screen and/or backdrop that will contrast with the built form;
- Increasing the biodiversity potential of the heavily modified agricultural landscape prevalent in these areas; and,
- Exploring opportunities to connect with existing hedgerows and woodland areas to contribute to an improved integrated green network for wildlife.

42. The mitigation woodland planting would comprise a mix of faster growing 'nurse' species and slower growing 'core' species. Nurse species, such as field maple, aspen, hazel and black poplar, would grow quicker so that after 15-years they would be approximately 6.8m to 8.3m in height. They would provide shelter to bring on core species, such as oak, elder, lime and willow. Whilst the nurse species would be sufficiently fast growing to provide substantial screening of the OnSS after 15-years, the core species would outlive the nurse species and provide a preferred native woodland with a more robust structure closer in character to other woodland copses in this area.
43. The growth rates of 6.8 to 8.3m over 15 years presents a conservative estimate in respect of common native species and is based on guidance set out in A Woody Plant Selection Guide (Skinner, D., 1987). The calculations are run on a base height for whips at 0.8m and then average predicted growth rates of between 0.4 and 0.5m for the following 15 years. While growth rates may be slower than this over the first 3 to 5 years, as the plants get established, typically growth will accelerate in the years that follow.
44. Proposed woodland planting could be spaced to maximise growth rate and ultimate screening potential. An example of this would be to plant approximately one plant per 1.5m^2 in natural groups and not too regimented, for example in randomly spaced species groups of three, five and seven plants. The precise detail of these spacings should form part of the planting schedule at a more detailed stage.
45. Hedgerow planting would comprise species rich hedgerows using locally representative species such as hawthorn, dogwood and holly. The proposed hedgerows and woodland planting could restore historic field boundaries and strengthen lines of existing field boundaries, connecting new planting to established hedgerows and tree cover in the area, thereby complimenting the existing landscape structure. Hedgerow planting would typically involve six hedging plants set out in a staggered row over each linear metre. It is assumed that hedgerows would be managed to maintain a height of approximately 1.5m, but could be grown taller to 2.5m or more.

46. The quality of the topsoil on the site has not been tested. The Land Information System classifies most of the Lincolnshire Fens as Soilscape 21 (LandIS Website). The general description is *'loamy and clayey soils of coastal flats with naturally high groundwater'* and while the drainage is naturally wet, the fertility is lime rich to moderate. The extensive drainage system across this landscape helps moderate issues of flooding and while the lighter soils are highly productive and support a wide range of crops, heavier soils are less easily worked and favour grass.

47. Given the existing and historical agricultural use of this area, it is considered likely to be of relatively good quality, although potential for both flooding and drought will be taken into consideration of increasing risks associated with climate change and species selected accordingly. In relation to preparation of the planting areas, the following guidelines could be followed: ensure the area is weed free prior to planting; and break existing ground identified for tree planting to a suitable depth, harrow and remove large stones.

48. The final design for the landscape planting will be developed in line with the design review process, as set out in the Design Approach Document (Document Reference APP-292) and the Onshore Design Principles ~~Document~~ Statement (Document Reference APP-293). The plans will be submitted for approv~~ed~~al by the ~~Local Planning Authority~~Lincolnshire County Council. Regardless of potential refinements to the final planting layout, the proposed screening effect will still be achieved and the conclusions of the LVIA chapter will remain unchanged.

2.5.4 Advanced Planting

49. In situations where it would be practical to undertake advanced planting and in locations where there would not be any interference with access or construction works, mitigation planting could be implemented during or even prior to the early phases of the construction of the OnSS. Where implemented, advanced planting could potentially give the woodland in these areas an additional 1 to 4 years of growth prior to completion of construction and commencement of operation. This will contribute to the height of the planting and reduce the period which it will take the planting to create an effective screen, especially where planted adjacent to road-sides and settlement.

50. In order to ensure a worst-case scenario is assessed in the LVIA, advanced planting has not been considered despite there being potential for this to be achieved, especially in respect of the planting areas that are more distant from the OnSS and peripheral planting areas around the OnSS.

2.5.5 Maintenance and Management

~~50.~~51. The planting associated with the OnSS will be subject to an aftercare period covering the lifetime of the project. This will include a replacement planting period of five years, consistent with the replacement planting period to be applied to all planting associated with the onshore elements of the project. As set out at paragraph 32, replacement planting will be carried out in accordance with Requirement 11 of the draft DCO (document reference 3.1). The maintenance and management period will extend beyond this to ensure after care for the lifetime of the project and the detail of these measures will be set out in the LMP.

3 Ecological Conservation and Mitigation Strategy

3.1 Scope

3.1.1 Spatial Scope

~~51.~~52. This OLEMS relates to the onshore elements of the Project only. In the context of onshore ecology, this refers to the elements of the Project landward of Mean High Water Springs (MHWS) and in the context of ornithology this is considered to be landward of Mean Low Water Springs (MLWS). Details of ecological mitigation measures relating to the offshore elements of the Project, including intertidal and subtidal environments, are provided in the relevant chapters of the ES:

- Volume 1, Chapter 9: Benthic and Intertidal Ecology (Document Reference APP-064);
- Volume 1, Chapter 10: Fish and Shellfish Ecology (Document Reference APP-065);
- Volume 1, Chapter 11: Marine Mammals (Document Reference APP-066); and
- Volume 1 Chapter 12: Offshore and Intertidal Ornithology (Document Reference AS1-040).

~~52.~~53. Within the onshore environment, avoidance, mitigation, compensation and enhancement measures (as defined in the ES and Sections 3.3 to 3.8), will be restricted to the areas within the Order Limits. Further details of how on-site mitigation, compensation and enhancement measures will be secured are provided in Section 3.8 of this document.

~~53.~~54. To aid description, the Order Limits has been divided into segments as set out in Table 1~~Table 1~~. The location of important ecological features is described in relation to these segments in Table 2. The locations of each segment are illustrated in Figure 1.

Table 1 Segment References

Segment Name
ECC 1: Landfall to A52 – Hogsthorpe
ECC 2: A52 – Hogsthorpe to Marsh Lane
ECC 3: Marsh Lane to A158 - Skegness Road
ECC 4: A158 – Skegness Road to Low Road
ECC 5: Low Road to Steeping River
ECC 6: Steeping River to Fodder Dike Bank/Fen Bank
ECC 7: Fodder Dike Bank/Fen Bank to Broadgate
ECC 8: Broadgate to Ings Drove
ECC 9: Ings Drove to Church End Lane
ECC 10: Church End Lane to The Haven
ECC 11: The Haven to Marsh Road
ECC 12: Marsh Road to Fosdyke Bridge
ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove
ECC 14: Surfleet Marsh OnSS/Marsh Drove to Connection Area

3.1.2 Temporal Scope

3.1.2.1 Pre-commencement, Construction and Operational Phases

~~54.~~55. This OLEMS covers the pre-commencement phase, construction phase, creation/restoration phase and the operational phase aftercare period (detailed in Chapter 3 (Document Reference APP-058)) i.e. until such time as reinstatement measures are deemed to be successful. It also covers longer term management of habitat at the OnSS, for which full details will be included in the EMP. Where relevant, measures to be employed during preventative (planned) maintenance throughout the operational phase are also included within this OLEMS.

~~55.~~56. Measures which relate to the operational phase are highlighted in Sections 3.8 and 3.9 of this document, accepting that aftercare activities lasting up to five years will be performed during the operational phase.

~~56.~~57. A programme will be provided in the EMP, once further details of all the relevant measures have been developed and agreed post consent.

~~57.~~58. The extent or nature of any unplanned corrective maintenance required during the operational phase cannot be fully predicted at this stage.

~~58.~~59. Mitigation measures relating to any unplanned corrective maintenance during the operational phase are therefore not included within this document. Provision for the types of mitigation required for unplanned corrective maintenance will be included within the EMP.

3.1.2.2 Decommissioning Phase

~~59.~~60. It is anticipated that a separate EMP would be produced to cover the decommissioning phase as part of the proposed decommissioning plan. Therefore, the decommissioning phase is not covered in this document. Decommissioning measures would be based on updated ecological survey data and would adhere to relevant legislation and good practice guidelines in place at the time.

3.1.3 Technical Scope

~~60.~~61. Table 5.10 of Chapter 21 (document APP-076) and Table 22.6 of Chapter 22 (Document Reference APP-077) present the Important Ecological Features identified during the assessment.

~~61.~~62. Table 2 below provides a comprehensive list of all receptors, including ornithological features, that may be impacted by the Project without mitigation in place. The ecological features encompass those considered 'important' according to Chapter 21, as well as those of less than local significance to nature conservation (for example, drainage ditches), and features with legal protection (for example, badger).

Table 2 Summary of those Ecological and Ornithological Receptors requiring Mitigation

Ecological Receptor	Summary of Receptor	Location Details
Section 41 Priority Habitats		
Arable field margins (UKHab c1a, c1a5)	A total of 85~~4.8~~04 ha of c1a and 0.44ha of c1a5 exist within the Order Limits. A maximum total of 0.963~~9~~ ha of c1a will be permanently lost (with 87.5% (0.843ha) of the c1a permanently lost will be replaced with new hedgerow and woodland planting around the OnSS). A maximum total of 5.13~~7~~ ha temporarily impacted during construction.	Figures 6.2.21.3 and 6.2.21.4 of Chapter 21 (Document Reference AS1-057) show all priority habitat locations with temporary and permanent habitat loss. Figure 21.3.1 of Appendix 21.3 (Document Reference APP-191) illustrates the locations of hedgerows. Figure 21.2.1 of Appendix 21.2 (Document Reference APP-190) provides the location of ponds and other water bodies.
Hedgerows (including hedgerows with trees) (UKHab h2, h2a)	A total of 72~~3~~ hedgerows are present with the Order Limits. Of these, three were evaluated to be of importance using a precautionary approach, under the Hedgerow Regulations Assessment: ▪ Hedgerow 546 in ECC 5: Low Road to Steeping River. ▪ Hedgerow 1926: ECC 7: Fodder Dike Bank/Fen Bank to Broadgate ▪ Hedgerow 1928 in ECC 12: Marsh Road to Fosdyke Bridge Hedgerows 546, 1926 and 1928 lie within a trenchless zone and will not be directly affected.	Figure 21.3.1 of Appendix 21.3 (Document Reference APP-191) provides the locations of hedgerows.

Ecological Receptor	Summary of Receptor	Location Details
	A total of 372m of hedgerow, of which 313m is Priority Habitat (UKHab h2a) ~~371886 m of hedgerow~~ will be temporarily lost during construction.	
Other Habitats		
Ditches (UK Hab r2b)	A total of 408 ditches exist inside the Order Limits. Of these, 58 ditches lie within the trenchless zones and 355 are situated within working areas. Temporary loss of lengths of ditch will be experienced at open trench crossing points. Culverts will be temporarily installed to allow for construction of the haul road.	Figure 21.2.1 of Appendix 21.2 (Document Reference APP-190) provides results of the UK Habitat Classification Survey. Figure 6.2.21.1 (Document Reference AS1-057)) show temporary and permanent losses of UK Habitat types.
Trees (including veteran/ ancient) /woodland (UK Hab w)	There are no woodland blocks within the Order Limits. There are 146 trees within the Order Limits, of which 43~~52~~ are situated within areas impacted by construction ~~proposed for temporary~~ or permanent works, with the remainder assumed to be retained. No veteran or ancient trees noted within the Order Limits during the desk study, UK Habitat Classification surveys or preliminary roost inspections for bats.	
Protected/Notable Species		
Rare arable weeds and uncommon plants	No rare arable weeds or uncommon plants recorded within the Order Limits during the desk study or UK Habitat Classification survey. Loss of previously undetected plants could occur in temporary and permanent working areas.	Figure 6.2.21.1 (AS1-057show temporary and permanent losses of UK Habitat types.

Ecological Receptor	Summary of Receptor	Location Details
Eels	The aquatic habitats have been assessed as being of low quality for fish. However, there is potential for eel to migrate along the River Welland and The Haven.	Figure 6.2.21.10 (Document Reference APP-112) illustrate the sections of the River Welland and The Haven under consideration.
Amphibians (including GCN, common toad and smooth newt)	GCN were found to be largely absent from the landscape, apart from two isolated metapopulations around Segments ECC 3 and ECC 6 (located outside of the Order Limits but within 500m). A positive eDNA result was returned for Pond WM_42 which is located approximately 345 m east of the Order Limits at ECC 3 and is located adjacent to Ditch 626, which runs into and across the Order Limits. Common toad and smooth newt are likely to be present in surface water features and suitable terrestrial habitats. Temporary loss of terrestrial habitats may impact the metapopulations of GCN at ECC 3 and ECC 6. Temporary and permanent loss of aquatic and terrestrial habitats may impact common toad and smooth newt.	Figures 6.2.21.5 of Chapter 21 (Document Reference APP-112) illustrates the impact on GCN.

Ecological Receptor	Summary of Receptor	Location Details
Reptiles (including grass snake, common lizard and slow worm)	The background data search returned records of common lizard, slow worm and grass snake in the local area and a habitat suitability assessment was undertaken. No permanent impacts are predicted for any area identified as having 'good' or 'exceptional' reptile habitat quality. Low risk to reptiles from vegetation clearance and construction phases only.	Figure 6.2.21.6 of Chapter 21 (Document Reference APP-112) shows Areas with potential for reptiles that will be impacted by works.
Birds (SPA/Ramsar qualifying features and SSSI listed features)	Dark-bellied brent goose: Peak flock count of 1,100 (2022/23) exceed 1% of the designated site population (non-breeding) and close to 1% of the GB population (non-breeding).	Figure 22.3.1 of Appendix 22.3 (Document Reference APP-306) illustrates the winter bird survey results 2022/23. Figure 1 of Addendum 13.2 (document reference AS1-108) illustrates the winter bird survey results 2023/24. Figure 22.3.2 of Appendix 22.4 (Document Reference APP205) illustrate the breeding bird survey results (non-Schedule 1 species). Figure 22.3A.1 of Appendix 22.5 (Document Reference APP-206) provides the breeding bird survey results for Schedule 1 species.
	Pink-footed goose: Peak flock count of 5,000 (2023/24) close to or exceed 1% of the designated site populations (non-breeding).	
	Whooper swan: Peak flock count of 297 (2023/24) with widespread distribution along the ECC route.	
	Shelduck: Peak flock count of 15 (2022/23) with widespread distribution along the ECC route.	
	Gadwall: Peak flock count of 165 (2023/24) exceed 1% of the designated site population (non-breeding).	
	Wigeon: Peak flock count of 450 (2022/23) exceed 1% of the designated site population (non-breeding).	
	Pintail: Peak flock count of 2 (2022/23) from landfall surveys only (present on one visit).	
	Teal: Peak count of 300 (2023/24) from ECC surveys.	
	Scaup: Single observation of 138 birds (2022/23) from the ECC surveys.	
	Pochard: Two observations with a peak flock count of 9 (2022/23) from ECC surveys.	

Ecological Receptor	Summary of Receptor	Location Details
	Eider: Single observation of 1 bird (2022/23) from landfall surveys.	
	Common scoter: Peak of a 40 individuals (2022/23) from landfall surveys.	
	Red-throated diver: Five observations of single birds (2022/23) from landfall surveys.	
	Oystercatcher: Recorded in low numbers at various locations along ECC with a peak count of 23 birds (2022/24) Recorded on 11 frequently during landfall and ECC surveys counts, each of a single individual.	
	Avocet: Recorded in low numbers at various locations along the ECC, with a peak flock count of 2322 (2023/24). Breeding pairs exceed 1% of the designated site population (breeding).	
	Lapwing: Peak flock count of 2,000 (2023/24) exceed 1% of the designated site population (non-breeding). Single observation from late March, more likely to be birds prospecting to breed rather than non-breeding birds. Breeding pairs exceed 1% of the designated site population (breeding).	
	Golden plover: Feature has been recorded within the survey area with peak flock count 2,000 birds (2023/24) close to or in excess of 1% of the designated sites population, indicating that FLL for qualifying features is present within the survey area (non-breeding). Peak flock counts of 400 from ECC surveys.	
	Grey plover: Peak of a single bird recorded during landfall surveys. During ECC surveys recorded from The Haven only, with a peak flock count of 7 (2022/23). Feature has been recorded within the survey area with peak flock counts close to 1% of the designated sites population, indicating that	

Ecological Receptor	Summary of Receptor	Location Details
	functionally linked land (FLL) for qualifying features is present within the survey area (non-breeding).	
	Ringed plover: Peak flock count of 4 (2022/23). Peak of a single bird recorded during landfall surveys. During ECC surveys recorded from The Haven only, with a peak flock count of 7.	
	Curlew: Peak flock count of 103 (2023/24) exceed 1% of the designated site population (non-breeding). Peak flock count of 4, recorded at The Haven only.	
	Black-tailed godwit: Peak flock counts exceed 1% of the designated site population (non-breeding) of 16 birds (2022/23) from ECC surveys.	
	Turnstone: Recorded infrequently during ECC surveys with a single record of two individuals. Peak count of 18 individuals (2023/24).	
	Ruff: Recorded infrequently during landfall and ECC surveys with a peak count of 16 individuals (2023/24). Single record of two individuals.	
	Sanderling: Not recorded. LWT have advised of records from spring from Anderby Marsh. Frequently recorded during landfall surveys with a peak count of 57 birds (2023/24).	
	Dunlin: Peak count of 24 (2023/24) from landfall survey counts. During ECC surveys only recorded from Anderby Marsh and The Haven with a peak flock count of 46. Whilst the peak count exceeds 1% of the citation population, it is not close to 1% of the most recent WeBS counts (The Wash, non-breeding).Peak flock counts exceed 1% of the designated site population (Gibraltar Point, non-breeding).	
	Redshank: Peak count of 17 and recorded on 6% of landfall survey counts. During ECC surveys only recorded from	

Ecological Receptor	Summary of Receptor	Location Details
	Anderby Marsh and The Haven with a peak flock count of 46 (2022/23).	
	Black-headed gull: Frequently recorded during ECC surveys with a peak flock count of 600 close to or exceed 1% of the designated site population (non-breeding). Not recorded as a breeding species.	
	Sandwich tern: No breeding colonies within the survey area and limited suitable foraging habitat. Peak flock counts close to 1% of the designated site population (non-breeding).	
	Little tern: No breeding colonies within the survey area and limited suitable foraging habitat.	
	Common tern: No breeding colonies within the survey area and limited suitable foraging habitat.	
	Bittern: No breeding colonies within the survey area and limited suitable foraging habitat. Not recorded. LWT advised of non-breeding records from Wolla Bank Reedbed. No breeding colonies within the survey area and limited suitable foraging habitat.	
	Marsh harrier: Breeding territories exceed 1% of the designated site population (breeding) (2023). Not recorded. LWT advised of non-breeding records from Wolla Bank Reedbed.	
	Hen Harrier: Single observation of two birds (2022/23). Breeding territories exceed 1% of the designated site population (breeding).	
	Anderby Marsh (an LWT Reserve) would meet the LWS selection criteria under GM1 and GM2 (coastal grazing marsh) for supporting a breeding and non-breeding bird assemblage.	
Bats	There are records of at least seven species of bat within 2km of the Order Limits and two bat roosts within 5km.	Figure 21.4.5 of Appendix 21.4 (Document Reference APP-193) illustrates important habitats for bats.

Ecological Receptor	Summary of Receptor	Location Details
	No evidence of bat roosting was found within the Order Limits, although roosting in trees cannot be ruled out. Static and manual activity surveys found bat activity to be very low across the Order Limits. A potential recording of Nathusius pipistrelle migration was recorded. Impacts to foraging and commuting bats from severance of flight lines is likely. Potential impacts on migrating and roosting bats are possible.	Figure 21.4.5 of Appendix 21.4 (Document Reference APP-193) provides roost suitability mapping.
Badger	Just over 400 records of badger within the Study Area, including 3 within the Order Limits. A total of 98 setts identified within the Survey Area, with 14 inside the Order Limits. 12 setts identified within 20m of temporary or permanent working areas.	CONFIDENTIAL Badger Desk Study and Field Survey (Document Reference APP-194) provides details of sett locations.
Otter	A total of 636 ditches exist within the Order Limits and functionally linked within the 250m buffer zone. Evidence of otter presence found in ECC 2, ECC 3, ECC 5, ECC 10, ECC 13 and ECC14. Possible disturbance and isolation effects on otters commuting along the Wainfleet Relief Channel, watercourses 1621 and 1623 and the River Welland, including a potential natal holt in ECC 10, associated with the Hobhole drain. Elsewhere, impact is limited to minor disturbance within the large territorial ranges of otter.	Figure 21.6.3 of Appendix 21.6 (Document Reference APP-195) provides the locations of otter field signs recorded during field surveys.

Ecological Receptor	Summary of Receptor	Location Details
Water Vole	Evidence of water vole presence found in all Segments with the exception of ECC 13 and 14. Direct impacts on water vole/their burrows could occur at three discrete locations within ECC 6, 6 and 12.	Figure 21.6.2 Appendix 21.6 (Document Reference APP-195) provides the locations of water vole field signs recorded during field surveys.
INNS	No records or INNS or evidence of their presence within the Order Limits found.	N/A

~~62.~~63. The Project will avoid all designated sites.

~~63.~~64. Those Annex 1 habitats, Priority Habitats and Lincolnshire Biodiversity Action Plan habitats that lie within the Order Limits, but are avoided by the Project (through adoption of trenchless techniques) include:

- Embryonic shifting dunes;
- Dunes with sea buckthorn;
- Coastal saltmarsh (including estuaries);
- Intertidal mudflats (including estuaries);
- ~~Coastal floodplain grazing marsh/ grazing marsh;~~
- Reedbeds;
- Coastal sand dunes; and,
- Priority ponds (and lakes).

~~64.~~65. Mitigation measures for designated sites and all habitat types, including the Annex 1, priority and LBAP habitats listed above, are principally covered in the Biosecurity Measures provided in Section 3.4 and in the outline CoCP (Document Reference APP-268), which includes the pollution prevention measures set out in Table 5~~Table 5~~.

3.1.4 Embedded and Non-Embedded Mitigation

~~65.~~66. Mitigation measures that were identified and adopted as part of the development of the Project design and are therefore 'embedded' into the Project design; that are relevant to Onshore Ecology are listed in Table 3.

~~66.~~67. Table 4: Non-Embedded Mitigation for Ecological Receptors summarises those measures identified through the impact assessment process as required to address potentially significant effects in relation to Important Ecological Features (IEF).

~~67.~~68. Provision for both the embedded and non-embedded mitigation requirements set out in Table 3 and Table 4 respectively below, are outlined within this OLEMS. The exception to this is for project design, which has already been identified within Volume 1, Chapter 3: Project Description (Document Reference APP-058).

Table 3: Embedding Mitigation relating to Onshore Ecology and Ornithology

Project phase	Mitigation measures embedded into the project design
General	
Project design	Careful siting of the Order Limits to avoid direct impacts to designated sites and avoidance of direct impacts on key areas of sensitivity including Annex 1 and Priority Habitats (for example coastal sand dunes and reedbeds) which may support protected species, wherever possible. Where the Order Limits crosses LWS's and LWT reserves (such as Anderby Creek Sand Dunes LWS), trenchless techniques will be used.

Project phase	Mitigation measures embedded into the project design
	This OLEMS sets out the key landscape and ecology principles to inform the EMP, which is conditioned as a requirement of the Development Consent Order (DCO). The OLEMS presents embedded mitigation with regarding to habitat reinstatement, enhancement and creation. The EMP would be based on the OLEMS principles and would set out the measures that the Undertaker and their contractors would be required to adopt. The EMP will be prepared in consultation with the Local Planning Authority (LPA).
Construction	
ECoW	Ecological Clerks of Works (ECoWs) will be employed to oversee construction work and minimise risks to IEFs and IOFs. Checks for the presence of badger setts, birds, reptiles, amphibians, hedgehogs and other protected or notable species will be carried out by the ECoW prior to vegetation clearance. Additional reasonable avoidance measures will be implemented, and mitigation licences will be applied for, as necessary.
Minimising disturbance to protected species beyond the construction footprint.	There will be subsoil and topsoil bunds within working areas of the Order Limits which will provide a degree of visual and acoustic screening between the works and the surrounding landscape. Further information on soil storage areas is provided in Chapter 3 Project Description (Document Reference APP-058). The MDS includes for the use of silent piling technology (at landfall) and vibratory sheet piling, rather than impact piling along the onshore ECC and 400kV cable corridor, with impact piling limited to the OnSS Construction. See ES Chapter 26 Noise and Vibration (Document Reference APP-081) for details on anticipated noise and vibration levels associated with piling methods. Artificial lighting during construction will be managed in line with the final CoCP to be drafted in line with the Outline CoCP (Document Reference APP-268). In response to comments from NE, the Project has committed to the retention and protection of bat flight lines during construction using protective fencing (such as Heras) to protect retained hedgerows and trees (including their root structure) from damage during construction. These will further be retained and protected through sensitive lighting design, which will be outlined in the Artificial Light Emissions Plan forming part of the final (CoCP).
Pollution prevention	As described in the Outline CoCP (Document Reference APP-268), detailed Construction Method Statements will be developed by the Principal Contractor for relevant construction operations. Relevant Construction Method Statements will be included as part of the final CoCP for each phase of the works. The Outline CoCP includes the following, which are relied upon to varying degrees as embedded mitigation: ▪ Outline Noise and Vibration Management Plan; ▪ Outline Air Quality Management Plan;

Project phase	Mitigation measures embedded into the project design
	▪ Outline Soil Management Plan; ▪ Outline Onshore Pollution Prevention and Emergency Incident Response Plan; and, ▪ Outline Surface Water and Drainage Strategy. The construction dust mitigation measures recommended as part of the construction dust assessment will form inclusion within the final CoCP, in agreement with the relevant Authority. All construction work will be undertaken in accordance with the Outline soil management plan (OSMP) (Document Reference APP-271) as part of the Outline CoCP. All soil handling, placing, compaction and management will be undertaken in accordance with best practice (Defra, 2009). All construction work will be managed in line with the Pollution Prevention and Emergency Response Plan (PPEIRP) to be drafted in line with the Outline PPEIRP as included in the Outline CoCP (Document Reference APP-272). Construction will be managed in line with CIRIA – SuDS Manual (C753) (CIRIA, 2015) including the following measures: ▪ No discharge to main river watercourses will occur without permission from the Environment Agency (SuDS Manual); ▪ Wheel washers and dust suppression measures to be used as appropriate to prevent the migration of pollutants (SuDS Manual); and, ▪ Regular cleaning of roads of any construction waste and dirt to be carried out (SuDS Manual). Construction will also be managed in line with Control of Water Pollution from Construction Sites – Guidance for Consultants and Contractors CIRIA (C532) (CIRIA, 2001). The standards that would be expected to meet any licence or environmental permit for works in relation to the water environment will be applied for all works (e.g. drilling, crossing, culverting, passing under or through) affecting the sea defence structures, Main Rivers, ordinary watercourses and IDB watercourses.
Invasive ~~Non Native~~Non-Native Species (INNS)	All construction work will be undertaken in accordance with the biosecurity measures outlined in Section 3.4 of the OLEMS (Document Reference 8.10, Version 3, Submitted 19th September 2024).
Reinstatement	The Project has made a commitment to reinstate habitats as soon as practicable following construction. Hedgerows will be reinstated using a species-rich, locally appropriate native mixture. Where trees are lost these will be replaced with heavy standard trees at a 3:1 ratio. Older hedgerow saplings will be used to re-establish hedgerows more quickly, as well as gap-fill existing hedges. All saplings will be planted with appropriate protection from pests.

Project phase	Mitigation measures embedded into the project design
	In response to comments from NE, the Project has committed to replace any trees to be removed for construction as soon as is practicably possible, within the Order Limits and at a greater number than have been removed.
Operation and Maintenance	
General	Operational practices will incorporate measures to prevent pollution and increased flood risk, including emergency spill response procedures, clean up and control of any potentially contaminated surface water runoff. These measures will be included within an Environmental Management System (EnMS). The EnMS will include specific measures to avoid potential impact to protected or notable species or sensitive habitats. Where unplanned operational or maintenance works are required, appropriate mitigation measures would be developed and agreed with relevant consultees prior to works taking place.
Decommissioning	
General	Decommissioning practices will incorporate measures similar to the construction phase, to prevent impact to ecological features. Provision of a decommissioning plan in advance of decommissioning works is a requirement of the DCO, to include protection of ecological features, based on up-to-date survey information and relevant guidance in place at the time of decommissioning.

Table 4: Non-Embedded Mitigation for Ecological Receptors

Ecological Receptor	Predicted impact pre mitigation	Mitigation Measures	Predicted impact post-mitigation	Significant in EIA terms?
Veteran Trees	Not assessed, not recorded in Order Limits	In order to mitigate the risk of loss of, or damage to veteran trees, final project design will seek to avoid boundary features wherever possible. Any tree that cannot be retained will be subject to pre-commencement surveys to assess if ancient or veteran or not. Appropriate mitigation and compensation for any losses of veteran or ancient trees will be agreed with relevant stakeholders.	No significant effects	No
Rare arable weeds	Not assessed, not recorded in Order Limits	Alternatives to herbicides will be used wherever possible during the construction phase. Pre-commencement surveys of suitable and impacted habitat will be undertaken where necessary.	No significant effects	No
Eels	No significant effect	The detailed design of the trenchless cable installation will be further refined at contract award, and therefore to mitigate impacts arising from any changes, an updated fish survey will be undertaken (if required), and specific mitigation measures in the EMP updated (where required) and agreed with relevant stakeholders. The fish impact assessment will be updated on receipt of detailed design for Cable Installation Compounds (CICs) and other infrastructure within close proximity to major watercourses.	No significant effects	No
GCN	Significant effect on metapopulation at ECC 6 (but negligible for amphibians as a group)	EPSL to cover works, reasonable avoidance measures (RAMs) for track matting installation/ removal.	No significant effects	No
Reptiles	Negligible negative effect	Pre-commencement surveys to tailor the siting of mitigation measures to the final project design, including: RAMs covering sensitive vegetation clearance and destructive search; temporary artificial refugia provided during construction; safe underpasses where haul	No significant effects	No

Ecological Receptor	Predicted impact pre mitigation	Mitigation Measures	Predicted impact post-mitigation	Significant in EIA terms?
		road leads to isolation effects, and where culverts are absent – Reptile Area 4.		
Bats	~~Significant~~ Negligible negative effect (flight lines)	Use of artificial flight lines during construction, sensitive layout of compounds to avoid disturbance impacts on potential roosts (within and outwith the Order Limits), and use of acoustic fencing and/ or the strategic placement of bunds where such impacts cannot be designed out. Pre-commencement surveys in accordance with good practice, currently Collins, J (ed) (2023), to include tree-climbing inspections where impacts on potential tree roosts are predicted. Based on survey data collected to inform the ES and detailed consultation with the principal project engineer, no impacts requiring a NE licence are considered to occur either as a result of the construction or operational phases of the Project. However, this situation will be reviewed by analysing the results of existing survey data and pre-commencement surveys against the final, detailed design for the Project. This commitment is set out in Annex A.3.	No significant effects	No
Badger	No significant effect	Pre-commencement surveys to tailor the siting of mitigation measures to the final project design; NE licence where impacts cannot be avoided; RAMs to guide works where setts retained.	No significant effects	No
Otter	Significant effect at site level only	Monitoring of holts to determine status, NE licence where impacts cannot be avoided, sensitive layout of compounds to prevent disturbance to adjacent watercourses, culverts installed in watercourses where otter have been recorded under the supervision of the ECOW.	No significant effects	No
Water vole	Significant effect at site level only	Pre-commencement surveys to inform detailed design, and NE licence if impacts cannot be avoided. Culverts installed in watercourses where water vole to be installed under the supervision of the ECOW. Sensitive	No significant effects	No

Ecological Receptor	Predicted impact pre mitigation	Mitigation Measures	Predicted impact post-mitigation	Significant in EIA terms?
		vegetation clearance along watercourses where water vole have been recorded.		

3.1.5 Layout of OLEMS

~~68.~~69. The layout of this OLEMS in respect of ecology includes:

- Overarching sustainability principles;
- The role of the Ecological Clerk of Works (ECoW);
- Biosecurity Measures (including those for non-native, invasive species);
- Pre-commencement surveys;
- Protection of retained habitats (including priority habitats – hedgerows and arable field margins);
- Measures to address potential impacts on protected or notable species including:
  - Notable Plants;
  - Eel;
  - Amphibians;
  - Reptiles;
  - Birds;
  - Bats;
  - Badger;
  - Otter;
  - Water vole; and,
  - Other terrestrial mammals;
- Re-instatement, enhancement and creation of habitats following construction including:
  - Priority habitats – hedgerows, ~~and~~ arable field margins and coastal and floodplain grazing marsh;
  - Greater Frampton Vision; and,
  - Biodiversity Net Gain;
- Monitoring and management.

~~69.~~70. Details of proposed measures to manage potential impacts due to accidental pollution, both airborne (including dust) and waterborne, are provided in the Outline CoCP (Document Reference APP-268) and are not repeated here.

~~70.~~71. This OLEMS includes initial proposals for biodiversity enhancements, in accordance with relevant planning policy. These proposals will be developed further in consultation with relevant stakeholders and details provided within the EMP.

~~71.~~72. The OLEMS also includes proposals for monitoring and review (i.e. the EMP will be subject to review at regular intervals), where required. Relevant, appropriately timed monitoring is important to enable the success of the measures set out in the EMP to be determined and to identify the need for measures to be altered, if required.

3.2 Overarching Sustainability Principles

~~72.~~73. The detailed design and implementation of outline measures set out here to mitigate and compensate for ecological impacts will apply the following principles with the aim of ensuring the execution of this work is as sustainable as practicable:

- Minimise consumption of materials and production of waste. Single-use plastics will be avoided, for example the use of reusable or compostable alternatives to plastic tree guards will be explored;
- Re-use of waste materials arising from construction, for example translocation of hedgerows where removal is required, or use of fallen trees to create hibernacula for herpetofauna or generic habitat piles;
- Alternatives to herbicides will be used wherever practicable, for example cutting and mulching around newly planted tree bases, although it is noted that eradication of some non-native plants may require very localised and controlled use;
- Conservation of water for example through the use of drought tolerant species in planting schemes and further reducing need for supplementary watering by using container grown trees, introducing soil improvers and topical mulching to increase soil moisture retention; and
- Minimising use of fossil fuels by using public transport and electric vehicles when travelling to, from and within the site. Car sharing would also be adopted to reduce the number of vehicle movements required.

~~73.~~74. On completion of the detailed design for the Project, a review will be undertaken to further inform the above list, and to design in additional measures to increase sustainability in the implementation of these works. Such measures will be set out in the EMP document.

3.3 Role of the Ecological Clerk of Works

~~74.~~75. An Ecological Clerk of Works (ECoW) would be employed for the duration of the Project construction (including pre-commencement/enabling works) to ensure species specific mitigation, method statements and plans are implemented effectively. All ecological measures within the EMP will be undertaken under the guidance of the ECoW. Supervision of post-construction monitoring and management is covered in Section 3.10~~3.9~~.

~~75.~~76. Given the large scale of the Project, it is anticipated that an ECoW team maybe required, with the lead ECoW delegating duties to an appropriately skilled and experienced deputy/ assistant ECoW(s), where necessary. The lead ECoW will be expected to have a minimum of three years' experience as a professional ecologist, including suitable ECoW experience, preferably on large linear infrastructure projects with knowledge of UK ecological policy and legislation and a member of an appropriate professional body. In the case of the Chartered Institute of Ecology and Environmental Management (CIEEM), this will be Associate grade (ACIEEM) or above. They will also hold a Construction Skills Certification Scheme (CSCS) card (or equivalent). Deputy/assistant ECoWs will also be expected to possess a suitable qualification and/or have relevant professional experience.

~~76.~~77. Curriculum vitae for the lead ECoW and other members of the ECoW team will be provided to the Local Planning Authority to demonstrate adherence to the role description, prior to construction commencing, thereby ensuring that proposed ECoW team members are suitably qualified and experienced.

~~77.~~78. The ECoW/ ECoW Team will be appointed either by the Principal Contractor or by the Applicant to oversee preliminary works and construction works. It is also possible that separate ECoW/ ECoW Teams will be appointed by the Principal Contractor and the Applicant, with each ECoW/ ECoW team performing different roles.

~~78.~~79. The roles, responsibilities and lines of communication will be determined at the detailed design stage, with details provided in the EMP. However, typically an ECoW would undertake the following tasks:

- Assist in delivering site biodiversity awareness training, including inductions and toolbox talks (i.e., presentations and the dissemination of information to site personnel on ecological matters);
- As necessary, assist with arranging specialist ecological surveys;
- Oversee the implementation of measures to protect notable sites and habitats;
- Undertake regular site inspections and checks for legally protected or notable species (including birds);
- Monitor compliance with the EMP and, if required to/ approved by licensee, protected species licence(s), during construction;
- Assist in reviewing the final Construction Method Statement; and,
- Notify the Applicant and/ or Principal Contractor of any non-compliance with the requirements of the EMP.

~~79.~~80. In addition to the monitoring undertaken by the ECoW, the Applicant would appoint an appropriate external body with the specific task of undertaking compliance audits. The compliance audits shall include identified Key Performance Indicators (KPIs) for each identified ecological feature. The KPIs would be agreed as part of the agreed EMP.

~~80.~~81. All site workers will be informed of the role and contact details of the ECoW. A copy of the EMP will be kept on site at all times and site workers will be made aware of its location and/or who to contact in order to obtain a copy of the EMP.

3.4 Biosecurity Measures

3.4.1 General

~~81.~~82. Pre-commencement surveys, mitigation works and monitoring and maintenance activities require personnel, equipment and machinery to move into and across the Order Limits. These activities could lead to the spread of non-native species and diseases without robust biosecurity measures.

~~82.~~83. The following sections draw on guidance produced by the Animal and Plant Health Agency (APHA), the Department for Environment and Rural Affairs (DEFRA) and the Forestry Commission (FC), and will provide a basis for the post-consent EMP document, which will be updated to include any relevant future guidance or legislative requirements.

3.4.2 Preventing spread of INNS

3.4.2.1 Non-native Plants

~~83.~~84. Where pre-commencement surveys (see below) confirm/identify the presence of non-native plants, exclusions zones will be demarcated around affected areas to prevent personnel/ machinery from coming into contact with such plants.

~~84.~~85. If removal of non-native plants is required to make way for construction activity, it may be necessary to engage specialist contractors to remove/irradicate in line with best practice and legislative requirements current at the time the work is required.

~~85.~~86. All field equipment, or machinery that comes into contact with waterbodies supporting aquatic non-native plants, such as New Zealand Pygmy weed, or areas supporting terrestrial non-native plants, such as Japanese knotweed (*Reynoutria japonica*), will be subject, as a minimum, to the biosecurity measures described below which will help to prevent spread. All field equipment or machinery that is entering or leaving the site should be cleaned and disinfected as follows:

- Use dedicated brush to scrub off any debris, plant fragments, mud etc after contact with waterbody/watercourse;
- Rinse equipment with water before soaking in /spraying with bleach solution or Virkon for at least 5 minutes;
- Rinse again with clean water;
- Allow to dry before next use; and,

- Dispose of disinfectant solutions following the supplier's instructions. Unless otherwise stated, it is recommended that used disinfectant solutions should be poured directly into a drain connected to the sewerage system flushed with clean water (note that not all drains are connected to sewerage systems) or disposed of as hazardous waste.

~~86.~~87. Site personnel undertaking work in areas with non-native plants should thoroughly clean footwear, taking particular care to clean and disinfect the tread of shoes. Any contaminated work wear should be washed on a 60°C cycle to kill plant propagules trapped in clothing.

3.4.2.2 Non-native Animals

~~87.~~88. No invasive, non-native species of fauna have been identified through ecological studies to date as outlined in Chapter 21 (Document Reference APP-076). No management is anticipated to be required at present. However, if this situation changes prior to pre-commencement/ enabling works then the EMP will be updated accordingly.

3.4.3 Preventing Spread of Disease

3.4.3.1 Preventing the Spread of Disease in Plants

~~88.~~89. The measures outlined above in relation to prevention of the spread of non-native plants are also of use in preventing the spread of diseases, such as ash die back and sweet chestnut blight, which are caused by the fungi *Hymenoscyphus fraxineus* and *Cryphonectria parasitica* respectively.

~~89.~~90. In relation to habitat creation and tree planting works, the Forestry Commission's industry guidance[1] is of relevance, with further guidance on biosecurity provided for industry professionals[2]. This guidance relates to the cleaning of kit (clothing, equipment, and machinery) and transport machinery with measures as set out previously under Section 3.4.2, but also extends to the responsible sourcing of planting stock.

~~90.~~91. With regard to planting stock, the following measures will be implemented:

- Stock will be responsibly sourced through a supplier that adheres to national standards such as the Plant Health Management Standard (Plant Health Biosecurity Steering Group, 2019);
- Planting stock and landscaping materials will be sourced from a pest and disease-free area of the country; and,
- Any suspected pests or diseases will be reported to Plant Health Controls at DEFRA/APHA.

[1] Forestry Commission (2023) *Tree Planting and Woodland Creation: Overview.* Available at: https://www.gov.uk/guidance/tree-planting-and-woodland-creation-overview

[2] Forestry Commission and Animal and Plant Health Agency (2023) *How Biosecurity Can Prevent the Introduction and Spread of Tree Pests and Diseases*. Available at: https://www.gov.uk/guidance/prevent-the-introduction-and-spread-of-tree-pests-and-diseases#industry-professionals

3.4.3.2 Preventing the Spread of Disease in Animals

~~91.~~92. Badgers have been recorded within the Order Limits and possible transmission of bovine tuberculosis (bTB) within badger/between badgers and cattle is well documented. While cattle farming is not extensively practiced within the Order Limits, a recent search conducted on the online ibTB bovine mapping resource (ibTB Website) has revealed a number of cases of bTB within herds located approximately 10km from the Order Limits. Among the nearest locations are Sandilands, near Sutton on Sea, and Scrub Hill, situated northwest of Boston. Therefore, it is possible that badger clans within the Order Limits could carry bTB, and precautionary measures will be adopted to prevent spread. An updated search of the ibTB mapping will be undertaken to identify whether there are any outbreaks within the Order Limits that could require special measures to be set out within the EMP.

~~92.~~93. Advice provided by the APHA (UK Government Website[c]) with regard to protecting cattle against TB is relevant to prevent spread in badgers, particularly in respect to the cleaning and disinfecting of PPE, equipment and machinery/vehicles. Cleaning and disinfecting to prevent bTB spread, is very similar to that described in Section 3.4.2, but requires the use of an approved[3] disinfectant. Further, personnel will avoid walking through areas that have been treated with slurry in the last 60 days, and will avoid farmyards, feeding areas and other places where livestock may be present.

~~93.~~94. Amphibians have been recorded within the Order Limits and this group are vulnerable to disease caused by Chytrid fungus (ARG UK, 2017). To limit the spread of this fungus and other potential diseases, work near to, or within all waterbodies, including ditches, rivers, ponds and lakes, will be kept to a minimum. The measures referred to in Section 3.4.2 will also be adhered to. Guidance is also available from the GB Non-Native Species Secretariat (NNSS Website).

3.4.4 Biodiversity Awareness Training

~~94.~~95. Provision will be made in the LMP and EMP for biodiversity awareness training. Training will be offered to employees and contractors to ensure unnecessary impacts on biodiversity are avoided during both the construction and operational phases of the Project. Training will include both induction packs and toolbox talks and will equip site staff with a basic knowledge of biodiversity, risks to ecology and best practice working methods that must be adopted to protect and enhance biodiversity and will include~~.~~ information in respect of local designated sites, the designated features of these sites and any functionally linked land.

[3] A list of approved disinfectants is available online at http://disinfectants.defra.gov.uk/DisinfectantsExternal/Default.aspx?Module=ApprovalsList_SI

3.4.4.1 Induction Packs

~~95.~~96. Both employees and contractors will have access to induction packs that include essential information on local biodiversity, the specific threats it faces, and the importance of conserving it. These packs will serve as a foundational resource to ensure that all personnel understand their role in the protection of ecological features from the outset.

3.4.4.2 Tool Box Talks

~~96.~~97. The ECoW will conduct toolbox talks to reinforce the principles outlined in the induction packs. These discussions will offer practical guidance on best practices for working methods aimed at minimizing ecological disturbance. Additionally, tailored toolbox talks will be provided as needed for specific protected species, such as the great crested newt.

3.5 Pre-commencement Surveys

~~97.~~98. Due to the time that may have elapsed since the last surveys and the possibility that species presence or activity could have changed in the intervening period, pre-commencement surveys would be undertaken for a number of species/species groups, including INNS. According to CIEEM guidelines (2019) survey data older than 12-18 months is unlikely to be considered valid. The results of the pre-commencement surveys would be used to identify whether any updates to the measures proposed in Sections 3.6 – 3.9 or additional mitigation measures are required and the EMP would be updated to reflect the survey results, as required.

~~98.~~99. Surveys will include those for certain species which, based on current information, will not be affected by the proposed development (and are therefore not subject to the mitigation and compensation measures set out in this document), but which could potentially (re)colonise the area within the Order Limits prior to construction commencing. Surveys will also be undertaken on those areas that have not yet been surveyed (primarily due to access constraints).

~~99.~~100. An ECoW (see Section 3.3) will be appointed to oversee the pre-commencement surveys.

~~100.~~101. Table 5~~Table 5~~ provides further details of the surveys that would be required prior to construction, including details of proposed survey areas (focussing on the areas likely to be affected by the works), timings and methodologies. All surveys would be undertaken by suitably experienced/ licensed ecologists who are members of an appropriate professional body, e.g. CIEEM.

Table 5 Pre-Commencement Surveys

Species/ Group	Survey Area	Survey Timing	Survey Methods
General ecology walkover	All working areas within the Order Limits	May to September during the season prior to	General walkover to identify any new ecological constraints and to be cross

Species/ Group	Survey Area	Survey Timing	Survey Methods
Notable plant species	Order Limits, focussing on directly impacted suitable habitats	construction commencing.	referenced with previous survey results
INNS	Order Limits, focussing on waterbodies.	May to September during the season prior to construction commencing.	Inspection of watercourses for presence of New Zealand Pygmyweed and other invasive plants.
Amphibians (GCN)	Decoy Wood waterbodies and ditches 20262, 20263 and 20273 near segment ECC 6 Additional ditches may also require surveying to inform a potential GCN licence. For example, repeat attempts to gain access to previously inaccessible land will be made where suitable aquatic habitat will be impacted.	April 15th – June 30th (eDNA survey) and mid-March to mid-June for population surveys, during the season prior to construction commencing.	eDNA survey to be carried out in accordance with standard methods (Biggs *et al*., 2014) Population survey (if required) undertaken in accordance with English Nature (2001).
Birds	Order Limits + 400m buffer	For breeding birds, April to July during the season prior to construction commencing.	Breeding Bird Surveys (4 visits) Annex 1 and Schedule 1 Species Surveys Barn Owl Surveys Survey to follow standard methods, as specified by Gilbert *et al*. (1998) and Shawyer (2011).
Bats	Order Limits + 25m	May to September during the season prior to construction commencing.	In accordance with good practice, currently Collins, J (ed) (2023), to include tree-climbing inspections where impacts on potential tree roosts are predicted.
Badger	All terrestrial habitats within 20 m of the Order Limits.	3-6 months prior to construction commencing.	In accordance with Harris, S. *et al* (1989).

Species/ Group	Survey Area	Survey Timing	Survey Methods
Otter	All water courses which may be directly affected within or immediately adjacent to the Order Limits (250 m upstream/downstream of Order Limits)	3-6 months prior to construction commencing	In accordance with Chanin (2003).
Water vole	All water courses which may be directly affected within or immediately adjacent to the Order Limits (200 m upstream/downstream of Order Limits)	April to September during the season prior to construction commencing	In accordance with Dean *et al.* (2016).

3.6 Protection of Retained Habitats

3.6.1 Habitats of Principal Importance and Lincolnshire Biodiversity Action Plan Priority Habitats

~~101.~~102. Habitats of principal importance and Lincolnshire Biodiversity Action Plan Priority Habitats within the Order Limits include coastal saltmarsh, intertidal mudflats, coastal and floodplain grazing marsh, reedbeds, coastal sand dunes, arable field margins and hedgerows. Embedded mitigation ensures that, with the exception of arable field margins, ~~ and~~ hedgerows, and coastal and floodplain grazing marsh (CFGM), all habitats of principal importance are crossed using trenchless techniques and will therefore be retained.

~~102.~~103. Where arable field margins and hedgerows are retained these will be protected via mitigation outlined in Section 3.6.21.1 below.

3.6.1.1 Hedgerows, ~~and~~ Ecological Arable Field Margins and CFGM

~~103.~~104. A total of 72~~3~~ hedgerows exist within the Order Limits. Direct impacts on the majority of hedgerows, including the three 'Important' hedgerows (assessed under the Hedgerow Regulations 1997) will be avoided through deployment of trenchless techniques.

105. A total of 85.04~~4.80~~ ha of c1a and 0.44ha of c1a5 exist within the Order Limits, with 78~~9~~.94 ha to be retained. Pre-commencement surveys will be undertaken to ascertain the presence, if any, of important arable weeds within areas of c1a and c1a5 to be either temporarily or permanently affected by the Project.

~~104.~~106. Exclusion zones would be established around ecologically valuable retained habitats ~~, including hedgerows and important ecological arable field margins,~~ at an offset of at least 5m, where practicable, to prevent negative impacts arising from enabling and construction activities. These exclusion zones would be demarcated with fencing, tape and signage, as appropriate to prevent ingress by the construction activity in the vicinity and maintained until the completion of the construction phase. Any fencing would be designed to ensure retained habitats would remain accessible to dependent species throughout the construction phase. The ECoW would work with the Site Manager to agree the alignment and specification for exclusion fencing in any given area, and to ensure it is installed prior to the commencement of construction in that area.

~~105.~~107. The location and type of all protective and exclusion fencing will be specified in the EMP.

108. At present, there are only two locations where a 5m exclusion zone is not practicable. These are at CIC21 and CIC22, where the exclusion zone will be reduced to 2m along Hedgerow 186 to the east of the Order Limits. However, at the western side of the CIC21 and CIC22 boundaries, a 5m standoff can be achieved from Hedgerow 1977.

3.6.2 Other Habitats

3.6.2.1 Rivers and Wetland

~~106.~~109. There are 408 ditches within the Order Limits. Of these, 73 ditches lie within the trenchless zones and 335 are situated within working areas. A minimum of 73 ditches will be retained as a result of using trenchless techniques, with those ditches in trenched zones and other working areas retained wherever practicable and the layout of the construction site allows it. Where ditches are to be retained, exclusion zones as outlined in within this section will be applied.

~~107.~~110. Embedded mitigation would ensure that impacts upon main rivers and Internal Drainage Board (IDB) owned /managed drains would be avoided through the use of trenchless techniques during construction. However, some minor watercourses and drainage ditches would be crossed by trenched techniques. Wherever practicable, buffer zones surrounding retained ponds and watercourses would be at least 10 m in width in line with Pollution Prevention Guidelines: Works and Maintenance in or near Water: PPG5 (Environment Alliance, 2007). Exclusion zones would be established around ecologically valuable retained habitats, such as hedgerows, arable field margins and ditches, at an offset sufficient to prevent negative impacts arising from enabling and construction activities. These exclusion zones would be demarcated with fencing, tape and signage, as appropriate to prevent ingress by the construction activity in the vicinity and maintained until the completion of the construction phase. Any fencing would be designed to ensure retained habitats would remain accessible to dependent species throughout the construction phase. The ECoW would work with the Site Manager to agree the alignment and specification for exclusion fencing in any given area, and to ensure it is installed prior to the commencement of construction in that area. The location and type of all protective and exclusion fencing will be specified in the EMP.

~~108.~~111. Best practice sediment management and pollution prevention measures will be employed when working adjacent to watercourses and are provided in the Outline CoCP (Document Reference APP-268).

~~109.~~112. Good site hygiene measures will be adhered to at all times, by all personnel, including ecologists and other workers. The principle of Check-Clean-Dry will be followed by anyone working close to or within water. Prior to use all equipment will be disinfected using a suitable disinfectant (such as Virkon) to ensure there is not potential for the transfer of pathogens from other sites. All surveyors will clean, disinfect and dry their waders / wellingtons prior to accessing the site and will ensure footwear is re-cleaned / disinfected when leaving the site.

3.6.2.2 Trees

~~110.~~113. There are 146 trees within the Order Limits, of which 43~~52~~ are situated within areas ~~proposed for temporary~~affected by temporary or permanent works, with the remainder assumed to be retained via project alignment in the detailed design.

~~111.~~114. In order to mitigate the risk of loss of, or damage to veteran trees, the detailed design of the Project will seek to avoid boundary features wherever possible. Any tree that cannot be retained will be subject to pre-commencement surveys to assess if ancient or veteran or not. Appropriate mitigation and compensation for any losses of veteran or ancient trees will be developed in line with Natural England's standing advice (Natural England, 2022a) and agreed with relevant stakeholders.

~~112.~~115. As part of the pre-commencement surveys, any veteran or ancient trees would be identified. The Root Protection Areas (RPAs) of all retained trees and woodland would be determined by arboriculture survey. The outer extent of the RPA would be demarcated, prior to commencement of works, by fencing of a specification capable of excluding construction machinery, equipment and personnel from these areas. Differing types of fencing may be installed across the Project depending on the type of works planned in the vicinity of the retained trees or woodland. For example, standard stock fencing may be sufficient to protect RPAs in areas where only pedestrian traffic is expected, however more robust fencing may be required where heavy plant/vehicles will be used.

3.7 Mitigation Strategies for Species

3.7.1 Notable Plant Species

~~113.~~116. Notable plant species have been recorded in association with designated sites. As a precaution, pre-commencement botanical survey will be undertaken during the summer prior to work commencing to determine the presence of notable or protected plant species in areas that would be directly affected by construction (see Section 3.5). The results will be used to identify areas which should be prioritised for salvage or other special measures, the details of which would be included in the EMP.

~~114.~~117. The exact mitigation/compensation method would be dependent on the species and habitat concerned but may include seed saving and propagation or translocation of individual plants.

3.7.2 Eel

~~115.~~118. The aquatic habitats within the Order Limits are considered to be of low value to species of fish in general. However, the possibility of migrating eel through the Order Limits, along the River Welland and The Haven, cannot be ruled out.

~~116.~~119. The detailed design of the trenchless cable installation will be further refined at contract award, and therefore to mitigate impacts arising from any changes, an updated fish survey will be undertaken (if required), and specific mitigation measures in the EMP updated (where required) and agreed with relevant stakeholders.

3.7.3 Amphibians

3.7.3.1 Great Crested Newt

~~117.~~120. Desk study and field survey results suggest that there may be two metapopulations of GCN within 250 m of the Order Limits. These are close to ECC 3 and ECC 6, with ECC 3 including pond WM_P42 which returned a positive eDNA result. The two metapopulations may be impacted by:

- Temporary loss of terrestrial habitats – pond WM_P42 is located c.100m east of the Order Limits;

- Temporary habitat fragmentation/isolation, resulting in functional loss of terrestrial habitat and breeding ponds;
- Accidental killing and injury; and,
- Accidental pollution to breeding ponds from diffuse or point sources associated with construction.

~~118.~~121. Embedded mitigation for impacts to GCN is via project siting and design. The embedded measures which are pertinent to GCN include retention of all ponds, with trees and hedgerows retained wherever practicable. Additional key principles that will be followed in order to mitigate for impacts are described below.

Licensing

~~119.~~122. A derogation licence in respect of GCN may be required for works within 250m of the two metapopulations identified. The detailed design will be reviewed, and GCN survey updated as necessary, to fully assess whether a GCN European protected species licence (EPSL) is required. Where impacts on GCN cannot be avoided by other means, a licence will be obtained from NE in advance of works. There are three different licences that may be suitable, depending on the scale of the predicted impacts: a mitigation licence (NE A14), registration under the Low Impact Licence (NE WML-CL33) or district level licensing, which is not currently available in Lincolnshire. Depending on the licensable activities, mitigation measures would likely be limited to destructive searches, staged vegetation clearance and provision of artificial refugia. It is not predicted that amphibian exclusion fencing, and capture and translocation would be required because of the small areas of habitats and likely low numbers of individuals affected. The creation of new ponds in compensation for impacts is not predicted to be necessary as no GCN-positive ponds are impacted by the proposed scheme. Compensation measures for impacts to terrestrial habitat can readily be accommodated within works activities and provided within the Order Limits.

~~120.~~123. In the event an EPSL were required, it would include the following:

- Details of compensation for temporary loss of terrestrial habitat and temporary loss of potential aquatic habitat (ditches 625, 626 and 629 near segment ECC 3 and ditches 20262, 20263 and 20273 near segment ECC 6);
- Scheduling of certain work to avoid sensitive periods of the GCN life cycle (e.g., refugia would be removed during the GCN active season, not during the hibernation period);
- All work with potential to affect GCN would be overseen by the named ecologist on the appropriate licence or their agent (or by the Project appointed ECoW);
- The ECoW would provide a toolbox talk to site workers in advance of work with potential to affect GCN. This would detail the potential presence of GCN, their identification and what to do if one is seen, and outline all the measures included in the licence Method Statement;
- Minimising the risk of injury or death as a result of entrapment in the site drainage scheme; and,

- If using an EPSL, the removal of GCN (and other amphibians) from areas where there is risk of injury or death. Translocated GCN would be moved to the nearest suitable habitat that would remain undisturbed during construction.

~~121.~~124. Reasonable avoidance measures for GCN and other amphibians are set out in the reasonable avoidance measures section below.

3.7.3.2 Toads and Smooth Newt

~~122.~~125. Common toad and smooth newt are likely to be present in surface water features and suitable terrestrial habitats, such as ditches, ponds, grasslands and arable field margins, where these occur throughout the Order Limits. Therefore, there is the potential for killing or injury of individual amphibians. The use of reasonable avoidance measures (RAMs) will be adopted to mitigate impacts to amphibians during vegetation clearance and site preparation works as set out in the reasonable avoidance measures below.

Mitigation

~~123.~~126. RAMs will be adopted to mitigate impacts to amphibians during vegetation clearance and site preparation works.

~~124.~~127. The management of vegetation (by strimming or flailing) and removal of potential refugia should only be undertaken during the amphibian active period of February to July; with works outside of this period would be subject to a fingertip search under supervision of the ECoW; and therefore may need to be carried out well in advance of construction in areas where work is scheduled to commence during the winter months. Once vegetation has been cut it should be kept to ground level to discourage amphibians from entering the working areas. At least 24-hours would be left between vegetation management and construction works commencing in affected areas.

~~125.~~128. Vegetation would be subject to a two-stage cut, whereby a first cut to c.300mm from ground level is undertaken, this should then be fingertip searched by the ECoW prior to the second cut to ground level.

~~126.~~129. Clearance should be undertaken in a directional manner, towards other areas of suitable habitat.

~~127.~~130. Uprooting of vegetation and clearance of habitat that has potential value to hibernating amphibians would be undertaken prior to the commencement of the hibernation period (November to March) to deter amphibians from hibernating in the area.

~~128.~~131. The deconstruction of wet ditches would occur outside the breeding season for amphibians (February to July inclusive) unless otherwise agreed by the ECoW.

~~129.~~132. In the event that an amphibian is discovered whilst undertaking RAMs, or during construction, the ECoW will be contacted immediately for best practice advice.

~~130.~~133. Complex mitigation/compensation methods such as new ponds would not be required (as no ponds are impacted), and temporary mitigation/compensation measures will be accommodated within works activities and provided within the Order Limits and as close as possible to the areas lost.

~~131.~~134. Compensation for temporary loss of amphibian foraging areas near to segments ECC 3 and ECC 6 would be provided where practical within the Order Limits and as close as possible to the areas lost. This is anticipated to comprise a temporary relaxation of/changes to agricultural grassland management, to enable a more diverse and less intensively managed sward to develop. Depending on the location, additional seeding of grassland/tall herbs may be used to ensure sufficient resource remains. Cut vegetation (such as arisings from scrub removal) would be used to create brash piles for use by sheltering amphibians.

~~132.~~135. Opportunities for enhancement and creation of terrestrial habitats exist at both the OnSS and the surrounding proposed landscape screening in segment ECC 13, illustrated in Figure 2). Subject to detailed design and agreement from landowners, this could include the management of habitat specifically for amphibians, along with the creation of refugia, wider and more species rich field margins, and an increase in the network of wildlife corridors for amphibian movement. Any enhancement measures would be included as part of the detailed project design and secured within the EMP.

~~133.~~136. Enhancement opportunities will be explored in segments ECC 3 and ECC 6 (Figure 3.3 (APP-089)), where the two GCN metapopulations exist. A considered approach to the enhancement of habitats within these segments could also be of benefit to reptiles.

3.7.4 Reptiles

~~134.~~137. No permanent impacts are predicted for any area identified as having good or exceptional reptile habitat quality. The ECoW would ensure reptile mitigation strategies are put in place for Areas 4, 14, 16, 19, 20, 26, 27, 32, 37 and 39 (see Figure 21.6.1 of Appendix 21.6 (Document Reference APP-195)) where temporary habitat loss would occur.

~~135.~~138. It is possible that reptiles may also be encountered at other distinct areas of suitable habitat within the Order Limits (but outside of the areas mentioned above) including rough grass, field boundaries, scrub and hedgerows. In this instance, the RAMs provided for amphibians would also be employed for reptiles.

~~136.~~139. Pre-commencement surveys will be undertaken to refine the RAMs and reptile mitigation strategies accordingly. The necessity and extent of pre-commencement survey requirements, along with the imperative for effective mitigation, management, and monitoring, will be aligned with Natural England's Standing Advice for reptiles (Natural England, 2022). The Project's approach will prioritise avoidance of suitable reptile habitats wherever feasible during the detailed design phase In instances where habitat loss or disturbance is unavoidable, work will be carried out collaboratively with the relevant local planning authority to establish comprehensive mitigation or compensation measures. These measures will be formulated in accordance with established best practices as outlined in the Reptile Habitat Management Handbook (Edgar, Foster and Baker, 2010).

~~137.~~140. Any additional measures required to minimise impacts to reptiles and their habitats, will be detailed in the EMP.

Mitigation

~~138.~~141. RAMs will be adopted to mitigate impacts to reptiles during vegetation clearance and site preparation works in areas identified as having good or exceptional reptile habitat, for example CIC 91 and 92 in Area 16. Measures would be similar to those employed for GCN, and would include destructive searches of potential refugia, staged vegetation clearance to persuade reptiles to move out of areas to be affected by construction activities and supervised topsoil strip as appropriate. Any refugia with hibernation potential would be taken apart during the active season, to avoid disturbing hibernating reptiles.

~~139.~~142. Where the haul road results in isolation effects, as predicted for Area 4, routes to enable the safe passage of reptiles (particularly common lizards and slow worm) across the road will be incorporated. Such measures could include pipes or 'Newt Grids' that pass beneath the haul road, connecting habitats on either side.

~~140.~~143. Temporary compensation for the loss of shelter habitat will be provided by the creation of artificial refugia located within the Order Limits in areas that are well connected to reptile habitat in the wider area and that are undisturbed by construction activity. Artificial refugia will be created before vegetation clearance and destructive searches begin in any given area.

3.7.5 Birds

3.7.5.1 Protection of Nesting Birds

~~141.~~144. Removal of vegetation will take place outside of the breeding season (considered to be March – August inclusive) wherever possible. Where that is not possible in discrete areas, a check for the presence of nesting birds by the ECoW will take place in advance of work. Where active nests are located, the relevant areas of vegetation will be retained until such time as young fully fledge, or the nesting attempt has ended.

~~142.~~145. In order to protect ground nesting birds which may choose to nest in short vegetation or bare ground, such areas will be checked for the presence of nests by the ECoW prior to works commencing during the breeding bird season. Where an active nest is located, an appropriate stand-off zone as determined by the ECoW will be demarcated and avoided until it has been confirmed by the ECoW that the nesting attempt has ended.

~~143.~~146. Nesting bird deterrent measures will be deployed in advance of the nesting season in large open fields (>5ha) as deemed appropriate by the ECoW to minimise the risk of ground nesting birds choosing to nest in the relevant areas. These will not be deployed in February in locations where aggregations of >50 individuals of geese and/ or waders are known to occur. Alternatively, and preferably, autumn sown cereal crops will be used to reduce numbers of nesting birds within the construction corridor in areas where notable aggregations of geese and/ or waders are known to occur.

3.7.5.2 Protection of Schedule 1 Nesting Birds from Disturbance

~~144.~~147. Species listed in Schedule 1 of the Wildlife and Countryside Act 1981 are afforded legal protection from disturbance at the nest site, as well as protection of dependent young. Surveys would therefore take place during each breeding season in which construction occurs to identify the approximate locations of nesting Schedule 1 birds and to review the mitigation measures to ensure they are sufficient to avoid disturbance. Surveys for other priority species, which could be significantly disturbed by construction works such as breeding waders, would also be undertaken prior to construction commencing.

~~145.~~148. The nest site data from the local barn owl group will be reviewed pre-commencement, alongside pre-works barn owl surveys, to identify current nest sites within the potential zone of influence of the project and to review and develop mitigation measures to ensure adherence to the legal protection of the species as a Schedule 1 listed bird. Where a nest site is deemed at risk of disturbance, then it may be necessary to close off access to that box temporarily prior to the nesting season and reopen it after completion of works. Should that be necessary, it would be conducted in liaison with the relevant landowner and barn owl conservation group, and an alternative box would be erected nearby outwith the ZoI in advance of capping the box.

3.7.5.3 Minimising Disturbance to Non-Breeding Birds within SPAs and Ramsar Sites

~~146.~~149. ODOW has committed to avoiding any construction activity within a minimum of 400m of The Wash SPA and Ramsar (relevant to The Haven crossing), during the period of October to March inclusive. This will avoid disturbance impacts to non-breeding birds within those designated sites' boundaries. The Wash SPA and Ramsar is located 180m from the onshore Order Limits at the closest point.

~~147.~~150. The restricted area will extend from Wyberton Road up to the field boundary east of Southfield Lane, as shown in Figure 22.4 of ES Chapter 22 Onshore Ornithology (Document Reference APP-113).

~~148.~~151. The Boston Alternative Energy Facility (BAEF) project was granted development consent in July 2023 and includes a requirement for compensatory measures. The proposed compensatory measures include the creation of the Wyberton Roads (South) compensation site to mitigate against adverse effects on the integrity of The Wash SPA and Ramsar. This will consist of creation of grassland and wetland habitat from existing arable land to offset disturbance displacement of waterbirds from the River Haven. Should the BAEF Wyberton Roads (South) compensation site be completed in advance of, or during, the construction phase for the Project, there will be a seasonal restriction (November to February inclusive) to construction works[4] within 400m of that compensation site, as shown in Figure 22.4 of Chapter 22 (Document Reference APP-113). In the event that the BAEF Wyberton Roads (South) compensation site is only completed during the construction phase for the Project, then construction works already underway at the point of completion would be allowed to continue. The Applicant will continue to engage with the BAEF project throughout construction.

3.7.5.4 Minimising Disturbance to Non-Breeding Waterbirds and Breeding Schedule 1 birds within Anderby Marsh LWT Reserve

~~149.~~152. The landfall construction area will be set back a minimum of 80m from the Anderby Marsh Local Wildlife Trust (LWT) Reserve. A 4m high earth bund will be constructed on three sides surrounding HDD works area to screen works from Anderby Marsh (additional to the existing Roman Bank landscape feature). This is illustrated in Plate 26.3 of Appendix 26.4 (Document Reference APP-217). At the conclusion of the construction phase, the earth bund will be removed. During its presence, however, it will be seeded with a mix of wildflower seeds.

~~150.~~153. The 4m high earth bund will also provide a screen to Wolla Bank Reedbed LWT Reserve which is located approximately 200m to the south-east of the construction compound.

~~151.~~154. Where piling is required for the landfall works, rotary and silent piling methods rather than impact piling will be adopted. Noisier plant will be located at the western end of the compound wherever possible.

155. Construction of the bund, will be undertaken within the months of August/ September between the core breeding and non-breeding seasons. March will be avoided for constructing the mitigation bund at the landfall. However, ODOW will focus on completing the 'soft start' works during this period. These preparatory works ~~, which include ground preparation, land drainage, fencing, signage, access haul road, material storage, and establishment of laydown for welfare,~~ are crucial for ensuring a smooth start to the Bund work. The soft start works would be limited to the following:

[4] Not including construction vehicle movements.

- Machinery and personnel access to the landfall area will be from routes that do not require additional vehicles to the Roman bank road that runs alongside the reserve. (Note: this does not exclude the use of the Roman Bank north of the reserve site, and traffic will be in line with the traffic management plan).
- Establishing welfare facilities for the landfall berm works. This works area is located more than 300 meters from the western boundary of the bird sanctuary. This will involve earth stripping and the placement of aggregate. The welfare location will house the majority of the soft works equipment and personnel for the duration.
- Installation of the works area boundary fence around the landfall works area. This may likely use a Heras-type fencing system that is secured with embedded stakes for stability.
- Preparing the ground locally, and installing of the flume, for the access road from the Roman Bank to the landfall field.
- Conducting ongoing ecological monitoring of the area in preparation for the main works scheduled for August/September.

3.7.5.5 Minimising Disturbance to Non-Breeding Waterbirds using (potentially) Functionally Linked Land (FLL)

Embedded

~~152.~~156. There will be a perimeter subsoil and topsoil bund, of approximately 1.5m height, at either side of the open trenched sections which will provide a degree of visual and acoustic screening between those works and the surrounding landscape. This is shown in Plate 7.2 of Chapter 3 (Document Reference APP-058).

~~153.~~157. No impact piling will be used for trenchless crossings; silent/rotary piling will be utilised at the landfall HDD, with vibratory sheet piling at the CICs to facilitate the trenchless crossings along the onshore ECC and 400kV cable corridor where required.

Seasonal Restriction

~~154.~~158. The additional mitigation for The Wash SPA and Ramsar, comprising a seasonal restriction to construction activity, to avoid works during the period of October to March inclusive within 400m of The Wash SPA, will reduce the potential disturbance impact to this species. Additionally, the seasonal restriction will be extended to cover the identified brent goose foraging areas adjacent to The Haven, as shown in Volume 2, Figure 22.4 (document reference APP-113).

~~155.~~159. Year 1 surveys recorded dark-bellied brent goose from the Order Limits plus 400m buffer predominantly from November through to March, with lower numbers in October. WeBS data from those sectors overlapping with or close to the Order Limits, for dark-bellied brent goose, shows peak numbers in January and low abundances in other months (sector counts of 40 or less). This indicates that a seasonal restriction for this species of November to March inclusive would be appropriate, which is within the October to March restriction for this area.

~~156.~~160. Data from the additional visit in April 2024 indicates that dark-bellied brent geese are still present at the River Haven at a notable abundance in this month and therefore works within 400m of the Haven, as illustrated in Figure 52 of the Winter Bird Survey 2023/24 Addendum (document reference AS1-108), during April will be limited to soft start works. Soft start works in April will entail site preparations and establishment of the haul road and work areas. No drilling will take place in April. Visual screening will be installed in the seasonally restricted area around The Haven in April in order to minimise potential visual disturbance arising from soft start works.

~~157.~~161. Within the October to March seasonally restricted area works would be limited to vegetation clearance and maintenance, in order to avoid clearance during the nesting bird season and to minimise the risk of birds establishing nests within the working area. The Applicant commits to employing an Ecological Clerk of Works (ECoW) to undertake a survey for brent geese within the seasonally restricted area prior to vegetation clearance works commencing in a discreet area. No clearance works will commence whilst brent geese are present within 400m of the area to be cleared. Once clearance works have commenced, they will continue until works have been completed in that location.

~~158.~~162. Usual agricultural operations will continue in the seasonally restricted area. Essential non-intrusive survey works would also be permitted within the seasonally restricted periods.

Localised Working

~~159.~~163. For conventional cross-country construction methodologies involving soil handling, the primary construction period is March – October. During November to February period, works will continue at trenchless crossing sites and joint bays that can be accessed by temporary haul roads and hard-standings, as described in paragraph 168~~167~~ . No trenched excavation works for duct installation[5] for the onshore ECC[6] will be undertaken throughout November – February.

[5] Works will include emergency response (fencing/trench failures)/general maintenance (de watering etc)/security.

[6] Not including the construction works for the OnSS

~~160.~~164. In order to minimise the potential for disturbance, and provide even greater certainty to the conclusions, additional mitigation has been included in the form of a commitment to localised working.

~~161.~~165. During the summer months (April to September inclusive, weather dependent), works will take place at between 20 to 30 locations at any time, or approximately 5% of the cable corridor. During October and March, summer works will progressively be completed/ started and transitioned between summer and winter working.

~~162.~~166. Areas where works are not due to take place that year will be left un-stripped (with exception for the haul road (if required). Trenching for duct installation across farmland will be carried out between March and October and will be followed by 'partial land reinstatement' involving reinstating the topsoil where practicable, leaving only the haul road, where this is required. Where practical, following partial reinstatement the project will plant a cover crop until the point at which the landowner is ready to start the normal cropping rotation. The intention is to return land to agriculture as soon as possible.

~~163.~~167. The 'where practical' in this instance refers to the fact that in some circumstances the Project may be in the position that the land can be handed back to the landowner to continue agricultural practices earlier than anticipated in which case there will be no opportunity plant a cover crop. Under this circumstance these areas of land are being reinstated to previous use and this habitat is no longer impacted. Where a cover crop is required; this will be in the form of a grass or clover mix variety which will be confirmed following the Applicants pre-commencement soil surveys and in line with the Outline Soil Management Plan (document 8.1.3, Version 2).

~~164.~~168. Winter works will be localised and will be carried out by several small teams at discrete locations along the route, such as joint bays, link boxes, trenchless crossings, short sections of haul road, bellmouths and access, cable installation (pulling) and other non-intrusive earth works (e.g. cable testing, route maintenance). Assuming a works section of 100m at these sites and 10 active sites, this would account for approximately 1,000m of works or 1km out of 70km or 1.4% of the cable corridor at any one time. Activity on the remaining 98.6% of the corridor will be confined to the operatives taking daily access to the work site where this involves the use of a haul road and moving the drilling plant to the next site once the work at any location is complete.

General

~~165.~~169. Disturbance to non-breeding waterbirds is likely to be most critical during periods of prolonged cold weather, when they may be unable to feed in their usual foraging areas and may face reduced prospects for survival. A scheme is in place to minimise the level of disturbance from wildfowl shooting in frozen conditions (JNCC, 2019). Similar measures would be imposed here, with the works suspended after seven consecutive days on which the ground was frozen (as measured at a nearby weather station). Any suspension of works would last for a minimum of seven days (or, as agreed by the ECoW), thereafter and any lifting of the suspension will take into consideration the need for a period of recovery for waterbirds after the end of the severe weather itself.

3.7.5.6 Minimising Temporary Loss of Arable Habitat

Timing of Agricultural Land Reinstatement

~~166.~~170. Areas where works are not due to take place that year will be left un-stripped outside of haul road installation (where required). Trenching for duct installation across farmland will be followed by 'partial land reinstatement' involving reinstating the topsoil where practicable (in line with the Outline Soil Management Plan (document 8.1.3, Version 2), leaving only the haul road, where this is required. Where practicable, following partial reinstatement the project will plant a cover crop until the point at which the landowner is ready to start the normal cropping rotation. The intention is to return land to agriculture as soon as practicable.

~~167.~~171. A timeline for reinstatement of agricultural land is provided below. The timeline is indicative only and may be subject to change are as follows:

~~168.~~172. Winter Year 0 (prior to mobilisation) – Localised vegetation clearance only and enabling works at some access locations.

~~169.~~173. Winter Year 1 – 35% stripped, with 3-5% (of whole corridor) partially reinstated.

~~170.~~174. Winter Year 2 – 70% stripped, 40% (of whole corridor) has been partially reinstated.

~~171.~~175. Winter Year 3 – 70% stripped (as 30% un-stripped as avoided through Trenchless Techniques), 80% of which fully reinstated to previous agricultural use.

~~172.~~176. Winter Year 4 – 100% fully reinstated to previous agricultural use.

~~173.~~177. The cover crop habitat will be retained and managed for the duration of the construction period, until such time as it is restored to the previous land use.

Severed Land

~~174.~~178. As set out in section 6.14 of the outline Code of Construction Practice o~~O~~pportunities will be explored to utilise severed land to provide compensatory habitat for skylark and yellow wagtail in sections of fields adjacent to, or near to the Order Limits, subject to agreements with landowners. The Applicant will liaise with landowners and tenants to agree a management plan for severed areas. Where viable, suitable habitat will be created immediately prior to construction commencement and will be retained for the duration of construction at each specific location. Management options will take into consideration guidance on the RSPB Website (RSPBa and RSPBb) and Farm Wildlife (2024), full details of management options will be submitted as part of a final Ecological Management Plan. These will include a mixture of:

- Fallow land – to provide high quality foraging habitat; and/ or,
- Suitable cover crop – to provide feeding habitat.

~~175.~~179. Use of broad-spectrum insecticides would be avoided in these locations. It is recognised that land close to field boundaries, particularly those with tall vegetation, would be more likely to be avoided due to predation risk. For example, guidance suggests that skylark plots should be at least 24m from the field edge (RSPBb) and ideally >80m (Farm Wildlife, 2024).

~~176.~~180. The area of compensation land >24m from a field edge comprising hedgerow, scrub, woodland, or existing built linear feature (fence line or wall) is anticipated to be up to 31 ha and the area which is >80m is up to 11 ha, subject to agreements with landowners. The total area subject to management is anticipated to be up to 65 ha, spread along the route of the onshore ECC and 400kV cable route, subject to agreements with landowners. The areas identified as severed land (potential compensation areas) are shown in Figure 22.5 (Document Reference AS1-060).

181. In summary, the range of mitigation measures presented above have been designed to address potential impacts to those species which are qualifying features of identified SPA/Ramsar sites, which have been recorded within the survey area, utilising land which is potentially functionally linked to the designated sites. Therefore, a separate outline Annex 1 species (including pink-footed goose) management plan is not considered to be necessary, as the relevant measures have been presented herein.

3.7.5.7 Additional mitigation for pink-footed goose utilising potential functionally linked land

182. In response to concerns raised by Natural England regarding the project's potential impact on pink-footed geese where avoidance is not practicable the Applicant has committed to developing a Construction Programme Management Plan. This plan will aim to address these concerns and provide additional conservation outcomes for the target species by where practicable coordinating construction activities with local farmers, avoiding critical feeding periods for the geese and providing alternative feeding options.

Objective

183. To manage the construction programme in a way that avoids cereal crops and sugar beet attractive to pink-footed geese, ensuring minimal disruption to both the construction activities and the local wildlife.

1.Collaboration with Farmers

~~-~~Post-Design Consultation: Following the detailed design phase, engage with local farmers to determine their crop rotation plans over the three-year construction period.

184. Crop Mapping: Create a detailed map of the planned crops and their locations.

2. Construction Activity Planning

185. Seasonal Scheduling: Schedule construction activities to avoid working near cereal crops and sugar beet between the months of November and January, when these crops are most attractive to pink-footed geese.

186. Alternative Planning: Identify alternative construction areas or adjust timelines to accommodate the presence of cereal crops and sugar beet.

3. Mitigation Measures

187. Additional Feeding: Where it is unavoidable to work near cereal crops or sugar beet, provide additional feed for pink-footed geese in the form of discarded sugar beet tops (or similar).

188. Feed Placement: Place the sugar beet tops (or similar) in fields away from the construction areas, within other fields within the project Order Limits .

189. The size of the field / area that would be utilised for the placement of alternative feed would be up to 1ha.

4. Detailed Plan Development

190. Integration with Design: Once the detailed design is completed and cropping cycles are established, integrate this information into a comprehensive plan.

191. Partnership with Natural England: Develop the detailed plan in collaboration with Natural England. The plan will be secured as a requirement of the final Ecological Management Plan, which must be approved by LCC in consultation with Natural England before commencing any construction activities.

5. Implementation and Monitoring

192. Plan Execution: Implement the plan as agreed, ensuring all construction activities are aligned with the established guidelines.

~~177.~~193. Ongoing Monitoring: Continuously monitor the effectiveness of the plan and adjust as necessary in consultation with farmers and Natural England.

3.7.6 Bats

3.7.6.1 Roosting Bats

~~178.~~194. Embedded mitigation for impacts to bats is via project siting and design, which has ensured that there are no buildings within the Order Limits. Surveys have not identified any bat roosts within any trees inside the Order Limits and no roosts have been identified within trees or buildings within 25m of the Order Limits.

~~179.~~195. Pre-commencement surveys will be conducted on any trees prior to their removal, informed by the latest bat survey guidelines (Section 3.5). Appropriate measures such as acoustic fencing and restricted timings of works will be implemented to ensure there are no indirect impacts on bat roosts in proximity to the Order Limits.

Licensing

~~180.~~196. At the time of writing, an EPS licence is not considered to be necessary. However, re-assessment of EPSL requirements will be undertaken based upon pre-commencement survey results and final scheme design. If required, an EPSL application would be submitted to Natural England (NE) in advance of work affecting bat roosts.

Mitigation and Compensation Measures

~~181.~~197. Compensation roost features will be provided for every potential roost feature (as identified by the pre-commencement surveys) affected prior to loss. This compensation measure applies regardless of whether a confirmed roost is affected. The compensation roost features will aim to provide a functionally equivalent potential roost resource and may include re-use of cavity containing sections, re-use of whole felled trunks by setting vertically as monoliths, veteranisation (cutting and carving into healthy trees to mimic nature, to speed the process of decay and rot holes) and/or bat boxes on retained trees or installed poles, as appropriate.

~~182.~~198. Compensation features will be installed as close as possible to those lost, whilst also addressing other constraints, such as the requirement to be within an unlit area, ideally away from Public Rights of Way (PRoW) and within or close to potential flight lines. In all cases the compensation measures for confirmed roost loss would be within the Core Sustenance Zone of the species concerned. Core Sustenance Zones are defined as “the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence on the resilience and conservation status of the colony using the roost” (Collins, 2023).

~~183.~~199. Subject to the timing of pre-commencement survey, re-scoping (pre-felling check) will be undertaken at the point of felling. Due to natural decay processes and weather damage, historic data will not be used as a basis for final decision making in respect of felling: all trees will be scoped, or re-scoped (ground-level assessment only) by a suitably experienced ECoW prior to felling. Thereafter the following measures will be taken:

~~184.~~200. Potential Roost Feature (PRF) absent – trees may be felled without additional measures.

~~185.~~201. PRF present – trees subject to an appropriate level of survey following the current BCT guidelines. Surveys will be overseen by a suitably qualified and licensed bat worker immediately prior to felling.

~~186.~~202. If no evidence of bats is recorded and bat absence can be conclusively determined at all PRFs within a tree, then the PRFs may be immediately blocked or removed, and/or the tree can be immediately felled without additional special measures. In this instance PRF filling/removal and/or tree felling may be conducted during all months of the year.

~~187.~~203. If it is not possible to conclude bat absence (such as with long or complex PRF which preclude full endoscope inspection, or if parts of the tree are inaccessible due to fragility) relevant trees plus a minimum buffer of 10 m of the surrounding vegetation (a larger buffer may be required and to be advised by the ECoW) will be left *in situ*. until the bat active season (April – October). Prior to felling, these trees will be subject to an appropriate level of survey following current BCT guidelines. This is likely to include aerial inspections and/ or emergence and re-entry survey, to be overseen by a suitably qualified licensed bat worker. If no evidence of bats is recorded during the process, the parts of the tree containing PRFs will then be soft and/or sectionally felled within 24-hours of the preceding emergence survey, under the direction of the ECoW. Felled cavity-containing sections will be left undisturbed on site for any undiscovered bats to depart.

~~188.~~204. Confirmed Roost – in all cases disturbance to, or felling of roost trees will take place during the period that bats are most likely to be absent or least sensitive to impacts (i.e. in autumn/winter in the case of maternity roosts), and under an EPSL. All work under the EPSL which could result in disturbance of bats would be overseen by the Named Ecologist, or his/her Accredited Agent (such as a suitably skilled and experienced ECoW).

3.7.6.2 Commuting and Foraging Bats

~~189.~~205. The loss of sections of hedgerow along the cable route will have a negligible impact on bat species that utilise hedgerows as flight lines such as the Pipistrelle, Myotid and Plecotus genus. The total length of hedgerow within the Order Limits is 6,0395~~53~~m. There is predicted to be a ~~permanent~~ temporary loss of 372~~89~~m of hedgerow in total. The future detailed design will aim to further minimise the need for hedgerow clearance work associated with the access roads, haul road and cable route.

Mitigation

~~190.~~206. Impacts to commuting and foraging bats will be reduced by filling temporary hedgerow gaps overnight during construction (and thereafter) with a "dead hedge" or similar, throughout the year to enable bat passage until such time as reinstated vegetation has established and is at least 1 m tall. These locations shall be identified in the EMP and will be based upon pre-commencement/ survey data plus final scheme design details. The dead hedge will be in place at least one-hour before dusk and will be removed no earlier than 30 mins after dawn (unless EPSL requirements specify otherwise or a temporary exemption has been pre-agreed with the ECoW in view of ongoing construction work that finishes late/starts early). During the day the dead hedge will be either left in-situ (if the hedgerow gap is not needed for access/construction) or carefully placed in a nearby location that is not within the active working area. The location would be agreed with the ECoW and is anticipated to be different for each hedgerow.

~~191.~~207. During construction the "dead hedge" will comprise Heras fencing (or similar, to enable sections to be manoeuvred into/out of position) with brash attached to a height of at least 1.2m. During construction the ECoW will regularly monitor each section of dead hedge and additional brash will be added to each section of Heras fencing if considered needed.

~~192.~~208. Post construction, the "dead hedge" will comprise brash to a height of at least 1.2m, held in place with untreated wooden stakes, and will be allowed to degrade naturally. These would be subject to regular monitoring until the reinstated hedgerow(s) are at least 1m tall. Maintenance and repairs would be undertaken, as required.

Migrating Nathusius

~~193.~~209. Although not confirmed, there is the possibility that recordings of relatively high numbers of Nathusius pipistrelle in ECC 10 in September could be attributed to migration activities.

~~194.~~210. In order to minimise any impacts on migrating Nathusius and other bat species, night-time working will be minimised. Should night-time working be deemed necessary, all lighting will follow a sensitive lighting design as per the IPL and BCT Guidance Note 08/23 and avoid key bat habitat, e.g. hedgerows.

3.7.7 Badger

~~195.~~211. Badger is confirmed to occur throughout the Order Limits, with outlier and main setts both recorded.

3.7.7.1 Mitigation

~~196.~~212. Mitigation for badgers will include pre-commencement surveys, to confirm the status of all setts within 20m of the detailed design of the temporary and permanent works footprint.

~~197.~~213. Reasonable avoidance measures shall be implemented and may include micro-siting certain elements and/or installing protective fencing to minimize disturbance to retained setts, ensuring excavations remain closed overnight or contain ramps such that badgers cannot become trapped and including suitable fencing in agreement with the ECoW so as to deter badger sett creation within it.

3.7.7.2 Licensing

~~198.~~214. If pre-commencement/surveys determine that a badger sett will be affected, then a licence from Natural England will be needed in advance of work that disturbs the sett. Depending on the degree of disturbance, mitigation may be relatively limited such as amending work schedules, or more complex in the event a sett requires closure, in which case creation of an artificial replacement sett in advance may be needed (depending on the type and usage of the original). Any such measures would be discussed and agreed with NE in advance and would form part of the licence Method Statement.

3.7.8 Otter

~~199.~~215. The project is predicted to lead to disturbance and isolation effects on otters commuting along the Wainfleet Relief Channel, watercourses 1621 and 1623 and the River Welland.

3.7.8.1 Mitigation

~~200.~~216. Reasonable avoidance measures for works near to other watercourses will be used to reduce the risk of committing an offence under the protecting legislation.

~~201.~~217. Design of compounds in close proximity to watercourses used by otter will seek to segregate noise and visual disturbance from the watercourse through sympathetic design. A potential solution would be to construct and seed top-soil storage areas (bunds) parallel to the construction compound boundary, to provide more natural looking acoustic and visual screening. Where this is not possible, hoarding could be used to provide visual screening, and/or acoustic fences to prevent disturbance from noise.

~~202.~~218. In cases where the Project temporarily crosses a ditch that is likely to be used by otter, appropriate mitigation measures to encourage the continued use of that ditch by otter will be agreed with the ECoW. Mitigation measures will be tailored to suit the size, water levels and flow rates of each ditch crossed, with details to be provided in a riparian crossing schedule in the EMP.

~~203.~~219. Pre-commencement monitoring of the holt in ECC 10 will be undertaken to establish whether it is a natal holt or not. Measures to avoid disturbance will be adopted such as strategic bund placement, acoustic barriers/ fencing and control of light spill. Where disturbance effects cannot be avoided, an A45 licence will be sought from NE.

3.7.8.2 Licensing

~~204.~~220. Where disturbance effects cannot be avoided, an A45 licence will be sought from NE.

~~205.~~221. If pre-commencement surveys or ECoW pre-clearance checks conclude the species is present and that micro-siting to avoid impact is not possible, then mitigation for temporary habitat loss and disturbance may include:

- scheduling of work to avoid sensitive periods of the otter life cycle;
- deterrence of otter from areas where there is risk of injury or death in advance, such as by installation of otter-proof fencing;
- minimising disturbance from light and human presence via controlled lighting methods, temporary screening and potentially amending working hours; and
- reinstatement of bankside habitats immediately after work, to include sowing with species rich locally appropriate sward and fencing to prevent stock access.

3.7.9 Water Vole

~~206.~~222. Water vole presence has been identified within the Order Limits and the surrounding landscape. Desk study records and field evidence have been collected for water vole presence within the drainage ditch network for all segments, except for ECC 13 and ECC 14.

3.7.9.1 Mitigation

~~207.~~223. Where the haul road crosses watercourses which are utilised by water voles beyond the Order Limits, mitigation measures will be tailored to suit the size, water levels and flow rates of each ditch crossed, with details to be provided in a riparian crossing schedule in the EMP.

~~208.~~224. The detailed design of the haul road and associated culverts will seek to avoid works within 5m of any water vole burrow.

~~209.~~225. Wherever practicable, buffer zones surrounding retained waterbodies will be at least 10m in width in line the Pollution Prevention Guidelines: Works and Maintenance in or near Water: GPP 5 (NetRegs, 2018). (The Pollution Prevention Guidelines (which are progressively being replaced with Guidance for Pollution Prevention (GPPs) provide environmental good practice for the devolved administrations of the UK. Whilst not endorsed by the Environment Agency, the GPPs provide a strong platform for informing best practice and environmental management in areas where there are no direct regulations).

~~210.~~226. Exclusion zones will be established around ecologically valuable retained habitats including ditches, at an offset sufficient to prevent negative arising from enabling and construction activities. These zones will be demarcated with fencing, tape and signage, as appropriate to prevent ingress by the construction activity in the vicinity and maintained until the completion of the construction phase. Any fencing will be designed to ensure retained habitats remain accessible to dependent species throughout the construction phase. The ECoW will work with the Site Manager to agree the alignment and specification for fencing in any given area, and to ensure it is installed prior to the commencement of construction in that area. The location and type of all protective fencing will be specified in the EMP.

~~211.~~227. Where possible impacts to water voles will be avoided either through retaining a buffer between the developments works and suitable habitat or through making slight adjustments to development works to avoid water vole burrows.

~~212.~~228. Where water vole have been recorded, sensitive vegetation clearance along watercourses will occur.

~~213.~~229. Pre-commencement surveys will take place, along with monitoring during and post-construction in line with licensing requirements (Annex A.5).

Pre-commencement Surveys

~~214.~~230. Pre-commencement surveys will be undertaken to confirm the location and activity of water voles at known locations and to identify the location of any new burrow or other field evidence. Surveys will include those ditches in ECC 13 and ECC 14 and those where access to a waterbody has previously been restricted. The results of the surveys will inform detailed construction design, which will follow the mitigation hierarchy. If impacts cannot be avoided on new areas of water vole habitat, suitability of this area for the CL31 licence will be reviewed.

~~215.~~231. The pre-commencement survey will be undertaken during the season that water vole is active (March-October), as close to the construction start date as possible. A minimum of two survey visits will be undertaken following methods set out in Water Vole Mitigation Guidance (Dean, M., *et al*., 2016).

~~216.~~232. If further evidence of water vole is not recorded following the pre-commencement surveys, the species will be considered most likely absent from these locations. The ECoW will instruct the contractor, and bankside vegetation will be removed to ground level and a final search for burrows undertaken. Where no further evidence is found, construction work will then proceed.

~~217.~~233. If any burrows are found that have high potential or positive evidence of water voles, these will be marked with hi-visibility markers and work in this location will pause until the Registered Consultant can review the situation. If water vole is encountered or considered highly likely to be present, work will immediately cease with a c.50m buffer surrounding the new area of water vole habitat until the specific site can be registered under a CL31 licence following the method described below in Section 3.7.9.2.

3.7.9.2 Licensing

~~218.~~234. Where impacts to burrows cannot be avoided, works will be progressed under a CL31 licence involving the displacement of individuals to suitable adjacent habitat. A CL31 licence can/ will only be used in the (three) months March, April and September.

~~219.~~235. A CL31 licence shall be required for working areas where the haul road runs through a water course that has confirmed presence of water vole. Based upon current survey data and the requirement to install a haul road, a licence is considered necessary to enable this work to proceed at three, separate locations: Ditch 20004, Ditch 20273 and Ditch 1571. Details of mitigation measures specific to the CL31 licence are provided in Annex A.

~~220.~~236. A draft licence application has been made to Natural England in respect of water vole presence at these three locations and includes the mitigation measures set out within this document and Annex A.

3.7.10 Other Terrestrial Mammals

~~221.~~237. Checks for the presence of hedgehogs, hares, harvest mice or other protected or notable species will be carried out by the ECoW prior to vegetation clearance. Additional reasonable avoidance measures will be implemented/mitigation licences will be applied for as necessary. Reasonable avoidance measures that may be employed if these species are present would be in line with those provided for GCN in Section 3.7.23 and reptiles in Section 135~~134~~4 and in the paragraphs for hedgehog and brown hare below.

3.7.10.1 Hedgehog

~~222.~~238. Towards the end of the autumn period (typically in November but dependent on temperature), any suitable habitat for hedgehogs to use for hibernating, such as tree roots, hedgerows, old mammal burrows, under timber buildings or compost heaps will be removed, where possible, thus minimising the risk of any hedgehogs hibernating within the development site (British Hedgehog Preservation Society, 2009). If an area of potentially suitable habitat could not be removed ahead of when hedgehogs would be expected to commence hibernating, then the areas of remaining habitat would be carefully inspected by the ECoW before they are removed. Any hedgehogs found would be relocated, with any nesting material, to a hedgehog box within the nearest suitable undisturbed habitat.

3.7.10.2 Brown Hare

~~223.~~239. Areas of suitable habitat with vegetation greater than 200mm in height would be subject to a two-stage cut of vegetation which would remove any suitable habitat for brown hare and discourage them from remaining in an area.

3.8 Reinstatement, Enhancement and Creation of Habitats following Construction

3.8.1 ~~Habitats in General, including Ditches and Trees~~Reinstatement at the Onshore ECCs, 400kV cable corridor and TCCs

~~224.~~240. The onshore ECC and 400kV cable corridor (Figure 3.3 (Document Reference APP-089)) will largely affect habitats of low conservation value, i.e. agricultural grassland and cropland. These will be returned to their previous state following construction.

~~225.~~241. Habitats being temporarily lost to haul roads and construction compounds, and therefore requiring reinstatement post construction, include agricultural grassland, cropland, and low/moderate condition ditches (ditches of high condition will be subject to trenchless techniques). Watercourse crossing points are anticipated to be 8m in width across a channel. These habitats would be reinstated following construction.

242. There are 43 ~~52~~ trees situated within areas ~~proposed for temporary or~~affected by construction or permanent works, with the remainder assumed to be retained. No trees will be removed for temporary access and efforts will be made to further reduce the number of trees lost through micro-siting wherever possible. Where trees are removed, they will not be replaced *in situ*. for operational reasons (i.e. because access to the cables is required). Compensation for the loss of trees along the route will ~~also~~ be provided by the proposed screening planting at the OnSS.

~~226.~~243. Compensation for loss of hedgerows will be provided by re-instating native, species-rich hedgerows, and including ditches where these were also present originally. Hedges will be reinstated at their original location and comprise a locally appropriate mixture of at least seven woody species.

~~227. Compensation for the loss of trees along the route will also be provided by the proposed screening planting at the OnSS. The indicative landscape mitigation plan included in Figure 2 indicates how this may be achieved (and has been used as the basis for the Biodiversity Net Gain Project Principles and Approach Statement (Document Reference APP-302). It is important to note that the figure is illustrative at this stage, i.e. the extent and location of habitats, mitigation and compensation measures may change at the detailed design stage.~~

~~228. Opportunities for further enhancements at the OnSS will be explored. Enhancement may include the installation of a range of bird boxes and the creation of earth banks for invertebrates, refugia for reptiles, amphibians and small mammals.~~

244. Reinstated habitats at the onshore ECC, 400kV cable corridor and TCCs will be subject to an aftercare period of up to five years following reinstatement. This is the standard period applied to reinstatement planting for the reasons, that it is within the first five years that the majority of failures will occur and beyond the first five years, thinning will be implemented that will look to remove the dead, diseased or damaged specimens to allow the healthier specimens the space above and below ground to develop. ~~,~~

~~229.~~245. The methods of aftercare will be agreed in the LMP and EMP and will be subject to the results of monitoring but are likely to include watering, pruning and the management of undesirable weeds. During the aftercare period certain areas (such as adjacent to PRoW) are likely to need protection from disturbance by people, dogs and grazing animals. The precise methods for protection will be agreed as part of the LMP and EMP and~~; they~~ are likely to involve the use of temporary fencing and signage.

~~230.~~246. The success rates of hedgerow, tree and shrub planting will be increased through considered selection of plants based on an understanding of how plant communities can withstand the effects of climate change, with specific consideration given to soil health. The specification of implementation and management practices will use British Standards to ensure quality is delivered.

~~231.~~ Reinstatement and aftercare would be the responsibility of the Applicant, or its appointed contractors and would only be undertaken by suitably experienced contractors.

247. Following the aftercare period, it is envisaged that ongoing management for reinstated habitats would revert to the existing management regimes and would be the responsibility of the existing landowner/ manager.

3.8.2 Outline Habitat Creation at the OnSS

248. The OnSS will largely affect habitats of low conservation value, i.e. agricultural cropland. These will be returned to their previous state following construction at the construction compounds and decommissioning in the remaining parts of the OnSS site.

249. The indicative landscape mitigation plan included in Figure 2 indicates how this may be achieved (and has been used as the basis for the Biodiversity Net Gain Project Principles and Approach Statement (Document Reference APP-302). It is important to note that the figure is illustrative at this stage, i.e. the extent and location of habitats, mitigation and compensation measures may change at the detailed design stage.

250. Compensation for loss of hedgerows at the OnSS will be provided by re-instating native, species-rich hedgerows with trees, and including ditches where these were also present originally, as well as creating new hedgerows where this is not possible. Hedges will be reinstated at their original location (or as close as possible), new hedgerows will be located so as to re-establish links and maintain the network. In all cases the hedgerows will comprise a locally appropriate mixture of at least seven woody species and unless directly adjacent to woodland, will also include heavy standard trees at a 3:1 ratio for any trees lost (noting that trees will not be planted above cable routes). Trees over and above the 3:1 replacement ratio would be considered to be an ecological enhancement.

251. Woodland creation is necessary to meet landscape screening requirements (see Section 2.5.2 of this OLEMS) and will mainly comprise locally appropriate broadleaved species. It will serve to link and/ or fortify the existing habitat network thereby also assisting toward maintenance and enhancement of the green infrastructure network, Woodland boundaries will in some locations comprise hedgerow species and be maintained as such, for the benefit of a wider range of species than would be supported by woodland alone, in addition to added screening benefit.

~~232.~~252. Opportunities for further enhancements at the OnSS will be explored. Enhancement may include the installation of a range of bird boxes and the creation of earth banks for invertebrates, refugia for reptiles, amphibians and small mammals.

~~3.8.2~~3.8.3 Habitats of Principal Importance and Lincolnshire Biodiversity Action Plan Priority Habitats

~~3.8.2.1~~3.8.3.1 Outline Hedgerow Management Strategy

~~233.~~253. A total of 372~~89~~m of hedgerow, of which 313m is Priority Habitat (UKHab h2a), ~~-~~will be temporarily lost across the entirety of the Order Limits. To ensure works will not adversely impact upon any notable or protected species, the removal of hedgerows will take place in line with the mitigation strategy for the protection of nesting birds, outlined in Section 3.7 above.

~~234.~~254. Compensation and enhancement for loss of hedgerows will be provided by re-instating native, species-rich hedgerows with trees (noting that trees will not be planted above the installed cables), as well as creating new hedgerows if/ where this is not possible. Hedges will be reinstated at their original location (or as close as possible), new hedgerows will be located to re-establish links and maintain the network. Compensation for loss of hedgerows and trees will be provided by re-instating native, species-rich hedgerows with heavy standard trees. New hedgerows will comprise a locally appropriate mixture of at least seven woody species and include heavy standard trees at a 3:1 ratio for any lost. Species selection will reflect established hedgerow species found within the local area and will be designed as mixed hedgerows to encourage biodiversity.

~~235.~~255. Hedgerows will be planted during the planting season (October to March), with the mixed native species planted at a density of five plants per linear metre, with plants arranged in an off-set double row in species groups of five to 11. Plants will be 0.8-1.2m in height. A 50mm bark mulch will be applied to suppress weeds during establishment and suitable rabbit guard fencing or shelter (using biodegradable or compostable materials), will be used to protect vegetation from damage.

~~236.~~256. Newly planted hedgerows will be monitored for a period of five years to ensure establishment. Where plants fail, these will be replaced like-for-like as soon as possible. Following hedgerow establishment (between year 5 and year 10) hedgerows should be cut on a three-year rotational basis, unless monitoring identifies excessive growth and the requirement for a more frequent regime. Plants should be encouraged to grow into tall, thick hedgerows.

~~3.8.2.2~~3.8.3.2 Ecological Arable Field Margins

~~237.~~257. Opportunities for the creation and enhancement of ecological arable field margins will be developed in the detailed design, with any specifications set out in the EMP. Along the ECC, opportunities will be focussed within the existing extent of field margins, with no encroachment of productive areas of a field or field access tracks.

~~238.~~258. Arable field margins will be seeded with a multi-annual, flower rich grass mix. Seeding will adhere to guidelines provided by Natural England, Defra and the Rural Payments Agency on suitable seed composition, with a particular focus on the following recommended mixes:

- AB8: Flower-rich margins and plots - GOV.UK (Natural England and the Rural Payments Agency, 2024);
- CIPM2: Flower-rich grass margins, blocks or in-field strips - GOV.UK (Defra and the Rural Payments Agency, 2024).

259. To achieve optimal results, the seeding of arable field margins will be carried out in consultation with the relevant landowner.

~~3.8.3~~3.8.4 Greater Frampton Vision Area

260. Greater Frampton Vision is a Landscape Recovery project on the edge of the Wash in Lincolnshire, England. Some of the land within the Greater Frampton Vision is within the ECC and would be impacted by works. Where habitats are lost to site clearance, a basic program of like-for-like reinstatement would be applied. However, this would be on the understanding that mitigation may be realigned to accommodate RSPB's plans for the area or where those habitats have functionality for protected species, the habitat would be reinstated and improved. An example of this is the reinstatement of hedgerow habitats in this area, where RSPB's conservation strategy is to remove hedgerows in their vision area. The Project remains committed to reinstating all habitats post-project, but the location of some of these may be altered based on continued stakeholder engagement in relation to the Greater Frampton Vision.

3.9 Biodiversity Net Gain

261. The Applicant is committed to delivering a net gain in biodiversity and demonstrating this gain by using an appropriate biodiversity metric~~,~~

262. If there is a shortfall in overall biodiversity units from any metric type (habitat, hedgerow, or river), as a result of the Project, offsite habitat enhancement to deliver an overall net gain for the Project will be agreed and incorporated.

263. The delivery of offsite enhancements will be secured through an agreement between the Applicant, or it's agent and the landowner/responsible body.

~~3.9~~3.10 Monitoring and Management

~~3.9.1~~3.10.1 During Construction

~~239.~~264. As outlined in Section 3.3, the purpose of the ECoW is to provide ecological advice and monitor compliance. The ECoW shall ensure that biodiversity is protected and impacts either avoided or minimised as described in the EMP and any protected species licences.

~~240.~~265. The ECoW will manage the execution of the pre-commencement surveys, and the subsequent assessment of their results. The ECoW will play a critical role in ensuring that these surveys are conducted effectively and that the findings are comprehensively evaluated. Where necessary and in response to assessment of the pre-commencement surveys (outlined in Table 3.5), the ECoW will work with the principal contractor to refine the agreed mitigation practices on a case-by-case basis at the local level (for example, the exact siting of herras fencing to protect hedgerows and trees in relation to a construction compound). The ECoW will oversee the implementation of all necessary monitoring and management practices and maintain detailed records of the practices undertaken throughout the Project.

~~241.~~266. The establishment of habitat creation/ landscape planting will also be monitored during the construction phase and will include checking that ground preparation works have been successfully implemented, planting stock is as specified in terms of species, size and quality and that that the process of planting is undertaken to a high standard with reference to British Standards and in appropriate conditions.

~~242.~~267. The ECoW role would be retained on site throughout the construction period (and any subsequent reinstatement works).

268. Noise monitoring will be undertaken within the Anderby Marsh LWT Reserve during the landfall construction phase as detailed within the Outline Noise and Vibration Management Plan (NVMP) [current version REP2-031].

~~243.~~269. A pre-construction survey for dark-bellied brent goose will be undertaken at the seasonally restricted area at The Haven and adjacent land to ensure that the proposed mitigation remains appropriate.

~~3.9.1.1~~3.10.1.1 Compliance Audits

~~244.~~270. In order to maintain the highest standards of environmental compliance, the Project will engage a suitably qualified external organisation to conduct comprehensive compliance audits. The ECoW will play a pivotal role in facilitating this process by ensuring that all necessary information is provided to the external review group, thereby enabling effective compliance monitoring.

~~245.~~271. The compliance audits will be structured around KPIs that have been specifically identified for each relevant ecological feature. These KPIs will be set out in the EMP. To streamline ecological compliance monitoring, a straightforward form that will assess adherence to the terms outlined in the EMP, aligned with the agreed-upon KPIs will be developed. Furthermore, separate forms dedicated to documenting compliance with protected species licensing will be incorporated into the relevant licensing documents where necessary.

~~246.~~272. In addition to appointing an external organization for compliance audits, the Project will invite representatives from key stakeholders to participate in an external review group. This invitation will be extended to stakeholders including those from the Environment Agency, Natural England, Internal Drainage Boards, Lincolnshire County Council and the relevant Local Planning Authorities. This group will be instrumental in overseeing the compliance auditing process, ensuring transparency and accountability throughout the duration of the Project.

~~3.9.2~~3.10.2 During Operation

~~247.~~273. Maintenance activities will be subject to an EnMS which will include specific measures to avoid potential impacts to protected/ notable species. The EnMS would also include measures to minimise the risk of a pollution event.

~~248.~~274. All habitats created as part of ecological compensation or enhancement would be subject to monitoring to ensure that aims and objectives are met, as well as any conditions related to protected species licensing requirements. The full details of the monitoring necessary would be included in the EMP.

~~249.~~275. In the first instance, it is anticipated that aftercare monitoring to ensure establishment of reinstated habitats and other mitigation/compensation/enhancement habitats will be undertaken in years 1-5 (to coincide with the aftercare and implementation period). This regular monitoring will enable an ongoing assessment of the success of habitat creation and will also inform ongoing management practices. Detailed schedules for monitoring and management tasks will be set out in the LMP. Further monitoring and management away from the OnSS would only be required if reinstated habitats failed to establish.

~~3.9.2.1~~3.10.2.1 At the OnSS

~~250.~~276. All habitats created as part of ecological compensation or enhancement, will be subject to long term monitoring and management to ensure that aims and objectives are met. This will be for the duration of the operational period , and at a frequency to be included in the LMP and EMP. A detailed post construction monitoring and management plan will be prepared, the full details will be included in the LMP and EMP.

~~251.~~277. KPIs for all habitats created as part of ecological compensation or enhancement will include checks on soil health, competition from weeds and the effectiveness of weed suppression measures, as well as plant health and rates of growth. During the first five years of monitoring, checks will identify plants that are dead, dying and/ or diseased and will inform the process of replacement planting. At Year 5, thinning of planting may be considered appropriate to ensure that the healthiest specimens are given the space required to establish more strongly. Damaged, diseased and dead plants will be removed as part of the thinning process but would not be replaced as overstocking would hamper the continued development of the stronger plants emerging.

~~3.9.2.2~~3.10.2.2 Additional Monitoring (if required)

~~252.~~278. If the Greater Frampton Vision is included within the Project design, further details on the monitoring and management of related habitats would be included in the LMP and EMP.

~~253.~~279. If habitat creation and enhancement opportunities are realised in other areas of the project, further details on the monitoring and management of those habitats would be included in the LMP and EMP.

~~254.~~280. In the event that offsite mitigation/ compensation, or additional measures are required for protected species, these shall be monitored against defined aims and objectives which shall be included in the EMP.

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Legend

- Order Limits
- Onshore Segment Break
- Onshore Substation (OnSS) Footprint
- Landfall Trenchless Works Area
- Transition Joint Bay Area
- Connection Area

Coordinate System: British National Grid

0 5 10 km

Scale: 1:200,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)

Onshore Order Limits and Segments
Figure 1.1

OUTER DOWSING OFFSHORE WIND

Date: 19/02/2025
Produced By: JCS
Revision: 2.0

SLR

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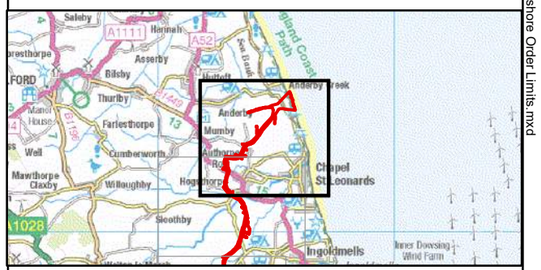
552000
554000
556000
376000
374000
372000
N
ECC 2: A52 - Hogsthorpe to Marsh Lane
ECC 1: Landfall to A52 - Hogsthorpe
ANDERBY CP
MUMBY CP
CHAPEL ST LEONARDS CP
Anderby Creek
Chapel St Leonards
Hogsthorpe
Wolla Bank Pit Nature Reserve
Chapel Pit Nature Reserve
Ember Lane
Maid Drain
Cocking Pit Drain
Wigg Drain
Four Hundred Acre Drain
Willoughby High Drain
Orby Drain
Roman Bank
Sea Bank
Groynes
England Coast Path
Langham Lane
Maiden Lane
A52
Poplar Grove
Gowt Bridge
Bank House
The Grange
Dennis's Cottage
Wolla Bank
Bank Farm
Chapel Six Marshes
White Horses
Chapel Point
Nelson Villa
Gratiss House
Rose Bay
The Laurels
Croft Farm
Rose Cottage
Sundial Farm
Ivy House Farm
Spring House
Authorpe Row
Chestnut Farm
Lowgate Farm
Mickleberry Hill
Meadow Side
Hawnby House
Oakleigh
Pine Hill House
Quakers' Hill
Langham Farm
Langham House
Manor Farm
Wesley House
Thrumber Marsh Farm
Field House Farm
Field Farm
Church Farm
Sycamore Farm
Rectory
Bluebell Farm
Wexham
Anderby
The Apiary
Chapel House
Dairy Farm
St Omer
Seaton Farm
Manor Farm
South Fen Drain
Helsey House
Helsey
Cherry Farm
Slate Farm
Listoft
Willow Farm
Loft's Bridge
Goodwin's Charity Farm
Drain Farm
Sewage Works
Church Farm
Elm Farm
Mill House
Mill Hill
Hotel
Sch
PO
Groynes

Legend

- Order Limits
- Onshore Segment Break
- Landfall Trenchless Works Area
- Transition Joint Bay Area



Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:17,500

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.2

OUTER DOWSING OFFSHORE WIND

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550000
552000
554000
556000
372000
370000
368000

ECC 1: Landfall to A52 - Hogsthorpe
ECC 2: A52 - Hogsthorpe to Marsh Lane
ECC 3: Marsh Lane to A158 - Skegness Road

HOGSTHORPE CP
ADDLETHORPE CP
INGOLDMELLS

Hogsthorpe
Addlethorpe
Ingoldmells
Cumberworth Ings
Sloothby Ings
Orby Marsh
Ashington End
Wyche
Listoft
Helsey
Habertoft
Slackholme End
Brothercrofts Gowt (Foot Bridge)
Red Gowt
Look in Gowt
Loft's Bridge
Stone Bridge
Skegness Golf Centre
Skegness Stadium
Whitehouse Farm
Chapel St Leonards
Anderby Creek
Skegness
Willoughby
Thurlby
Farlesthorpe
Mumby
Huttoft
Sutton on Sea
Winthorpe
Seathorne
Gibraltar Point
Ingoldmells Point
Holiday Village
Inner Dowsing Wind Farm
Outer Dowsing Wind Farm

Willoughby High Drain
Sloothby High Lane Drain
Four Hundred Acre Drain
Helsey Drain
Wyche Drain
Hildyke Drain
Orby Drain
Dudick Bank Drain
Marsh Road
Chapel Lane
Rectory Lane
Bolton's Lane
Maiden Lane
Chapel Road
Orby Road
Mill Road
A52
A158
A1104
A1028

Legend

- Order Limits
- Onshore Segment Break

Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:20,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.3

OUTER DOWSING OFFSHORE WIND

Date: 19/02/2025
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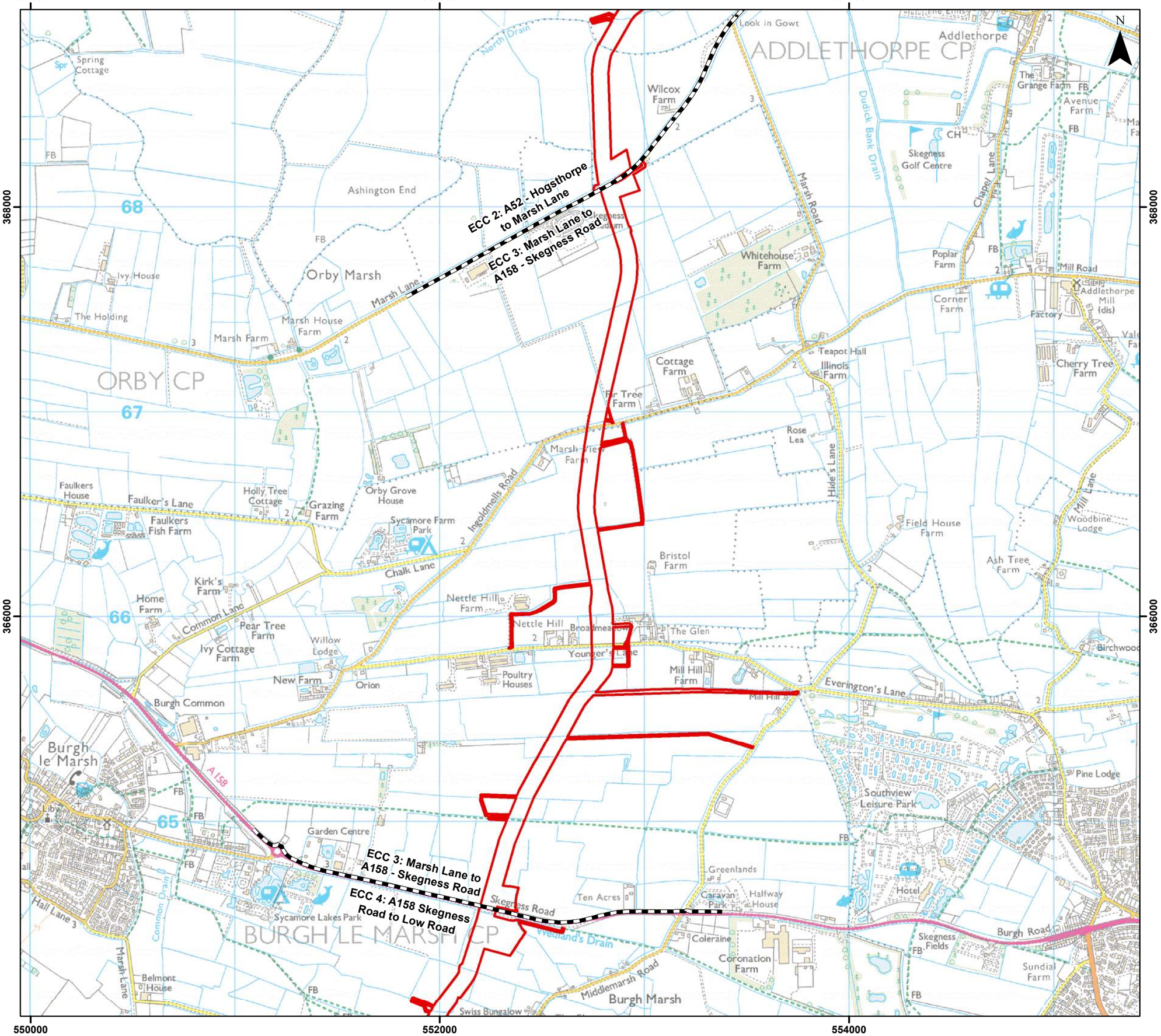
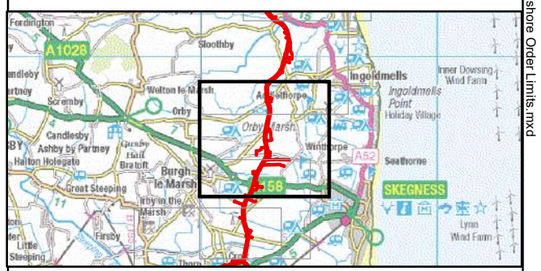


Legend

- Order Limits
- Onshore Segment Break



Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:17,500

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.4

OUTER DOWSING OFFSHORE WIND

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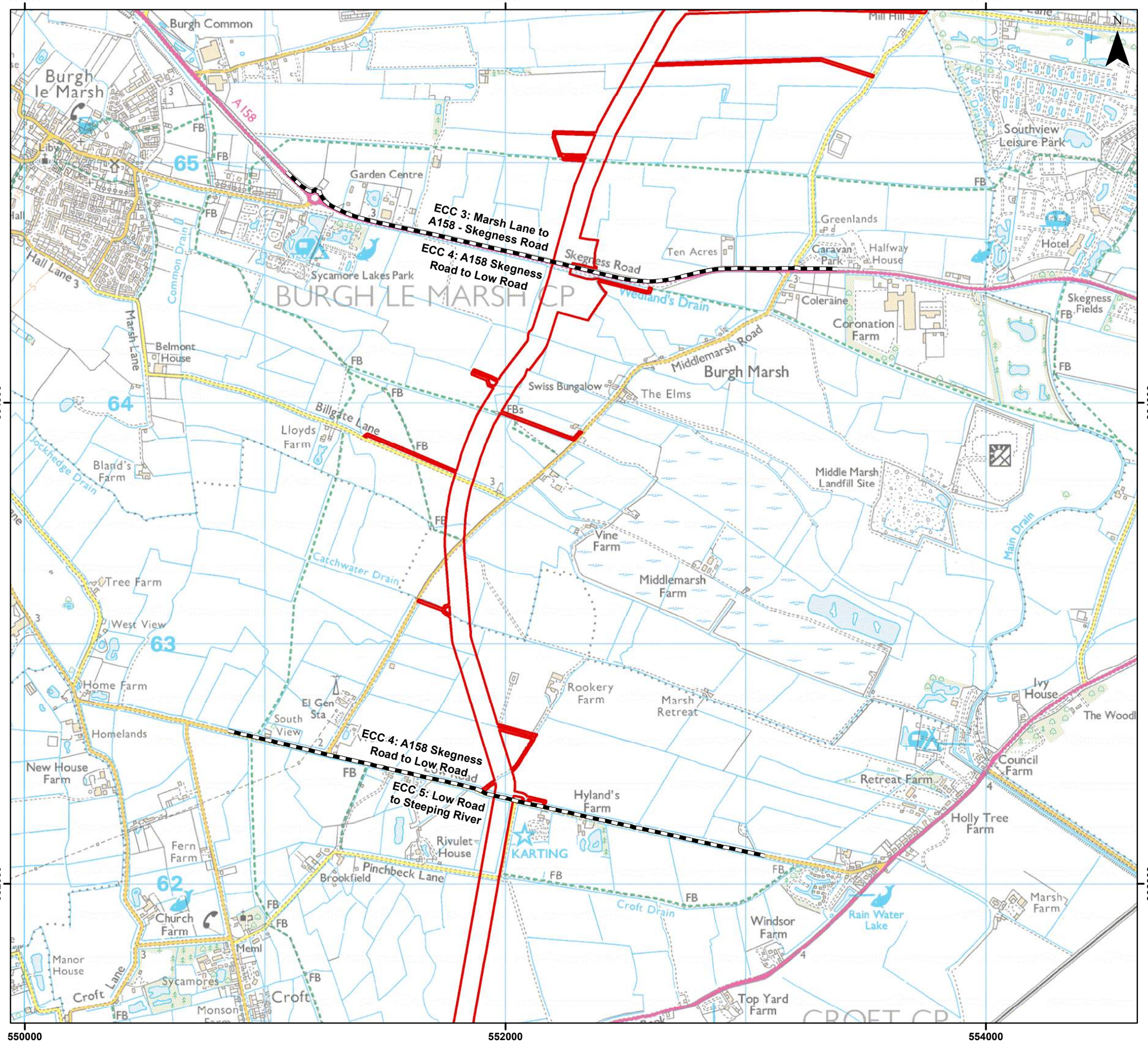

Legend

- Order Limits
- Onshore Segment Break

Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:15,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.5

OUTER DOWSING OFFSHORE WIND

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548000 550000 552000

362000 360000 358000

ECC 4: A158 Skegness Road to Low Road

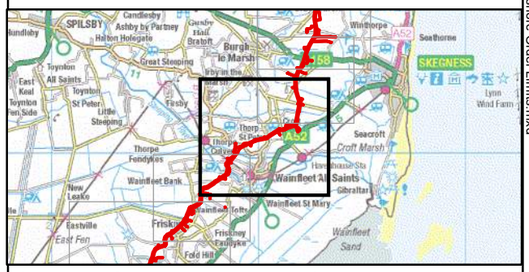
ECC 5: Low Road to Steeping River

ECC 6: Steeping River to Fodder Dike Bank/Fen Bank

ECC 5: Low Road to Steeping River

Legend

- Order Limits
- Onshore Segment Break



Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:20,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.7

OUTER DOWSING OFFSHORE WIND

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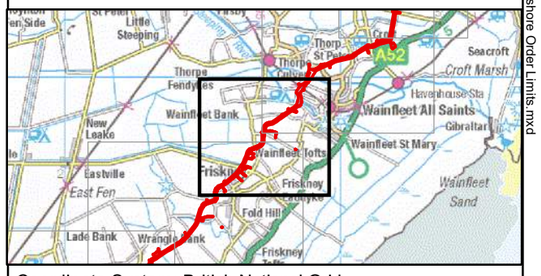
546000
548000
358000
356000

ECC 6: Steeping River to Fodder Dike Bank/Fen Bank
ECC 5: Low Road to Steeping River
ECC 6: Steeping River to Fodder Dike Bank/Fen Bank
ECC 7: Fodder Dike Bank/Fen Bank to Broadgate

Trustee Farm
West Gate
Old Bank
Fen
Lady Lane
Watson Farm
Leaver Gate
King Street
Bycroft's Bridge
Mead's Yard Farm
Wainfleet Common
Brewster Lane
Crow's Lane
Sewage Works
Collison Lane
Burn's Bridge
Hall
Whitehead's Farm
White Cross Clough
Church Farm
Wainfleet Bank
Great Field
Allot Gdns
Brewery
Mill Lane
Cranberry Farm
Medieval Town of Wainfleet (site of)
Swan Lane (Track)
Church Lane
Washdike Lane
Bethlem Drain
Old Fen Bank
Low Grounds
Wainfleet Hall
Sports Ground
Queen's Estate
Low Farm
First Farm
Scald Gate
Russell House
Key's Toft
Border Farm
Decoy Farm
New Farm
Abraham's Lane (Track)
Saltworks
Wainfleet Tofts
Decoy Wood
Pepperthorpe Hall
Acres Gate (Track)
Low Road
Toft House Farm
Ivy Lane
The Apiary
Cranberry Farm
Willowdene Farm
Armstrong's Lane
Ivy House
Ramper Farm
Mill Lane
Cranberry Lane
Fen Bank
Friskney Eaudyke
Bromby Bridge
Boundary Farm
Toft Farm
Marsh Grove Farm
Pear Tree Farm
Ingleborough Farm
School Farm
The Staver (Track)
Walnut Farm
Avenue Farm

Legend

- Order Limits
- Onshore Segment Break



Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:15,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.6

OUTER DOWSING OFFSHORE WIND

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542000 544000 546000 548000

356000 354000 352000

ECC 6: Steeping River to Fodder Dike Bank/Fen Bank

ECC 7: Fodder Dike Bank/Fen Bank to Broadgate

ECC 8: Broadgate to Ings Drove

Friskney

Wrangle

Wrangle Common

Wrangle Low Ground

Friskney Low Ground

Friskney Fen

Friskney Eaudyke

Friskney Tofts

Friskney Marsh

Wrangle Tofts

Wrangle Marsh

Wrangle Lowgate

Small End

Claxy Common

Fodder Dike

Lade Bank Drain

Cross Drain

Upregh Drain

Wrangle Drain

Outer Marsh

Bystall Bank

WRANGLE CP

FRISKNEY

Legend

- Order Limits
- Onshore Segment Break

Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:25,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.8

OUTER DOWSING OFFSHORE WIND

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538000 540000 542000

354000 352000 350000

ECC 8: Broadgate to Ings Drove

ECC 7: Fodder Dike Bank/Fen Bank to Broadgate

ECC 9: Ings Drove to Church End Lane

ECC 8: Broadgate to Ings Drove

N

Legend

- Order Limits
- Onshore Segment Break

Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:22,500

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.9

OUTER DOWSING OFFSHORE WIND

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536000 538000 540000

350000 348000 346000 344000

ECC 8: Broadgate to Ings Drove

ECC 9: Ings Drove to Church End Lane

ECC 9: Ings Drove to Church End Lane

ECC 10: Church End Lane to The Haven

N

Legend

- Order Limits
- Onshore Segment Break

Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:25,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.10

OUTER DOWSING OFFSHORE WIND

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536000
538000
342000
340000
FREISTON CP
FISHTOFT CP
Freiston
The Priory
Church Road
ECC 9: Ings Drove to Church End Lane
ECC 10: Church End Lane to The Haven
ECC 11: The Haven to Marsh Road
Coupledyke Hall
Tamworth Green
Tamworth House
Mill House
Mill Lane
Shore Road
Lynton Lodge
Shore
Scrane End
Miramar House
Eastview
Cropper's Lane
Toot Lane
Toot Farm
School
Bladon Estate
Willow Lodge
The Grange
The Graft
Norwood House
Church Green Road
The Chestnuts
Fishtoft Road
Collingwood
Ivy Farm
Playing Field
Clamp Gate Bridge
Grovefield Lane
Manor House
Fishtoft
Mounds
Woad Farm
Laurel Farm
Corporation Point
Holly House
Nunn's Bridge
Vine House
Sea Bank
Slippery Gowt
Toft Jetty
Sewage Works
Scalp Road
Alvey House
Southfield La
Woodbine Farm
Hobhole Bank Nature Reserve
Blue Anchor Bight Farm
Woad Lane
Cut End Road
Old House Farm
Haven Side Country Park
Southfield Farm
Canons Farm
Marsh Farm
Crawford's Farm
Bleak House Farm
FB
Memorial
Ppg Sta
White House
North Sea Camp (HM Prison)
Smallholding
BS
35
36
37
38
39
Wks

Legend

- 🟥 Order Limits
- Onshore Segment Break

BOSTON
A52
A52
Frampton West End
Wyberton
Frampton
Kirton
Fishtoft
Freiston Shore
Butterwick Low
Toft Sand
Black Buoy Sand
Sandholme

Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:15,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.11

OUTER DOWSING
OFFSHORE WIND

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532000
534000
536000
340000
338000
336000
ECC 10: Church End Lane to The Haven
ECC 11: The Haven to Marsh Road
ECC 12: Marsh Road to Fosdyke Bridge
Frampton
Frampton Marsh
Kirton Marsh
Wyberton Marsh
Wyberton Roads
Sandholme
Skeldyke
Hall Lane
Cross Britain Way
Frampton Towns Drain
Boundary Drain
Sea Bank
New Sea Bank
Mean High
Western Point
The Cots
Frampton Nature Reserve
Frampton Outfall
Lime Tree Farm
Crawford's Farm
Bleak House Farm
Marsh Farm
Roads Farm
Manor Farm
College Farm
Cotton Hall
Frampton Hall
The Beeches
Park's Farm
Coupledyke Lane
Craile Eau (Drain)
Bull Lane
Sandholme Lane
Bailey Walls
Craile Cottage
Sheldyke Road
Southfields Farm
Eleven Acre Lane
Blossom Hall
Sandholme House
Ivyhouse Farm
Nidd's Lane
Boot Lane
Burton House
The Mallard
Crook Green Farm
Seadyke House
Seadyke
Bucklegate House
Slade House
Marine Villa
Clatterdykes Rd
A16
Wyberton House
Black's Farm
Rowting Cross
Streetway
Wyberton Roads
White House
Roads Plantation
Cross Bank
6 Macmillan Way
Memorial
Ppg Sta
Meat
Hospital
FB
FBs
P
V
32
33
34
35
36
Legend
Order Limits
Onshore Segment Break
Coordinate System: British National Grid
0
0.5
1 km
Scale: 1:17,500
A3 Page Size
Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments
Figure 1.12
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532000
534000
336000
334000
N
ECC 11: The Haven to Marsh Road
ECC 12: Marsh Road to Fosdyke Bridge
ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove
Elms Farm
Seadyke House
Seadyke
Crossgate House
Crossgates Farm
Wash Road
Cross Britain Way
The Woodlands
Slade House
Slade Bridge
Bucklegate House
Marsh Road
Kirton Marsh
Marine Villa
Macmillan Way
C B Way
Hundred Acre Sea Bank
Hundred Acre Farm
New Sea Bank
Ppg Sta
The Horseshoe
Lamming's Marsh Farm
White House Farm
Low Mill Lane
Fosdyke Villa
Villa Farm
The Newlands
Earl Marsh
Mill Lane
White House
FOSDYKE CP
Mount Pleasant
Hodgman's Farm
Port Lane
Sea Bank
Mean High Water
Sch
Cemy
Fosdyke
Graves Farm
Puttock Gate
Craven's Lane
Middlecotes Hospital (Almshouses)
New Marsh
Fosdyke House
Lloyds Farm
Bank House
Foster's Farm
River Welland
Reservoir
Main Drain
Middle Marsh Road
CP Bdy
Place Farm
Fosdyke Bridge
Legend
Order Limits
Onshore Segment Break
Coordinate System: British National Grid
0 0.5 1 km
Scale: 1:15,000
A3 Page Size
Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments
Figure 1.13
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528000 530000 532000

334000 332000 330000

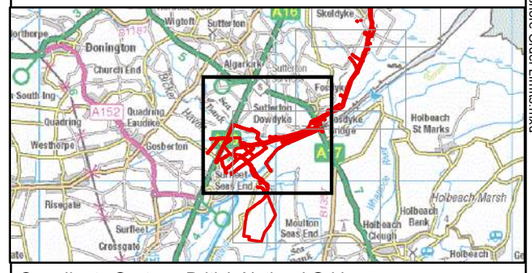
Legend

- Order Limits
- Onshore Segment Break
- Onshore Substation (OnSS) Footprint

ECC 12: Marsh Road to Fosdyke Bridge

ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove

ECC 14: Surfleet Marsh OnSS / Marsh Drove to Connection Area



Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:17,500 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.14

OUTER DOWSING OFFSHORE WIND

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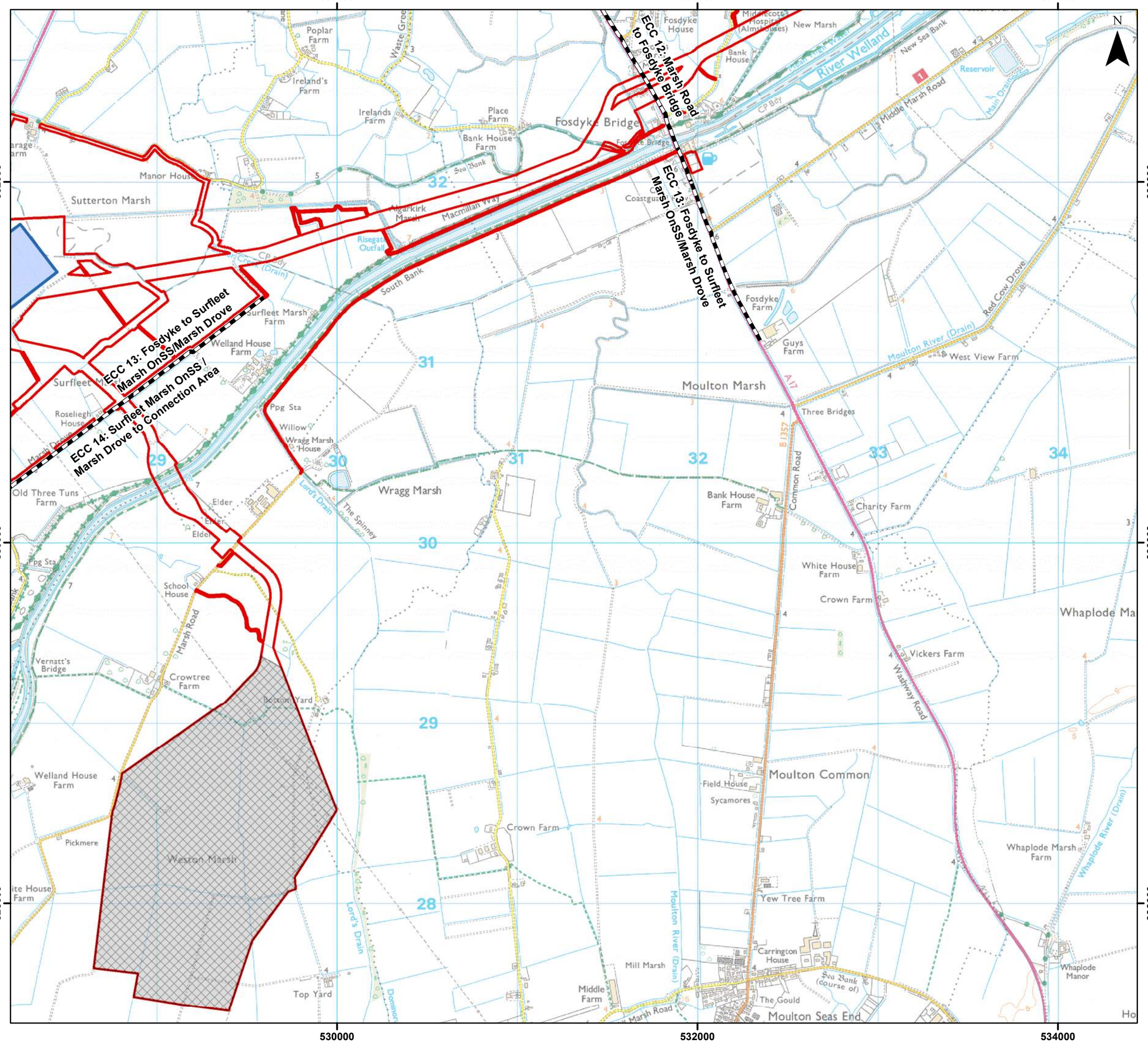

Legend

- Order Limits
- Onshore Segment Break
- Onshore Substation (OnSS) Footprint
- Connection Area

Coordinate System: British National Grid

0 0.5 1 km

Scale: 1:20,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Onshore Order Limits and Segments

Figure 1.15

OUTER DOWSING OFFSHORE WIND

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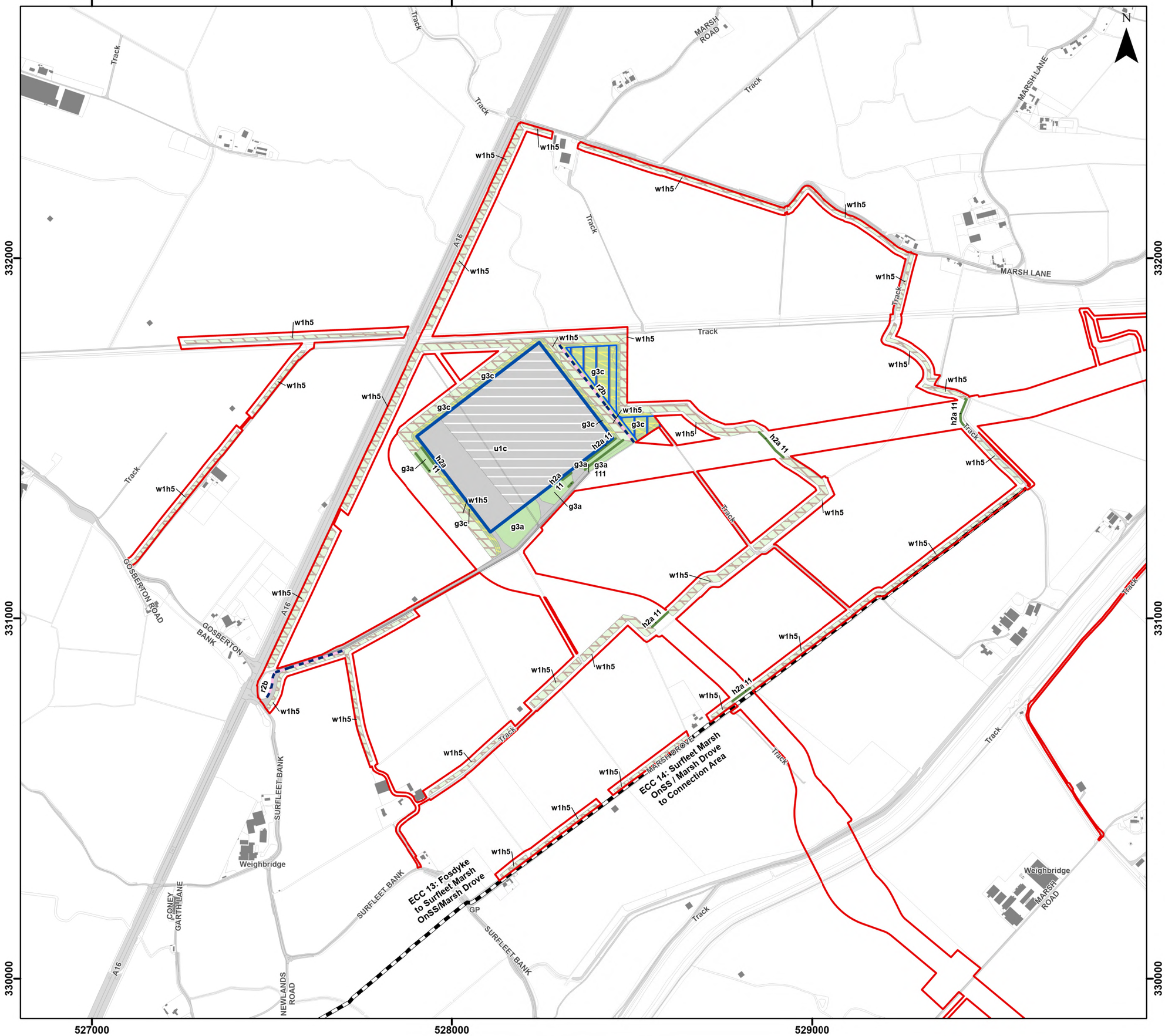


Legend

- BNG Assessment Boundary
- Onshore Segment Break
- Onshore Substation (OnSS) Footprint
- Onshore Substation (OnSS) Temporary Construction Compound

Primary Habitat Classification

Heathland and Shrub - Hedgerows
- h2a - Hedgerow Priority Habitat

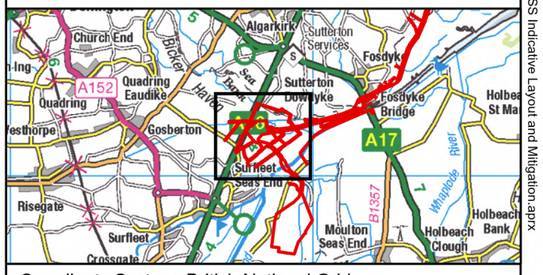
Rivers and Lakes - Rivers and Streams
- r2b - Other Rivers and Streams

Grassland - Neutral Grassland
- g3a - Lowland Meadows
- g3c - Other Neutral Grassland

Urban - Built-up Areas and Gardens
- u1b - Developed Land; Sealed Surface
- u1c - Artificial Unvegetated, Unsealed Surface

Woodland and Forest - Broadleaved Mixed and Yew Woodland
- w1h5 - Other Woodland; Mixed; Mainly Broadleaved

Secondary Code
11 - Scattered Trees
64 - Mown
74 - Ploughed
111 - Road



Coordinate System: British National Grid

0 100 200 400 Metres

Scale: 1:10,000 A3 Page Size

Outline Plans
Outline Landscape and Ecology Strategy (OLEMS)
OnSS Indicative Layout and Mitigation

Figure 2

OUTER DOWSING OFFSHORE WIND

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Revision: 2.0

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Annex A – Protected Species Rationale and Further Mitigation

A.1 Introduction

A.2 GCN

A.3 Bats

A.4 Otter

A.5 Water Vole

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A.7 Hedgerows and Trees

A.1 Introduction

~~255.~~281. Following the submission of the Development Consent Order (DCO) application in April 2024, the design of the project has continued to progress, allowing a refinement of some of the mitigation set out in this OLEMS.

~~256.~~282. Refinements in mitigation have been driven by the Relevant Representations made by Natural England on 13th June 2024 (ADD REF). The species/ groups considered are listed below alongside their Natural England Relevant Representation reference numbers:

a. H14 and H15 – Protected Species Licensing
b. H52, H53, H54, H55 and H56 – Bats
c. H57, H58 and H59 – Badger
d. H60, H61 and H62 – GCN
e. H64 – Otter
f. H65 – Water Vole

~~257.~~283. Other Relevant Representations for reptiles (H63) and ancient/ veteran trees (H94 and H95) are addressed in the relevant sections of the main body of this OLEMS.

~~258.~~284. Additional information regarding working areas within the Order Limits has now also been reviewed in relation to the extent of tree and hedgerow losses, the details of which are provided in Section A.7 of this Annex.

~~259.~~285. Where additional mitigation measures are not considered necessary, the rationale for this decision is set out in the relevant section below.

~~260.~~286. Key information confirmed by the principal project engineer regarding operational patterns, vehicle access protocols, and methodologies for culvert installation, alongside the construction processes for the Surfleet Marsh substation, has led to a strategic refinement of the required working areas in instances where ecological constraints occur (e.g. the secondary construction compound SCC-026 will now have an adjusted boundary to accommodate an exclusion zone at a minimum distance of 25m from a potential bat roost tree (Section 3 below)).

~~261.~~287. Our efforts to mitigate ecological impacts have been further advanced through proactive avoidance strategies, notably the implementation of established standoff distances. Additionally, we have adopted targeted measures to alleviate potential sources of disturbance, including the integration of tailored lighting schemes and physical barriers to enhance ecological protection.

~~262.~~288. The supplementary mitigation measures agreed upon with the project engineer are detailed in this annex and the Schedule of Mitigation (document 8.13 (version 2)) and will be systematically incorporated into the Environmental Management Plan (EMP) to ensure compliance and facilitate effective monitoring throughout the project lifecycle.

A.2 GCN

A.2.1 Introduction

~~263.~~289. The purpose of this annex is to explain the adopted approach to licencing for GCN, and to provide the rationale for omitting the metapopulation in ECC3 from the draft licence application which has been submitted to NE, to secure a Letter of no Impediment.

A.2.2 Summary of Baseline

~~264.~~290. The results of desk studies and GCN surveys undertaken in 2023 indicate that there are two GCN metapopulations, one in ECC 3 and the other in ECC6, near Decoy Wood. The locations of both metapopulations and the adjacent construction infrastructure are shown on Figure A1. Both metapopulations comprise offsite ponds, with associated ditches passing through the Order Limits. The associated ditches were themselves either dry, of limited suitability for GCN, or otherwise, returned negative eDNA results.

~~265.~~291. The Ecology Chapter identified potential impacts upon both metapopulations arising from construction activity affecting the ditch network and determined that a licence might be required for the ECC 3 metapopulation (dependent upon construction methods) but would very likely be required for the ECC6 metapopulation, due to the proximity of the construction footprint to the assumed breeding pond. The subsequent sections present discussions of licensable impacts on each metapopulation, the approach to licencing for the ECC6 metapopulation, and mitigation measures.

A.2.3 ECC3 – Discussion of Licensable Impacts

~~266.~~292. The metapopulation in ECC3 comprises pond WM_P42, located c.350m east of the Order Limits with a positive eDNA result for GCN, and a desk study record for GCN within a cluster of ponds, the nearest located c.400m west of the Order Limits. Two ditches, assessed as providing suitable habitat for GCN, and which cross the order limits east to west, run very close to the ponds on either side and could provide connective habitat and dispersal corridors for GCN. The intensively managed arable fields within the metapopulation are considered sub-optimal habitat for GCN.

~~267.~~293. Impacts to the ditches and associated riparian zone will be limited to the installation of the haul road, as the cables will be installed using trenchless techniques in these areas. To enable the haul road to cross the ditch, and to maintain hydraulic connectivity, an 8-10m culvert will be installed in each ditch, with the ditch reinstated post-works. The exact location of the culvert is not known at present, although it will fall within the Order Limits, the boundaries of which are set back >250m from the GCN positive ponds that lie on either side.

~~268.~~294. Cable installation compounds will be set up within the arable field interiors, away from the ditches and riparian zones. The soil will be stripped in these areas to allow temporary hard standing to be laid, to enable machinery to operate. These areas will be in use for a maximum of 6 months, after which the arable land will be reinstated.

~~269.~~295. Considering that only very short lengths of ditch will be affected by the culvert installation, that the culverts will not represent total barriers to dispersal, and that GCN are not considered likely to be present (other than occasionally) in the arable field interiors, the potential impacts of the Project on the ECC3 metapopulation are considered minimal and are not considered to trigger the need for a licence. Instead, reasonable avoidance measures (RAMS) will be prepared to further reduce the low risk of any impacts, and to guide the works in the unlikely event that individual GCN are encountered. Key tasks that will be covered within the RAMS document are set out under 8.13: Schedule of Mitigation.

A.2.4 ECC6 – Discussion of Licensable Impacts

ECC6 - Impacts

~~270.~~296. The pond is immediately surrounded by woodland, beyond which is actively cultivated arable habitat which is of low-suitability for GCN. It is unlikely that long-distance migrations will occur, particularly as there are no ponds within 500 m of Decoy Wood. Further, the results of eDNA analyses indicates the absence of GCN in all surveyed ditches within the works area, many of which were also dry.

~~271.~~297. The proposed works will not impact the breeding pond identified for the metapopulation, nor the woodland that immediately surrounds it; however, there will be effects on more distant terrestrial habitat within 500 m of the pond.

~~272.~~298. Vegetation clearance to facilitate the construction of the haul road and set up of the cable installation compounds could result in the mortality and injury of newts. Culverts will be installed in each ditch to allow the haul road to cross and maintain hydrological connectivity, but could act as a partial barrier to GCN dispersal along the ditches, but will not isolate any GCN pond from another. Soil will be stripped within the cable installation compounds, which will be in use for up to 6 months but then reinstated back to arable land. The compounds are located in arable field interiors where GCN are not predicted to be present other than occasionally.

~~273.~~299. The expected outcome is a minor negative impact on the newt population, which, while not trivial and triggers the need for a licence, remains manageable within the scope of mitigation strategies.

ECC6 – Licencing Strategy

Use of LP1

~~274.~~300. An exclusion and relocation exercise is not proposed. As most of the affected habitat is of low-suitability for GCN this would likely have a low chance of encountering significant numbers of GCN. Relocating low numbers of GCN would be unlikely to significantly increase annual recruitment, genetic diversity or the resilience of the local population to environmental change.

~~275.~~301. LP1 requires compensation above and beyond what would typically be required for a standard exclusion / translocation strategy, which, as argued previously, has comparatively limited benefits to FCS of the local population in the scenario where GCN are present at low density in the impacted habitat. Therefore, a generous provision of temporary artificial refugia will be created during the Project life, in retained habitat to enhance the available terrestrial habitat.

Use of LP4

~~276.~~302. Historic records, HSI and eDNA data have been relied upon to identify waterbodies supporting GCN. Population class assessment data was not considered necessary to the prediction of impacts, as where GCN presence in waterbodies was confirmed, their presence in the surrounding terrestrial habitat was assumed.

~~277.~~303. Further, with regard to licencing, population class information is normally used to inform the length of the relocation period, and the extent of the compensation measures. As no exclusion / relocation is proposed, and temporary compensation ratios are generous, it is considered that the additional survey data is not required for this purpose either.

A.2.5 Mitigation

ECC3 – Reasonable Avoidance Measures

~~278.~~304. A RAMS document will be prepared by the Lead Contractor's Ecological Clerk of Works (or equivalent) and will be informed by ecological survey data that is not more than 2 years old. It will include as a minimum the following tasks:

- Two-stage cut of vegetation;
- Finger-tip search and destructive search of any potential refugia within directly impacted areas;
- Tool-box talk for site personnel to cover the identification of GCN and an emergency discovery action plan; and
- ECoW to be present for works affecting ditches and riparian zones.

ECC6 – Measures Delivered under GCN licence

~~279.~~305. The GCN licence will include the following mitigation measures:

- Provision of 'over-and-above' compensation to satisfy conditions of use of LP1 comprising temporary provision of artificial refugia (log piles) within retained habitat within the Order Limits;
- Control of timing of works to avoid hibernation period;

- Two-stage cut of the existing vegetation with a gap of no more than 24 hours between the first and second cutting stages;
- Fingertip search between the first and second cut, and following the second cut;
- Following the completion of the cutting, the area will undergo a thorough hand search to identify any GCN present;
- Should any GCN be found, they will be safely relocated to Decoy Wood (the Receptor Area), which is in close proximity to the existing pond;
- Supervised soil-strip / destructive search under the supervision of the registered consultant or accredited agent to ensure that any remaining GCN are adequately protected; and
- Toolbox talk for site personnel to cover the identification of GCN and an emergency discovery action plan.

A.3 Bats

A.3.1 Introduction

~~280.~~306. This annex has been prepared to provide additional clarification in response to relevant representations made by Natural England in relation to bats and to outline why a licence to disturb bats is not currently considered necessary.

A.3.2 Summary of baseline

~~281.~~307. Habitats within the Order Limits were assessed as Moderate suitability for bats consisting principally of intensively managed arable land, albeit with some modified and neutral grassland (c.10% total land area), divided by well-established hedgerows (up to 5,965m), ditches, and dykes.

~~282.~~308. A small number of trees were identified within close proximity of the Order Limits but none of these have been confirmed to contain bat roosts.

~~283.~~309. Bat activity was considered to be low, with transect surveys only recording in the order of 1,500 bat passes over an entire year of transect surveys across the Study Area (extending beyond the Order Limits).

~~284.~~310. As no bat roosts or specific populations of bats were identified as important during the baseline studies, the bat assemblage (potential roosting, foraging and commuting habitat) was valued collectively at Local value.

A.3.3 Update to Hedgerow Mitigation

~~285.~~311. To further understand likely construction impacts and activities within the construction footprint, detailed discussions were held with the Project's Civil Engineer who was able to identify flexibility in the design and agree to retention and safeguarding measures to further reduce impacts on hedgerows and trees.

~~286.~~312. This discussion identified that the following hedgerows could be retained because their position was along the periphery of construction infrastructure, and suitable exclusion zones could be accommodated during construction activities:

- Hedgerow 186;
- ~~Hedgerow 1405;~~
- Hedgerow 1541; and
- Hedgerow 1931

~~287.~~313. Impacts to Hedgerow 96 and 719 could not be avoided as these hedges run across the Order Limits in areas where construction infrastructure cannot be relocated.

A.3.4 Discussion of Licensable Disturbance Impacts to Roosts and Potential Roosts

~~288.~~314. In order to assess if a licence would be required in relation to disturbance of bat roosts, a 25m buffer was applied to all trees and buildings with moderate or above potential. Low potential trees or buildings were discounted on the grounds that bats would be unlikely to be present or if resurveyed using the current BCT guidelines (BCT, 2023), these would likely fall into a category not requiring further mitigation.

~~289.~~315. A review of the construction infrastructure interacting with the 25m buffer zones, and the local context where such 'clashes' occurred was undertaken to assess whether construction activity would contribute disturbance in exceedance of the likely background levels. For example, for potential roosts situated adjacent to existing roads or industrial / agricultural units, the impact associated with the short-term use of enabling access tracks by construction traffic was not considered likely to significantly exceed baseline levels or trigger a licensable impact. The majority of clashes occurred according to this scenario, with enabling access tracks within 25m of potential roosts located in areas already subject to disturbance from road or farm traffic. No additional mitigation is considered necessary for such a scenario.

~~290.~~316. However, for two potential tree roosts, additional controls to working methods have been agreed to ensure no licensable impacts occur in the event that bats utilise these trees in future.

~~291.~~317. Tree 4217 with moderate bat roosting potential is located on a historic sea bank/ flood defence and is shown, along with the construction infrastructure in Figure A2. The 25m buffer clashes with a secondary construction compound (SCC-26), which is located immediately east and an access track serving this compound located to the west of the potential tree roost. The access track follows an existing access road serving a large area of hard standing.

~~292.~~318. Through discussions with the Project's Civil Engineer it was agreed that the secondary compound will have an adjusted boundary to accommodate an exclusion zone at a minimum distance of 25m from the potential roost tree. Embedded mitigation relating to control of lighting will ensure no lighting disturbance impacts occur. Traffic speeds on the access track will be reduced to 10mph to minimise disturbance from traffic noise. With these mitigation measures implemented, potential impacts have been minimised and residual disturbance is not considered likely to significantly exceed baseline levels or trigger a licensable impact.

~~293.~~319. Tree 4954 with high potential for bat roosting is located on a driveway leading to a pumping station and is shown, along with the construction infrastructure in Figure A2. The 25m buffer clashes with an enabling access track which uses the existing drive serving the domestic property, an access track to the south of the tree serving a secondary compound which follows an existing Sea Bank maintenance access track along the River Welland, and the secondary compound (SCC-28) which lies to the north of the tree.

~~294.~~320. The tree is already subject to background levels of disturbance from traffic accessing the property, human presence and maintenance activity within the pumping station curtilage and agricultural traffic along the Sea Bank maintenance access track.

~~295.~~321. Through discussions with the Project's Civil Engineer it was agreed that acoustic and visual screening would be provided along the boundary of the compound to the north to ensure no noise disturbance would occur. This mitigation measure is also a requirement for otters as set out in Annex A Section A.4 Otter. Embedded mitigation relating to control of lighting will ensure no lighting disturbance impacts occur. Traffic speeds on the access track will be reduced to 10mph to minimise disturbance from traffic noise. With this mitigation implemented, any residual disturbance is not considered likely to significantly exceed baseline levels or trigger a licensable impact.

A.3.5 Discussion of Licensable Disturbance Impacts to Habitats Functionally Linked to Roosts

Flightlines

322. Section 3.7.6.2 of the OLEMS sets out measures for the provision of artificial flight lines where sections of hedgerow are temporarily removed. Therefore, although ~~the~~ discrete sections of hedgerow (typically <10m long) ~~vegetation~~ will be removed during construction, there will be no loss of flight line functionality, as artificial flightlines (dead hedges) will be provided at night.

323. Further, no lighting disturbance impacts are predicted as control of lighting is embedded mitigation within the Onshore Ecology Chapter. Artificial lighting during construction will be managed in line with the final CoCP to be drafted in line with the Outline CoCP (Document Reference APP-268). The Project has committed to the retention and protection of bat flight lines during construction using protective fencing (such as Heras) to protect retained hedgerows and trees (including their root structure) from damage during construction. These will further be retained and protected through sensitive lighting design, which will be outlined in the Artificial Light Emissions ~~Construction~~ Management Plan forming part of the final CoCP.

~~296.~~324. All hedgerows will be reinstated following the works, with artificial flightlines maintained until the replacement vegetation has sufficiently established. Detail is provided in Section 3.7.6.2 of the OLEMS.

325. The updated assessment of impacts upon hedgerows identified that for ~~only~~ three ~~wo~~ sections of hedgerow (within Hedgerows 96, 719 and 1405) that will be temporarily removed during construction, it will not be possible to provide an artificial flightline during construction due to the sections being located within open cut or laydown areas. These hedges will, however, be ~~and~~ reinstated post-works.

~~297.~~326. Hedgerow 96 will be partially removed to permit the construction of a cable installation compound. Transect 4 covered part of this hedgerow, recording low levels of activity by common pipistrelle (*Pipistrellus pipistrellus)* and an unidentified Myotis bat. No bat roosts, or high potential trees were recorded within the connected hedgerow network although on occasion, some moderate and low potential trees were recorded nearby. It is considered unlikely that Hedgerow 96 is functionally linked to a roost, however it not possible to rule this out completely.

~~298.~~327. Hedgerow 719 will be partially removed to permit the construction of the haul road and lies within an area that may be subject to open cut installation of cables. Transect 12 covered the hedgerow network linking to Hedgerow 719, which was not included in the transect survey as it is a dead end or spur. The transect recorded low levels of activity by common pipistrelle, soprano pipistrelle (*Pipistrellus pygmaeus)* and a noctule bat (*Nyctalus noctula)* along the linked hedgerows. No bat roosts or high potential trees were recorded nearby. The nearest tree was assessed as having low bat roost potential and is located c. 400m to the southwest. Given that the hedgerow does not lead anywhere, that very low levels of activity were recorded nearby, and the paucity of potential roosts in the vicinity, it is considered unlikely that Hedgerow 719 is functionally linked to any roost.

328. A short (c.10m) section of Hedgerow 1405 lies within an area where trenchless techniques may be employed. The affected section is at the end hedgerow 1405 which terminates just within the Order Limits. As the hedgerow does not provide a link between linear habitats or roosts, it is unlikely to be used as a flightline and is not considered to be functionally linked to any roosts.

~~299.~~329. All other hedgerows and the retained sections of Hedgerow 96, ~~ and~~ 719 and 1405 will be subject to protection measures as per Section 3.6.1.1 of the OLEMS.

~~300.~~330. Hedgerow 96 will be partially removed to permit the construction of a cable installation compound. Transect 4 covered part of this hedgerow, recording low levels of activity by common pipistrelle (*Pipistrellus pipistrellus)* and an unidentified Myotis bat. No bat roosts, or high potential trees were recorded within the connected hedgerow network although on occasion, some moderate and low potential trees were recorded nearby. It is considered unlikely that Hedgerow 96 is functionally linked to a roost, however it not possible to rule this out completely.

~~301.~~331. Hedgerow 719 will be partially removed to permit the construction of the haul road and lies within an area that may be subject to open cut installation of cables. Transect 12 covered the hedgerow network linking to Hedgerow 719, which was not included in the transect survey as it is a dead end or spur. The transect recorded low levels of activity by common pipistrelle, soprano pipistrelle (*Pipistrellus pygmaeus)* and a noctule bat (*Nyctalus noctula)* along the linked hedgerows. No bat roosts or high potential trees were recorded nearby. The nearest tree was assessed as having low bat roost potential and is located c. 400m to the southwest. Given that the hedgerow does not lead anywhere, that very low levels of activity were recorded nearby, and the paucity of potential roosts in the vicinity, it is considered unlikely that Hedgerow 719 is functionally linked to any roost.

~~302.~~332. Section 3.7.6.2 of the OLEMS sets out measures for the provision of artificial flight lines where sections of hedgerow are removed. Therefore, although the hedgerow vegetation will be removed, there will be no loss of flight line functionality, as artificial flightlines will be provided at night.

~~303. Further, no lighting disturbance impacts are predicted as control of lighting is embedded mitigation within the Onshore Ecology Chapter. Artificial lighting during construction will be managed in line with the final CoCP to be drafted in line with the Outline CoCP (Document Reference APP-268). The Project has committed to the retention and protection of bat flight lines during construction using protective fencing (such as Heras) to protect retained hedgerows and trees (including their root structure) from damage during construction. These will further be retained and protected through sensitive lighting design, which will be outlined in the Artificial Light Emissions Construction Management Plan forming part of the final CoCP.~~

~~304. All hedgerows will be reinstated following the works, with artificial flightlines maintained until the replacement vegetation has sufficiently established. Detail is provided in Section 3.7.6.2 of the OLEMS.~~

~~305.~~333. Taking account of embedded mitigation presented in the Ecology Chapter and the Mitigation Strategy for bats presented in the OLEMS, no licensable disturbance impacts to flightlines are predicted.

Foraging habitat

~~306.~~334. The habitats impacted by the Project are predominantly intensively managed agricultural land with only very small areas or more botanically diverse habitat, such as arable margins, affected. Intensively managed arable land is of low value to bats and is unlikely to provide a significant foraging resource supporting any roosts in the local area. Therefore, the arable habitats are not considered likely to be functionally linked as foraging areas to any bat roosts.

~~307.~~335. Further, the construction of the Project will be completed in sections, progressing along the route, and as sections are completed land will be reinstated. Therefore, only part of any given roosts' core foraging area would likely be affected at any one time as reinstated land would begin to reestablish it's (albeit low) ecological value.

~~308.~~336. Measures to safeguard flightlines from lighting or other impacts will preserve these linear habitats which also served as a foraging resource to bats using them.

~~309.~~337. On balance, no licensable disturbance impacts to foraging areas are predicted.

A.3.6 Discussion around Changes to Design after Bat Surveys

~~310.~~338. The assessment presented in document APP-076 took into account direct impacts on all habitats suitable for bats. Additionally, the above sections set out an update review of the current baseline and construction design to assess whether a licence is required in respect of disturbance to bats. Based on both these assessments, it is concluded that no direct or disturbance impacts are likely to occur. Where minor disturbance is predicted, such as temporary loss of small length of hedgerow, such impacts are capable of being mitigated for by the measures committed to in document APP-286 (OLEMS).

A.3.7 Discussion of likely Impacts on Nathusius' Pipistrelle Roost and Functionally Linked Habitat

~~311.~~339. Static 43, which recorded a peak in Nathusius' pipistrelle in autumn 2023, was deployed within the Order Limits, approximately 300m upstream of The Wash SSSI. Static 43 was deployed on the edge of a woodland belt on the banks of The Haven, located within The Haven LNR, in the Pilgirm Fathers Memorial Site, which contains a number of large ponds and woodland belts. Approximately 700m upstream, on the opposite side of the river, there are a further series of linear ponds / lakes.

~~312.~~340. The local geography / topography suggests Nathusisus' pipistrelle migrating to the UK could 'landfall' via this route, as well as the abundant aquatic habitat offering suitable foraging habitat along The Haven.

~~313.~~341. Caves or mines which are associated with Nathusius' pipistrelle swarming behaviour are unlikely to be present in this area given the local geology and there are no buildings (which could also support swarming activity) within 25m of the Order Limits in this area.

~~314.~~342. Detailed bat surveys of the trees within The Haven LNR have not been undertaken and therefore it is not known if any could support important bat roosts or facilitate swarming behaviour. However, the current construction design avoids any direct impacts to riparian grassland, ponds, tree belts (and any individual trees), and hedgerows or ditches. Therefore, surveys are not considered necessary for assessing the risk of direct impacts to bat roosts or swarming sites (which may or may not be present), as no direct impacts to habitats that could be used in this way are predicted.

~~315.~~343. With regard to disturbance, an enabling access track serving CIC250 runs c.10m to the north of the woodland belt associated with Static 43. The route follows an existing farm access track. The existing baseline disturbance therefore includes intermittent passes by agricultural machinery, as well as visitor traffic (vehicular and pedestrian) associated with the Pilgrim Fathers Memorial Site and carpark accessed via Scalp Road. The use of the Enabling Access track would be short in duration, with construction traffic routed along the haul road once constructed. CIC250 is located c.55m to the north of the woodland belt, and as such lies beyond the 25m buffer adopted for assessing disturbance within the impact assessment.

~~316.~~344. Document APP - 286, Paragraph 183 contains a commitment to sensitive design of lighting in the event night-time working is required around this location.

~~317.~~345. No significant increase in disturbance above baseline levels is predicted for any unknown roosts / swarming sites that could be associated with the tree belt / static 43 location and no loss of important commuting / foraging habitat is predicted.

~~318.~~346. Therefore, in line with NE's Advice Note (July 24) on bat disturbance and licencing approaches, a licence is not considered to be required.

A.3.8 Mitigation

~~319.~~347. Additional mitigation measures identified in the preceding sections are summarised below.

Hedges

~~320.~~348. Retention and protection from direct impacts for hedgerows:

- Hedgerow 186;
- ~~Hedgerow 1405;~~
- Hedgerow 1541; and
- Hedgerow 1931

Trees

- Tree 4217 ~~—~~- the secondary compound will have an adjusted boundary to accommodate an exclusion zone at a minimum distance of 25m and traffic speeds on the access track will be reduced to 10mph.
- Tree 4954 - acoustic and visual screening provided along the boundary of the compound to the north and traffic speeds on the access track reduced to 10mph.

~~321.~~349. With this mitigation in place, no licensable impacts are predicted for bats.

A.4 Otter

A.4.1 Introduction

~~322.~~350. This annex has been prepared to provide additional clarification in response to relevant representations made by Natural England in relation to otter and to justify why a licence to disturb otter is not currently considered necessary.

A.4.2 Summary of Baseline

~~323.~~351. The results of desk studies and surveys undertaken in 2023 indicate that otter are present throughout the much of the local landscape, with the highest concentration of records returned from ECC 6. Field surveys found holts at ECC 10 (Hobhole Drain) and ECC114 (River Welland/ tributaries), a couch at ECC 3 and a slide at ECC 5. Otter footprints and feeding remains were noted at ECC 14, ECC 13, ECC2, ECC5 and ECC10. The population of otter using habitats within the Order Limits was considered to be of local importance.

A.4.3 Summary of Impact Assessment

~~324.~~352. Potentially significant impacts were identified at two locations: Hobhole Drain (ECC10) and the River Welland and its tributaries (ECC14).

Hobhole Drain

~~325.~~353. The Ecology Chapter identified a potential impact to a holt which lies on Hobhole Drain, within 150m of CIC 246. If this were later identified to be a natal holt, construction activity within the compound could lead to significant disturbance, triggering an offence under the Wildlife and Countryside Act 1981 (as amended) (WCA).

River Welland and Tributaries

~~326.~~354. The secondary compound SCC-28 is located at the convergence of the tributary and the River Welland and is located in very close proximity (within 2m) to watercourse 1626 and watercourse 1621 which run in parallel and either directly into the River Welland, or indirectly via the Five Towns Drain. The construction haul road runs from CIC300, east following an existing farm track that runs parallel to, and approximately 15m from watercourse 1621. The construction haul road then crosses this watercourse, which will likely require the installation of a culvert, to join the metalled road that runs parallel to the sea bank and the River Welland between the Five Towns pumping station and the Risegate Eau pumping station. In the wider landscape, much of the installation of cable with be via open trench, further increasing noise and visual disturbance in the area. In the absence of mitigation, significant disturbance and isolation effects at this location could also trigger an offence.

A.4.4 Mitigation for Disturbance (and Isolation)

Hobhole Drain

~~327.~~355. In relation to the otter holt located on Hobhole Drain, which is situated 150 m from CIC246, acoustic and visual screening will be installed along the eastern perimeter of CIC246. This measure aims to minimise disturbance to any otters in residence and the wider otter population commuting along the Hobhole Drain.

~~328.~~356. The specific configuration of the screening will be determined at the detailed design phase, with final design decisions made in agreement with the ECoW to ensure compliance with all best practice guidelines.

~~329.~~357. Potential options for the acoustic and visual screen may include commercially available barriers such as fencing or a soil bund constructed from topsoil sourced from the compound. A hybrid approach utilising both strategies may also be considered, depending on effectiveness and site-specific requirements.

~~330.~~358. Additionally, similar acoustic and visual screening measures will be implemented along the temporary access track, ensuring that potential sources of disturbance with the 150m buffer zone are controlled.

River Welland and Tributaries

~~331.~~359. Visual and acoustic screening will also be deployed along the perimeter of SCC-28, CIC300 and CIC301. The screening will be extended along the temporary access tracks as deemed necessary to ensure effectiveness. The inclusion of visual and acoustic screening at this location also serves to reduce disturbance impacts to a potential bat roost within T4954.

~~332.~~360. The precise configuration and layout of the screening will be subject to evaluation at the detailed design phase and will be finalised in consultation with the ECoW. The proposed acoustic/ visual mitigation measures may include the installation of commercially available barriers, as well as the construction of a soil bund utilizing topsoil sourced from within the compound. A hybrid approach, integrating both mitigation techniques, may be employed to optimize effectiveness and ensure disturbance is minimised.

A.4.5 Mitigation

~~333.~~361. In summary, the mitigation measures for otter now include those outlined in Section 3.7.8 of this document (to include employment of an ECoW, pre-commencement surveys, sensitive scheduling of work, minimising noise and control of lighting, reduced traffic speeds to 10mph, and the immediate re-instatement of habitats), as well as the securement of visual and acoustic screening in two, sensitive areas of the Project. With this collective mitigation in place, disturbance levels are considered to be effectively minimised, with residual levels too low to consider it necessary to apply for a A45 licence to disturb otter.

~~334.~~362. In the future, should the pre-commencement surveys reveal new evidence of otter presence, or suggest that new impacts on otter would occur, an assessment of the need for further mitigation would be carried out. If the ECoW considers that an offence under the WCA would still be possible, an A45 licence would be applied for at that time.

A.5 Water Vole

A.5.1 Introduction

~~335.~~363. The purpose of this annex is to outline the adopted approach to licencing and to provide additional clarification in response to relevant representations made by Natural England in relation to water vole.

A.5.2 Summary of Baseline

~~336.~~364. The results of desk studies and surveys undertaken in 2023 indicate that water vole are present throughout the much of the local landscape, with evidence of their presence noted in the majority of segments across the Project. The population is assessed to be of local importance to nature conservation.

A.5.3 CL31 Licence

Licence Locations

~~337.~~365. The vast majority of impacts on water vole have been avoided through thoughtful project design, strategic placement of site infrastructure and the application of the mitigation hierarchy, which has circumvented the vast majority of potential ecological impacts. Notably, a total of up to 211 trenchless crossing points have been included in the design, facilitating the effective avoidance of a significant proportion of the ditch network.

~~338.~~366. Within the defined Order Limits, there are three specific locations where construction activities are considered likely to lead to offences of the WCA 1981 and therefore would be licensable. These three locations are situated more than 500m apart and are illustrated in Figure A3 and summarised in Table A.5.1. The locations of concern include Ditch 20004, Ditch 20273 and Ditch 1571 (Figure A3). At each of these three, separate locations, the presence of water vole burrows has been recorded within 5 m of the haul road. Details of the water vole burrow affected are provided in Table A.5.1, with locations provided in Figure A3.

~~339.~~367. Displacement will only be completed between 15th February and 15th April or 15th September to 31st October. The earlier dates are preferrable as suitable weather conditions and sufficient forage is likely to be available to support the displaced water voles.

~~340.~~368. Displacement will follow the protocol set out in Appendix 1 of the Water Vole Mitigation Guidance (2016) and summarised below.

A.5.4 Walkover and Updated Survey

~~341.~~369. An initial walkover by the Registered Consultant, or Accredited Agent will be undertaken prior to any displacement works taking place. The first stage of the displacement works involves the Registered Consultant and/or Accredited Agent undertaking an updated water vole survey in the working area, and all burrows and latrines found will be marked out with pegs and high visibility hazard tape. All pegs and hazard tape will remain in place until the end of the displacement works.

Vegetation Clearance for Water Vole

~~342.~~370. The Registered Consultant or Accredited Agent and Assistant(s) would supervise the removal of vegetation on the banks using the following approach:

- Overnight temperature must be above 0°C and daytime temperature must be above 5°C. Work will be postponed in the event of cold temperatures or risk of high rainfall/flooding events.
- Remove bank face vegetation using suitable machinery for precise cutting of vegetation above ground, e.g. a flail mounted on hydraulic arm, a 'skid steer' with height adjustable cutting tools, or 360-excavator with reed cutting bucket. Vegetation removal will include the working area and an additional c.3m either side of the working area and back from the bank top. Taller vegetation may be cut in stages to bare ground (initially to 30cm then to bare ground).
- Cut aquatic vegetation along the bank margins, c. 50cm from the bank edge and below water level, where practical, using a reed cutting tool.
- Rake and check arisings and bank areas for previously undiscovered burrows, marking any found. Arisings may be piled outside the working area.
- Check the burrow entrances have not been blocked and mark any additional ones found. Photographs of identified burrows will be taken.
- Remove any latrines, feeding remains or other signs of active use by water voles and record levels of activity.
- Leave area and avoid any further disturbance for 5 days to allow animals to leave.

~~343.~~371. Machinery and excavators and cutting equipment will be specified by the contractor but must be height controllable and low ground-pressure. Grass mats (or other ground protection) may be specified on soft ground to further spread the load and reduce ground pressure. Wherever possible. the machine will be operated from the top of the bank.

A.5.5 Destructive Search

~~344.~~372. After the working area has been left for five days, the Registered Consultant or Accredited Agent and Assistant(s) will re-survey the area for fresh signs of water vole. If evidence of water voles is found at this stage (before the destructive search) then the above steps (in vegetation clearance) would need to be repeated (and a further 5 days to allow voles to disperse). If there are still signs that water vole is present, a destructive search by hand should be carried out and water voles allowed to escape or captured temporarily. Any captured water voles must be released into adjacent habitat on the same day.

~~345.~~373. If no fresh field signs are found, then the next stage of the displacement works can begin.

~~346.~~374. The following methodology under the supervision of the Accredited Agent and assistant will be required to be followed for successful displacement:

- Overnight temperature must be above 0°C and daytime temperature must be above 5°C.
- The Registered Consultant, Accredited Agent and Assistant(s) will excavate burrows using hand tools to carefully check that no animals are present within the working area.
- Any animals found, will be allowed to move of their own accord into retained habitat.
- The bank face surface would be smoothed to remove any lumps that might provide refuge for water voles, e.g. smoothed using the back of a spade or an excavator.
- The in-channel vegetation within 50cm of the toe of the bank should be removed; and
- Regular monitoring and management of the work area to ensure no re-establishment of vegetation, whilst the construction commences.

~~347.~~375. All works (pre-commencement survey and final destructive searches) need to be completed between 15th February and 15th April or the autumn displacement window (15th September to 31st October).

~~348.~~376. In the unlikely the event of coming across a water vole unwilling to move of its own accord, the water vole would be caught and placed in a suitable holding container, e.g. a nest box trap provisioned with bedding and suitable food, e.g. apple. The holding container would then be placed with the door open in suitable adjacent and undisturbed habitat so the water vole can leave on its own.

~~349.~~377. In the unlikely event of coming across an injured water vole a specialist centre with water vole rehabilitation facilities would be contacted for advice and, if appropriate, the vole would be moved to this facility to recover.

A.5.6 Compensation Measures

~~350.~~378. The Project will result in the temporary loss of small sections (>10m) of watercourse to facilitate the construction of the haul road. These are temporary losses and bankside habitats will be reinstated with suitable vegetation allowed to establish. The Project will seek to enhance the areas of watercourse that will be reinstated following the construction and use of the haul road, increasing the suitability from the baseline. This would include planting emergent and marginal vegetation and include appropriate bank heights and gradients for burrowing.

A.5.7 Monitoring and Management

~~351.~~379. Monitoring of the licensed water vole populations will be conducted pre-development, during construction and post-development.

~~352.~~380. Following completion and re-instatement of the construction haul road, a single years post-construction monitoring would be completed to determine the success of the mitigation measures. This would commence once construction was complete and would comprise two visits per year in accordance with current best practice guidelines. The results of the monitoring would be presented in a stand-alone report suitable for submission to Natural England and other relevant authorities.

Table A.5.1 Direct Water Vole Impacts and Mitigation

ECC Segment	Watercourse Identification (WCID)	Number of Burrows	Other Field Signs	Habitat Suitability	Water Vole Population Estimate (Total in Watercourse)	Total Length Lost as part of the Project (metres)	Permanent or Temporary	Temporary Loss Timeframe	Reasons for Loss	Licencing Requirement
5	20004	2	1 latrine 1 nest	Moderate	2	<20m (both banks)	Temporary	Up to 15 months	Indicative haul road	CL31 displacement licence
6	20273	2	None	Moderate	2	<20m (both banks)	Temporary	Up to 15 months	Indicative haul road	CL31 displacement licence
12	1571	2	None	Moderate	2	<20m (both banks)	Temporary	Up to 15 months	Indicative haul road	CL31 displacement licence

A.6 Hedgerows and Trees

A.6.1 Introduction

~~353.~~381. The Environmental Statement [APP-076] and the OLEMS V1 [APP-284], OLEMS V2 [AS1-103] and OLEMS V3 [PD1-055] have considered the worst-case scenario using the maximum design scenario for the Project. This annex has been prepared to provide some refinement of the design parameters in relation to direct impacts anticipated on hedgerow and trees. The design parameters considered now include the following:

- The crossing point for hedgerows and tree lines to be a maximum of 60m in width; and,
- The working area of haul roads to be a maximum of 8m in width.

~~354.~~382. As a result, those hedgerows and trees that lie outside the parameters of these confirmed working extents will not require removal. Figures A4: Trees and Hedgerows Potential Impacts and Figure A5 Trees and Hedgerows Potential Impacts Detail illustrate those hedgerows and trees that will require removal in orange and red, with those to be retained highlighted in green.

A.6.2 Hedgerows

~~355.~~383. A total of 72~~3~~ hedgerows exist within the Order Limits. Of these 72~~3~~ hedgerows, only 19 intersect with either a haul road, or sit within a laydown area or area of open-cut trenching and will require re-instatement post-construction. The 19 hedgerows to be directly affected are illustrated in Figure A4 and A5 and listed in in Table A.6.1.

Table A.6.1: List of Hedgerow with Direct Impacts Anticipated

Hedgerow Number	Infrastructure Type Intersecting with the Hedgerow	Figure Reference
57	Haul road	A4.3
71	Haul road	A4.4
96	Haul road	A4.4
96	Open cut trench	A4.4
99	Haul road	A4.4
107	Haul road	A4.4
157	Haul road	A4.5
168	Haul road	A4.11
201	Haul road	A4.52
248	Haul road	A4.11
719*	Open cut trench	A4.17
1036	Haul road	A4.22
1175	Haul road	A4.27
1323*	Haul road	A4.29
1380	Haul road	A4.35
1405*	Open cut trench	A4.36
1940	Haul road	A4.5
1954	Haul road	A4.23
1986	Laydown area	A4.1

*Hedgerow assessed to be of historical importance (not of ecological importance) under the Hedgerow Regulations Act.

~~356.~~384. The remaining 54 hedgerows will be retained and protected following mitigation measures set out within Section 3.6 of this document. This includes the three hedgerows which are ecologically Important (under the Hedgerow Regulations 1997).

A.6.3 Trees

~~357.~~385. There are 146 trees within the Order Limits, of which 435~~2~~ are situated within areas ~~proposed for temporary or~~affected by construction or permanent works, with the remainder assumed to be retained via project alignment in the detailed design. Working within the new design parameters, only four~~3~~ of the 435~~2~~ trees ~~within areas proposed for temporary or permanent works~~ will require removal. Those trees to be directly affected are illustrated in Figures A4 and A5 and are listed in Table A.6.2. The remaining 394~~9~~ will be protected by adopting mitigation outlined in Section 3.6.1.1 of this document.

Table A.6.2: List of Trees with Direct Impacts Anticipated

Tree Reference	Infrastructure Type Intersecting with the Hedgerow	Figure Reference
550	Haul road	A4.11
3493	Haul road	A4.36
3495	Haul road	A4.36
~~3808~~	~~Haul road~~	~~A4.41~~
Tree – not numbered*	Haul road	A4.18

*no tree number provided as tree numbers only given for those trees subjected to bat surveys

552000
553000
366000
365000
N
CIC58
CIC59
CIC60
CIC61
CIC62
CIC63
CIC64
CIC65
CIC66
CIC67
CIC68
CIC69
CIC70
CIC71
CIC72
CIC73
SCC-6
SCC-7
626
628
629
630
WM_P42
YOUNGER'S LANE
LANE
ROAD
Track
SKEGNESS ROAD
A158
Lay-by
ECC 3: Marsh Lane to A158 - Skegness Road
ECC 4: A158 Skegness Road to Low Road
ROAD WEST
MIDDLEMARSH ROAD
GP

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track

GCN Metapopulation Waterbody and Buffers

- Pond 42 - Positive eDNA Result
- Pond 42 Associated Ditch - GCN Absent (Dry)
- Pond 42 Associated Ditch - Unknown Not Sampled
- 50 m Waterbody Buffer
- 250 m Waterbody Buffer
- 500 m Waterbody Buffer

Note:
Locations for proposed permanent Link Boxes are not shown on the figure, however, have been taken into account for the habitat impact calculations.

Coordinate System: British National Grid

0 100 200 400 Metres

Scale: 1:7,500

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Locations of GCN Metapopulatiions Alongside Site Infrastructure
Figure A1 (Page 1 of 2)

OUTER DOWSING OFFSHORE WIND

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CIC135
CIC136
CIC137
CIC138
CIC139
CIC140
CIC141
CIC142
CIC143
CIC144
CIC145
SCC-12
20253
20273
20273a
20251
20262
20263
20284
20279
20265
20276
Decoy Wood
Track
SCALD GATE
BURGH ROAD
FEN BANK
GP
ECC 7: Fodder Dike Bank/Fen Bank to Broadgate
EAUDIKE ROAD
ARMSTRONG'S LANE
LOW ROAD
CRANBERRY LANE
SICKLING LANE
ECC 6: Steeping River to Fodder Dike Bank/Fen Bank

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track

GCN Metapopulation Waterbody and Buffers

- Decoy Wood Metapopulation Waterbody - GCN Presumed Present
- Decoy Wood Associated Ditch - GCN Absent
- Decoy Wood Associated Ditch - GCN Absent (Dry)
- Decoy Wood Associated Ditch - Unknown Not Sampled
- 50 m Waterbody Buffer
- 250 m Waterbody Buffer
- 500 m Waterbody Buffer

Note:
Locations for proposed permanent Link Boxes are not shown on the figure, however, have been taken into account for the habitat impact calculations.

Coordinate System: British National Grid

0 100 200 400 Metres

Scale: 1:7,500

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Locations of GCN Metapopulatiions Alongside Site Infrastructure
Figure A1 (Page 2 of 2)

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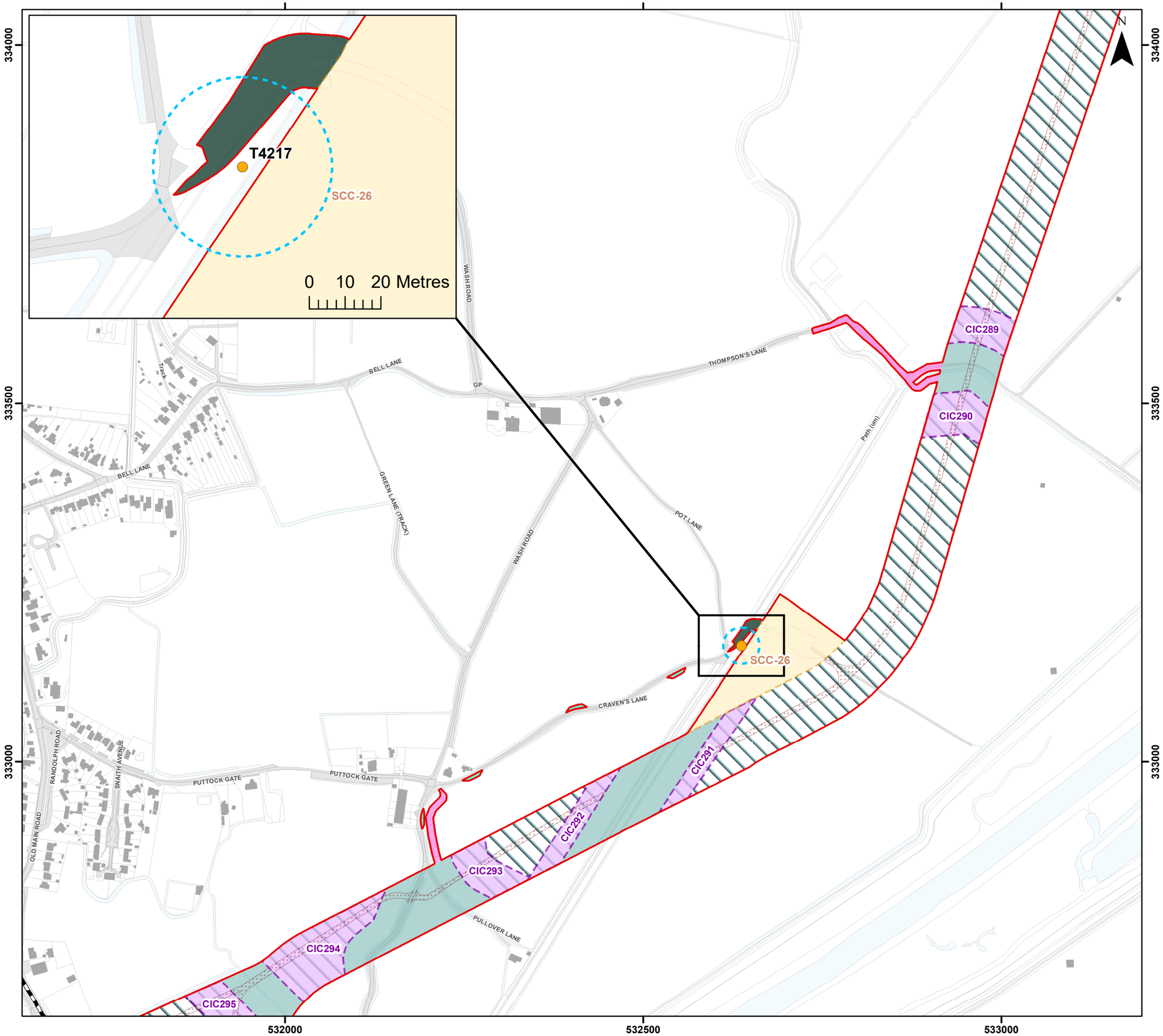

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track

Preliminary Tree Classification

- Moderate Potential
- 25 m Tree Buffer

Coordinate System: British National Grid

0 125 250 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OUTER DOWSING OFFSHORE WIND)
Locations of Potential Bat Roost Trees Requiring Visual and Acoustic Screening

Figure A2 (Page 1 of 2)

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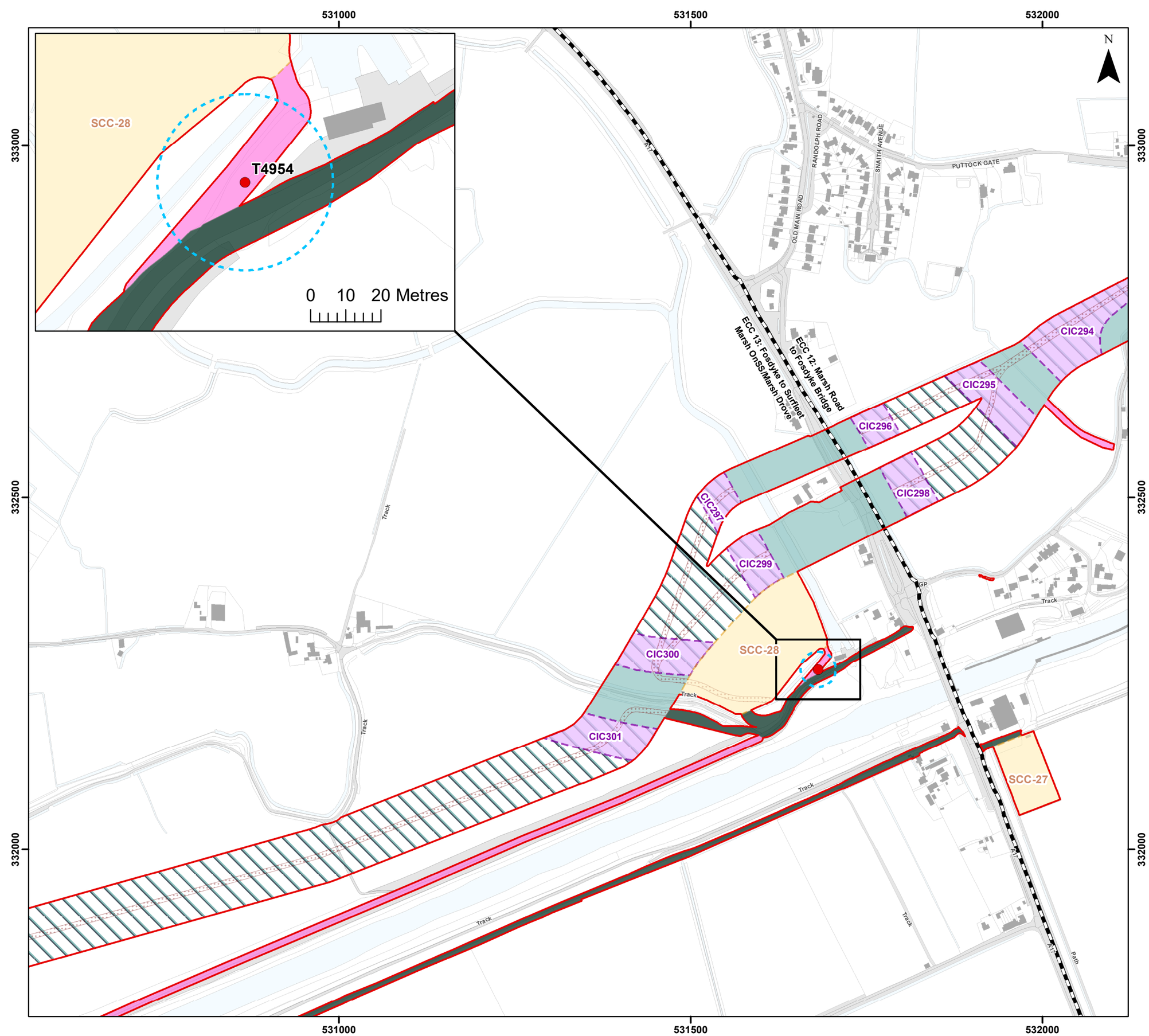

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track

Preliminary Tree Classification

- High Potential
- 25 m Tree Buffer

Coordinate System: British National Grid

0 125 250 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Locations of Potential Bat Roost Trees Requiring Visual and Acoustic Screening

Figure A2 (Page 2 of 2)

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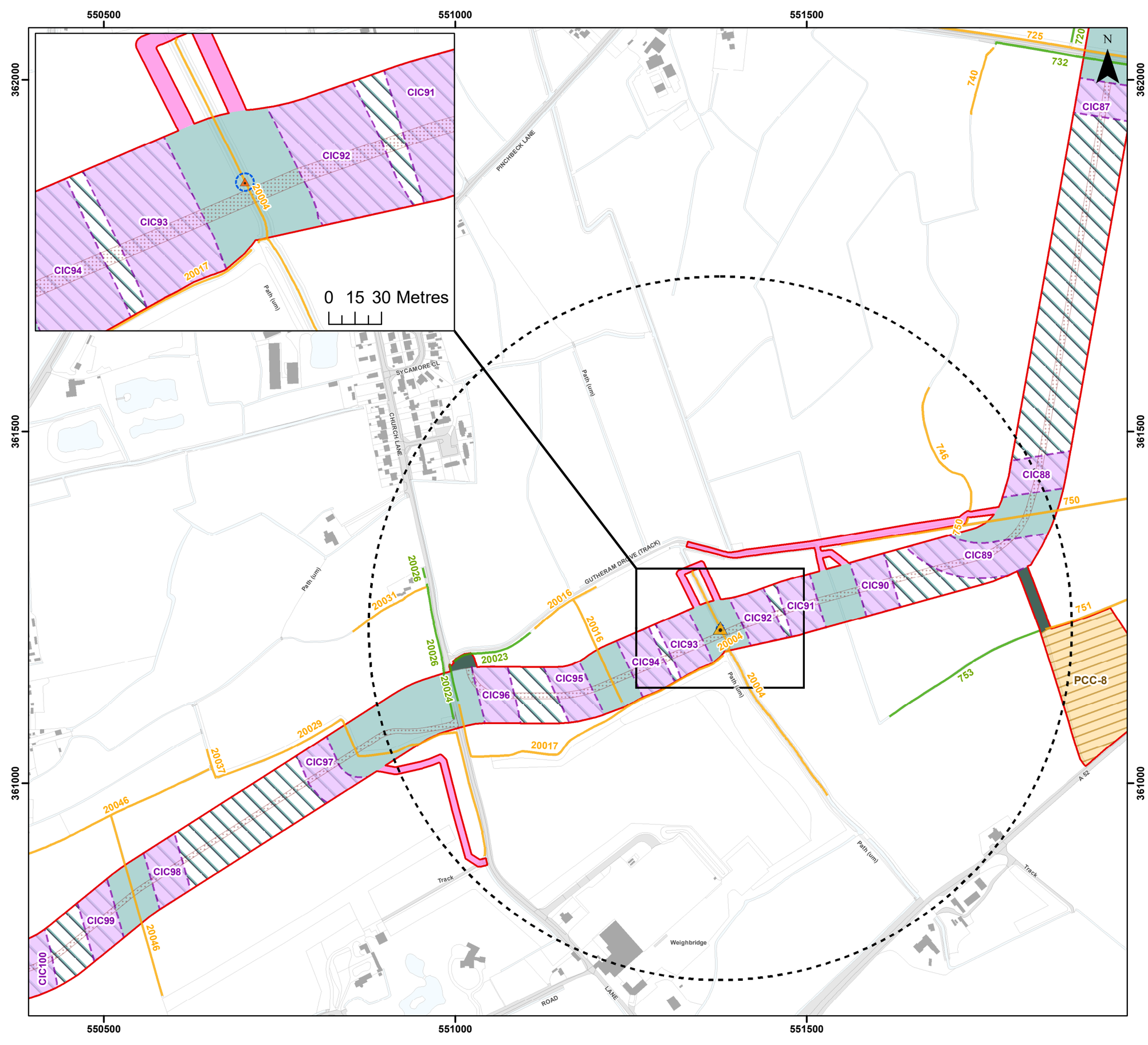

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track

Watercourse Suitability for Water Vole

- Moderate
- Low

Water Vole Field Sign

- Individual Burrow
- Water Vole Burrow 500 m Buffer
- Water Vole Burrow 5 m Buffer (Only Visible within Inset)

Note:
Watercourses that intersect with the Order Limits and are within 250m upstream and downstream are included in the assessment.

Coordinate System: British National Grid

0 125 250 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Locations where Water Vole Burrows Interact with Site Infrastructure

Figure A3 (Page 1 of 3)

OUTER DOWSING OFFSHORE WIND

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546000
546500
547000
358000
357500
357000

CIC131
CIC132
CIC133
CIC134
CIC135
CIC136
CIC126
CIC127
CIC128
CIC129
CIC130
20273
20253
20251
20240
20231
20214
20227
20247
20244
20219
20284
20279
20263
20299
20276
20290
13a
5a
2a
Track
Path (um)
FEN BANK
ECC 6: Steeping River to Fodder Dike Bank/Fen Bank
ECC 7: Fodder Dike Bank/Fen Bank to Broadgate

0 15 30 Metres

N

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track

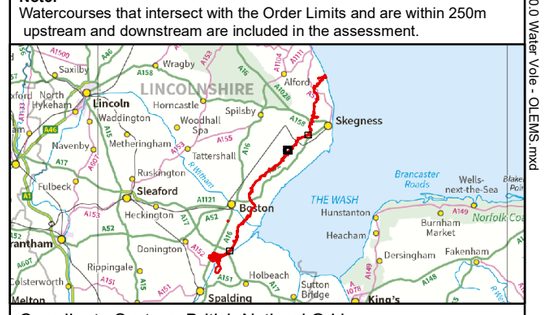
Watercourse Suitability for Water Vole

- Moderate
- Low
- Not Surveyed (No Access/Added After Survey Completion)
- Dry Ditch/Not Present

Water Vole Field Sign

- Individual Burrow
- Water Vole Burrow 500 m Buffer
- Water Vole Burrow 5 m Buffer (Only Visible within Inset)

Note:
Watercourses that intersect with the Order Limits and are within 250m upstream and downstream are included in the assessment.



Coordinate System: British National Grid

0 125 250 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Locations where Water Vole Burrows Interact with Site Infrastructure

Figure A3 (Page 2 of 3)

OUTER DOWSING OFFSHORE WIND

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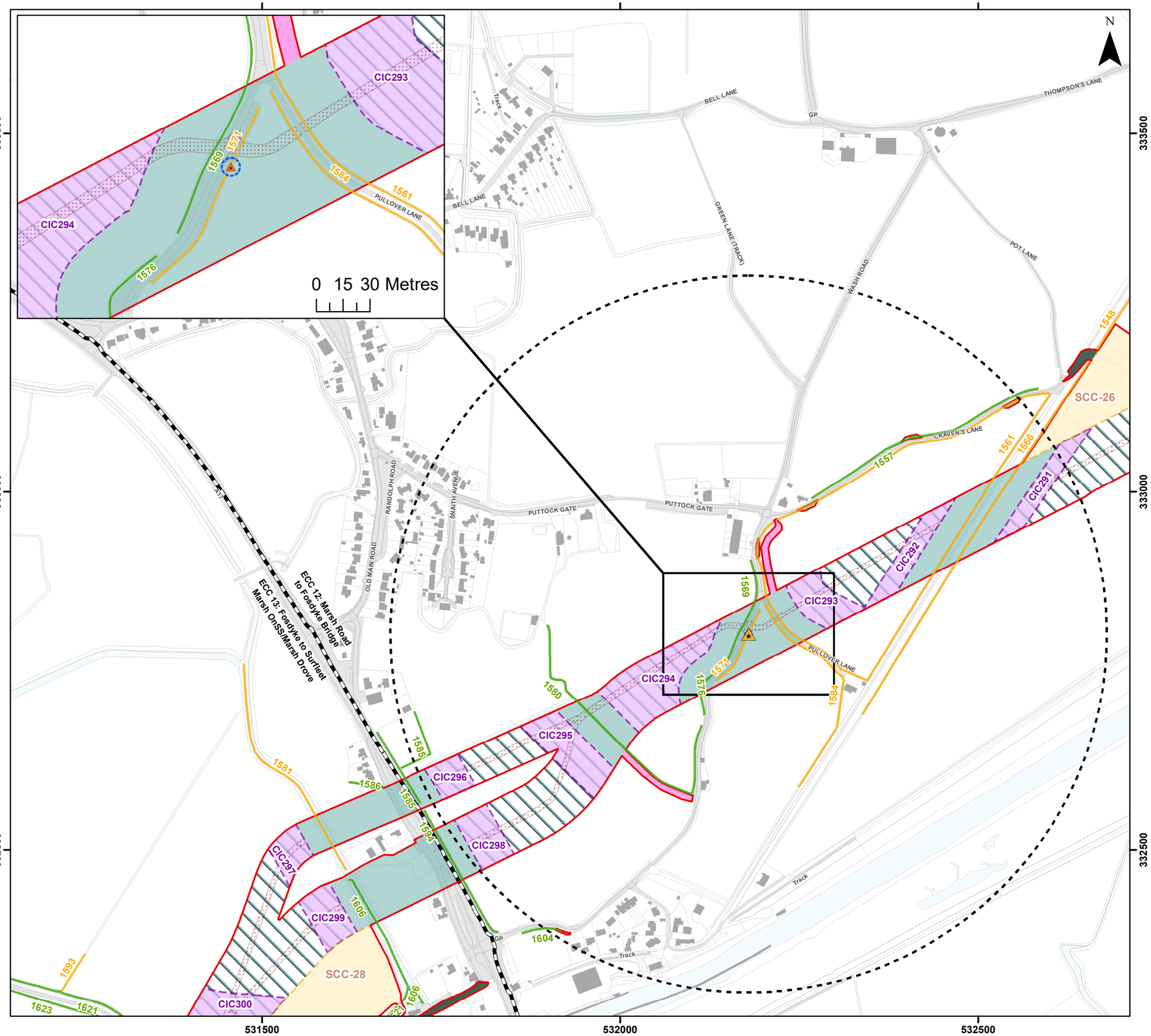

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track

Watercourse Suitability for Water Vole

- Moderate
- Low

Water Vole Field Sign

- Individual Burrow
- Water Vole Burrow 500 m Buffer
- Water Vole Burrow 5 m Buffer (Only Visible within Inset)

Note:
Watercourses that intersect with the Order Limits and are within 250m upstream and downstream are included in the assessment.

Coordinate System: British National Grid

0 125 250 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Locations where Water Vole Burrows Interact with Site Infrastructure

Figure A3 (Page 3 of 3)

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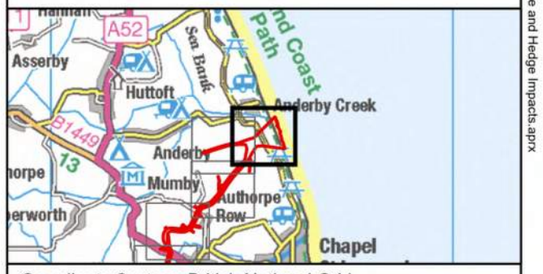
555000
555500
556000
376000
375500
375000
N
SEA ROAD
THE DELL
Path
GP
GP
ROMAN BANK
Path (um)
ROMAN BANK
Path (um)
1986
Path (um)

Legend

- Order Limits
- Landfall Trenchless Works Area
- Transition Joint Bay Area
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Permanent Access Track
- Temporary Access Track
- Indicative Haul Road
- Temporary Construction Compound (Laydown Area)
- Enabling Access Track
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.1

OUTER DOWSING OFFSHORE WIND

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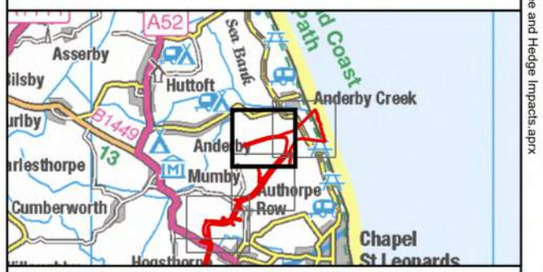
554000
554500
555000
375500
375000
N
SEA ROAD
ROMAN BANK
Track
Path (um)
1986

Legend

- Order Limits
- Transition Joint Bay Area
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Temporary Construction Compound (Laydown Area)
- Enabling Access Track
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.2

OUTER DOWSING OFFSHORE WIND

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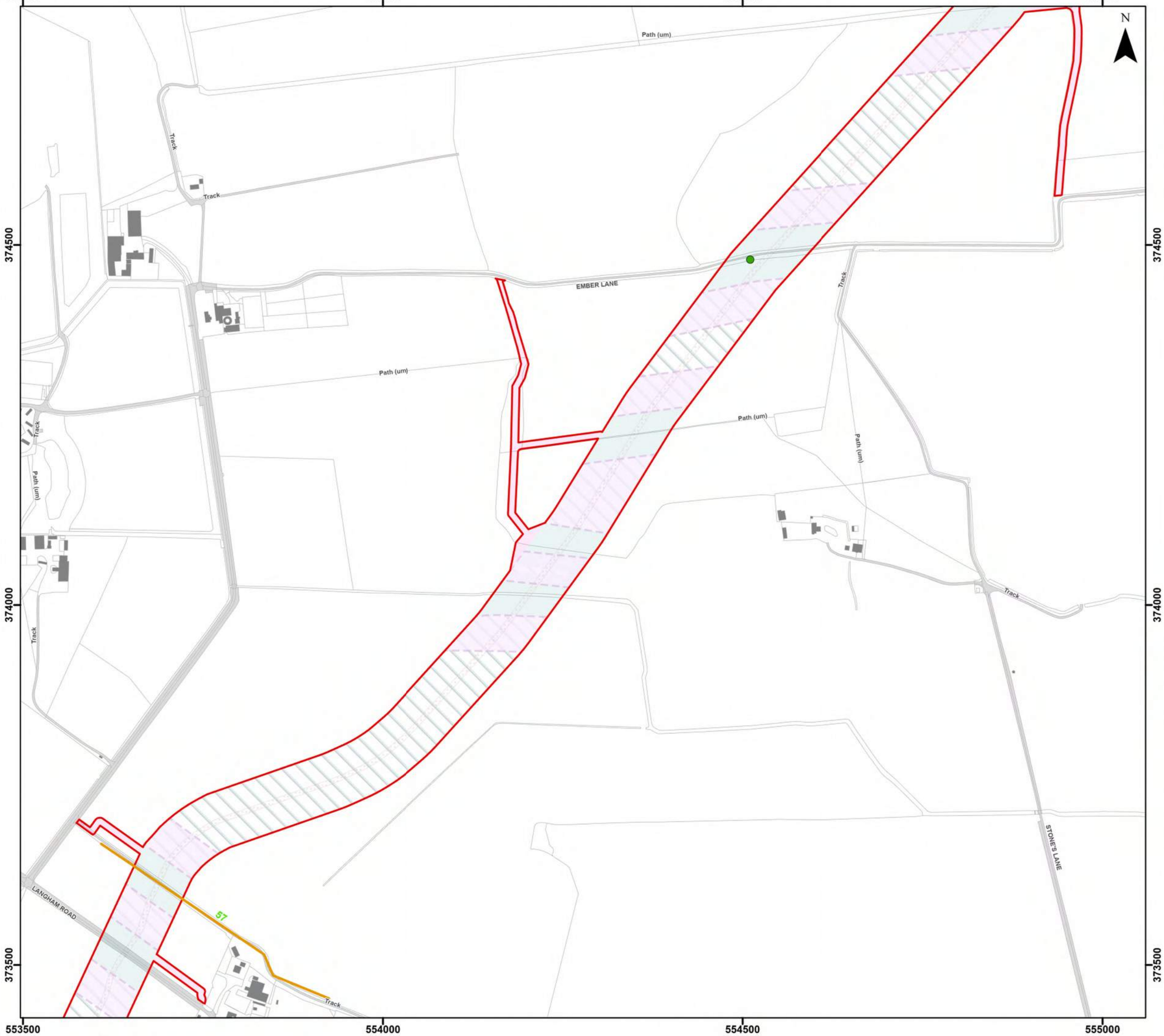

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.3

OUTER DOWSING OFFSHORE WIND

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552500
553000
553500
373500
373000
372500
N
GREEN LANE (TRACK)
WILLEY'S LANE
Track
LANGHAM ROAD
LOWGATE ROAD
BRACKEN LANE
LANGHAM ROAD
SEA LANE
THAMES STREET
JUBILEE CLOSE
THAMES MEADOW DRIVE
GP
Path
ECC 1
ECC 2
57
91
71
99
1980
96
1981
64
107
97
213
183
201
197
203
211
181
1976
1932
1977
186

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important
- Hedgerow Not of Ecological or Historical Importance

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.4

OUTER DOWSING OFFSHORE WIND

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552500 553000 553500

372500 372000 371500

N

201 197 203 211 181 1976 1932 1977 186 1940 157 1938

BRACKEN LANE

WEST END

ECC 1

ECC 2

HIGH STREET

THAMES STREET

THAMES CRESCENT

CARSON CLOSE

TAVERN LANE

SOUTH END

ST MARY'S CLOSE

LISTOFT LANE

SLOOTHBY HIGH LANE

LANE

Track

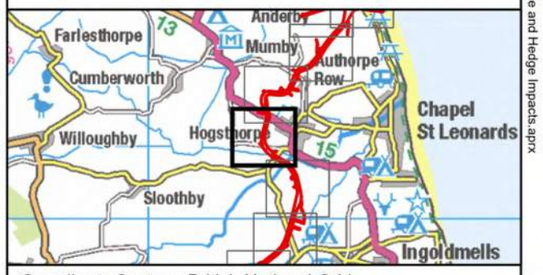
Path

Path (um)

GP

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.5

OUTER DOWSING OFFSHORE WIND

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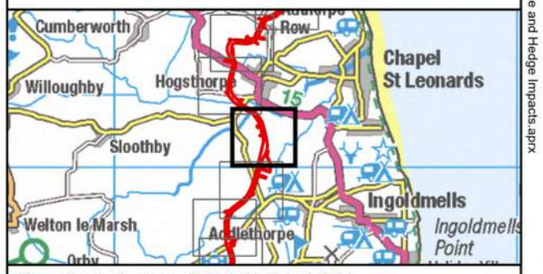
553000
553500
554000
371000
370500
N
ECC 1
ECC 2
1940
1938
1972
1971
55
65
63
Track
Path (um)
SOUTH INGS LANE

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Unscheduled Access Track (Construction)
- Hedgerow Classed as Historically Important
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.6

OUTER DOWSING OFFSHORE WIND

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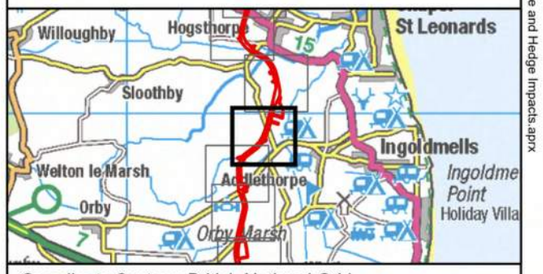
553000
553500
554000
370000
369500
369000
N
1971
SOUTH INGS LANE
Track
Track
ECC 2
ECC 3
ORBY ROAD
Red Gowt
GP
GP

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Unscheduled Access Track (Construction)
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.7

OUTER DOWSING OFFSHORE WIND

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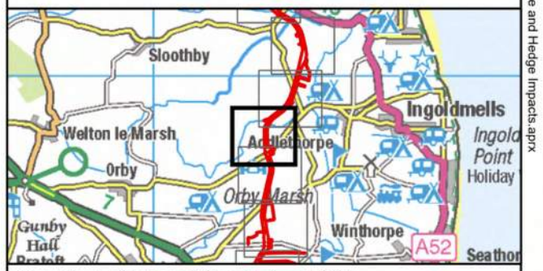
552000
552500
553000
553500
369000
368500
368000
N
GP
MARSH LANE
ECC 2
ECC 3
Track
MARSH LANE
1969

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.8

OUTER DOWSING OFFSHORE WIND

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552500
553000
553500
368000
367500
367000
N
MARSH LANE
1969
ECC 2
ECC 3
Track
WB
ROAD

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.9

OUTER DOWSING OFFSHORE WIND

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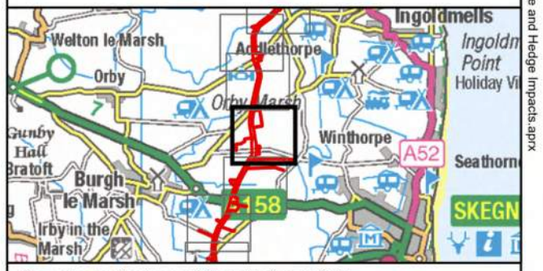
552500
553000
553500
366500
366000
N
ROAD
Track
YOUNGER'S LANE
YOUNGER'S LANE
GP
190
189

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.10

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552500
553000
553500
365500
365000
364500
N
189
168
550
248
305
270
Track
Lay-by
SKEGNESS ROAD
ECC 3
ECC 4
A 158
GP
BURGH
MIDDLEMARSH
ROAD

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Tree within area of Open Cut / Within Haul Road
- Hedgerow Classed as Historically Important
- Hedgerow Not of Ecological or Historical Importance

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.11

OUTER DOWSING OFFSHORE WIND

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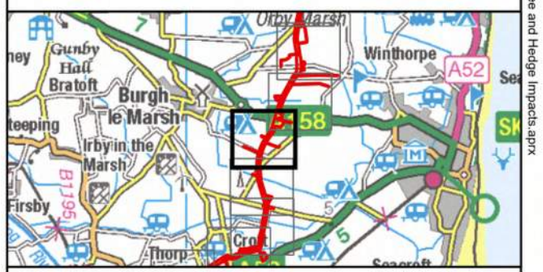
551500
552000
552500
364500
364000
363500
N
SKEGNESS ROAD
A158
ECC 3
ECC 4
305
270
287
Lay-by
SKEGNESS ROAD
Lay-by
Track
Path (um)
Path (um)
Path (um)
Path (um)
Path (um)
Track
BILLGATE LANE
MIDDLEMARSH ROAD
GP
Path (um)

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.12

OUTER DOWSING OFFSHORE WIND

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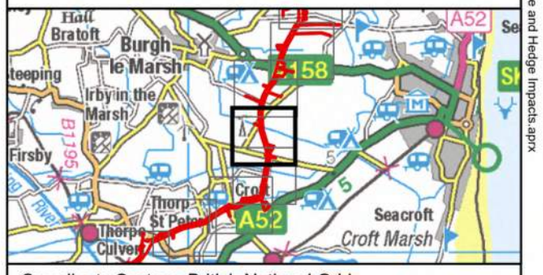
551500
552000
552500
363500
363000
362500
N
ROAD
Track
Track
Track
Track
Track
Track
MIDDLEMARSH ROAD
LOW ROAD
LOW ROAD
ECC 4
ECC 5
Path (um)
Track
PINCHBECK LANE

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.13

OUTER DOWSING OFFSHORE WIND

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551500
552000
552500
362500
362000
361500
N
LOW ROAD
ECC 4
ECC 5
Track
Path (um)
PINCHBECK LANE
LOW ROAD
PINCHBECK LANE
Path (um)
Path (um)
Track
Path (um)
GUTHERAM DROVE (TRACK)
CROFT BANK
Lay-by
325

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.14

OUTER DOWSING OFFSHORE WIND

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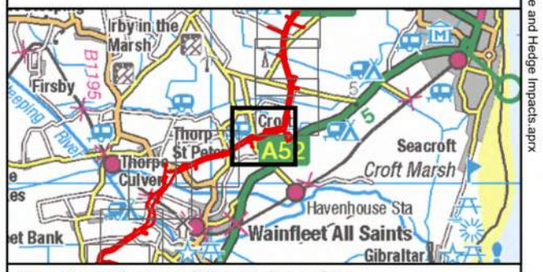
551000
551500
552000
361500
361000
360500
N
WASHDIKE LANE
GP
SYCAMORE CL
CHURCH LANE
Path (um)
GUTHERAM DROVE (TRACK)
Track
Weighbridge
CHURCH
CROFT
ROAD
HAVEN
325
335
A52

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.15

OUTER DOWSING OFFSHORE WIND

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549500 550000 550500

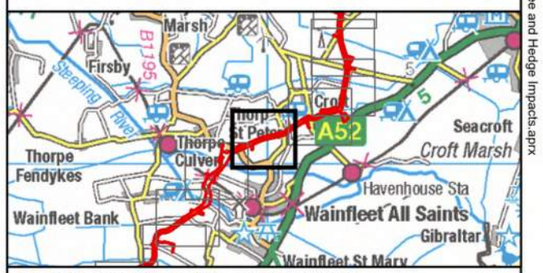
361000 360500 360000

N

WEDLAND LANE
WEDLAND
GP
CROFT LANE
CROFT
Track
WAINFLEET ROAD
B 1195
546

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- East Lindsey District Council Tree Preservation Order (TPO) Tree Location
- Hedgerow Classed as Ecologically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.16

OUTER DOWSING OFFSHORE WIND

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548000
548500
549000
549500
360500
360000
359500

N

B 1195
Track
WAINFLEET ROAD
Track
B 1195
719
BREWSTER LANE
CROW'S LANE
COLLISON GATE
BREWSTER LANE
Path (um)
MATT PITS LANE
Track
ECC 5
ECC 6
MILL LANE

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Construction Access Track / Potential Bridge Reinforcement
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Not of Ecological or Historical Importance

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.17

OUTER DOWSING OFFSHORE WIND

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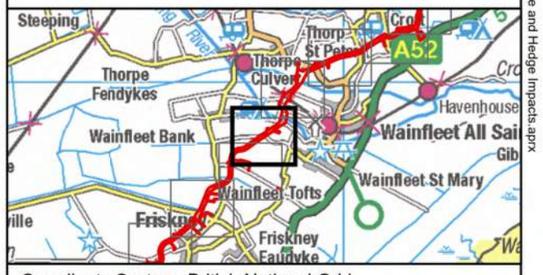
547500
548000
548500
359000
358500
358000
N
ECC 5
ECC 6
MILL LANE
n/a
1948
Path (um)
Track
Swan Lane (Path)
CHURCH LANE
HALL GATE (TRACK)
HALLGATE
WASHDIKE LANE
LOW ROAD
GP

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Tree within area of Open Cut / Within Haul Road
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.18

OUTER DOWSING OFFSHORE WIND

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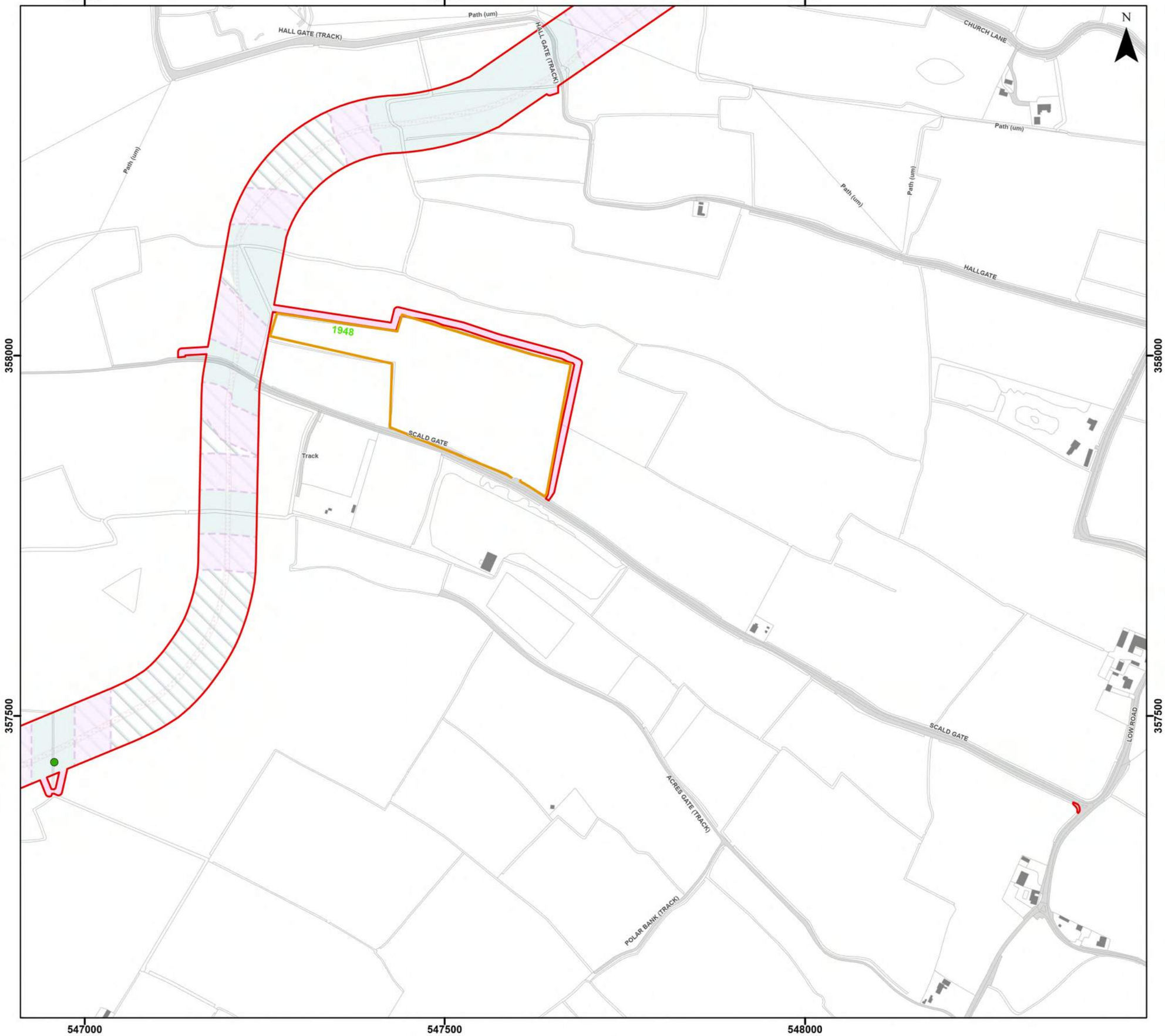
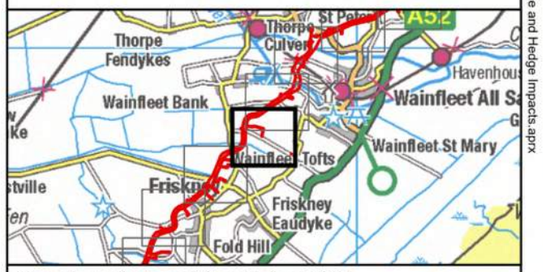


Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.19

OUTER DOWSING OFFSHORE WIND

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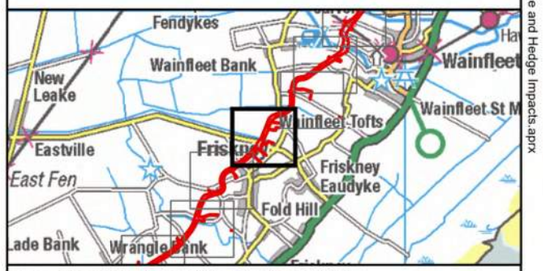
546000
546500
547000
357500
357000
356500
N
905
907
BURGH ROAD
Track
FEN BANK
ECC 6
ECC 7
GP
EAUDIKE ROAD
BURGH ROAD
EAUDYKE ROAD
GP

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.20

OUTER DOWSING OFFSHORE WIND

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545000 545500 546000

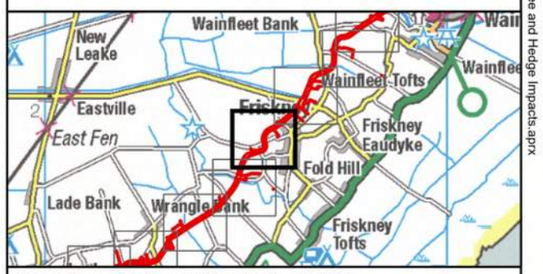
356000 355500

N

Track
Track
Track
Track
Track
Track
GP
GP
1959
1926
1926
1958
SMALL END ROAD
SMALL END ROAD
MILL HILL
CHURCH LANE
HOWGARTH LANE
BURGH ROAD
CHEALES CLOSE
BOWMAN AVENUE
THE AVENUE
SMITHY LANE
YAWLING GATE ROAD
WILDMORE CRES
CHURCH ROAD

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important
- Hedgerow Classed as Ecologically and Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.21

OUTER DOWSING OFFSHORE WIND

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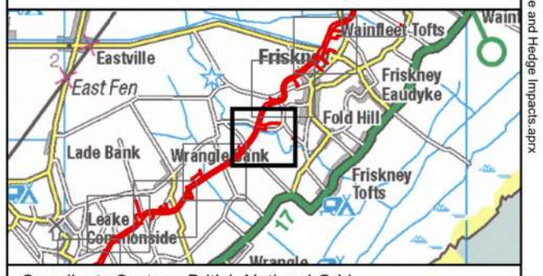
544500
545000
545500
355000
354500
354000
N
SKIRMORE ROAD
PATMAN'S LANE
HOWGARTH LANE
HOWGARTH LANE
Track
Track
Path (um)
Path (um)
Path (um)
1015
1036

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.22

OUTER DOWSING OFFSHORE WIND

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543000 543500 544000 544500

354000

353500

N

WRANGLE BANK

IVERY LANE

Track

Track

1036

1954

1931

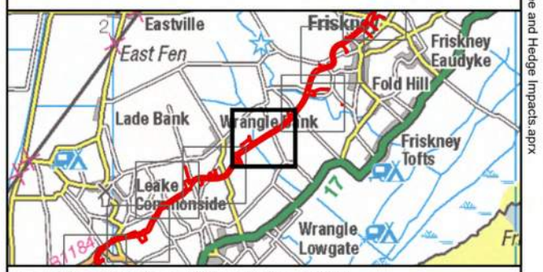
1931

1931

GOLD FEN DIKE BANK

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.23

OUTER DOWSING OFFSHORE WIND

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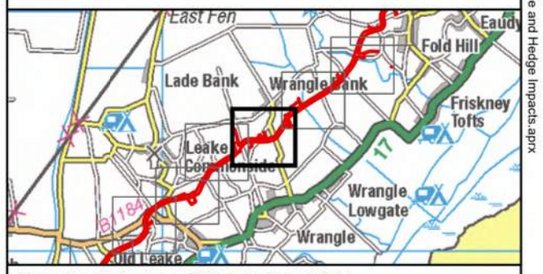
542000
542500
543000
353500
353000
352500
N
WRANGLE BANK
BROADGATE
CRAGMIRE LANE
Track
ECC 7
ECC 8
1931
1931
1931
DOUBLE BANK
COMMON ROAD
CRAGMIRE LANE
BROADGATE
Track
Track

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.24

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541000
541500
542000
353000
352500
352000
N
WRANGLE BANK
LOW LANE
PARK LANE
MANOR LANE
Track
DOUBLE BANK
COMMON ROAD
SEADYKE
PARK LANE

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)

Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.25

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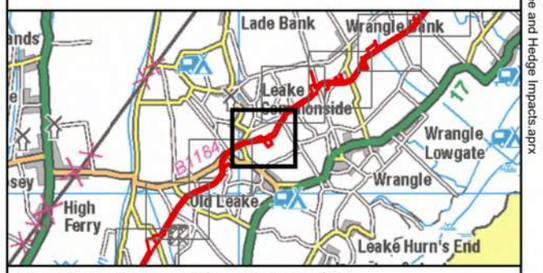
Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.26

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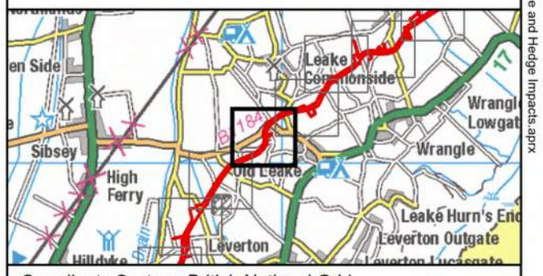
539000
539500
540000
351000
350500
350000
N
1154
1175
B 1184
GP
CHURCH ROAD
THE GRIDE
PODE LANE
SKIPMARSH LANE
CRACK HOLT LANE
RAYSOR'S LANE

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.27

OUTER DOWSING OFFSHORE WIND

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538000
538500
539000
350000
349500
349000
N
B1184
KINGS DROVE
SOUTHFIELDS
SKIPMARSH LANE
1987
ECC 8
ECC 9
GRIDE BANK

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Hedgerow Not of Ecological or Historical Importance

Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.28

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537000
537500
538000
538500
349000
348500
348000
N
INGS ROAD
INGS DROVE
Track
GP
MIDDLEMERE BANK
1323

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Hedgerow Not of Ecological or Historical Importance

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.29

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536500 537000 537500 538000

347500 347000 346500

N

HOBHOLE BANK

GP

DOUBLE BANK

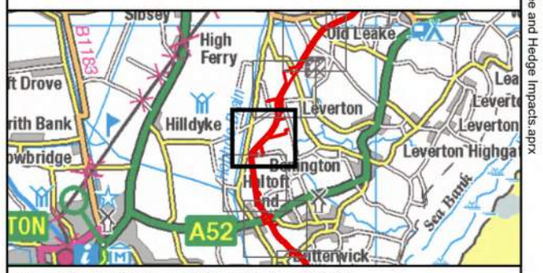
LOWFIELDS LANE

LOWFIELDS LANE

STRAFLEETS LANE

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.30

OUTER DOWSING OFFSHORE WIND

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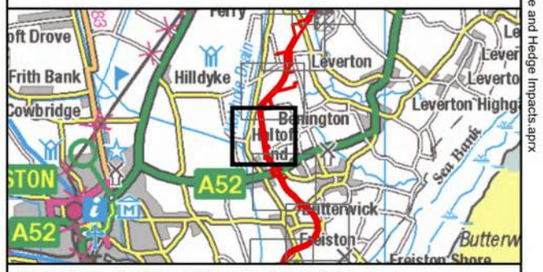
536500
537000
537500
346500
346000
345500

LOWFIELDS LANE
HOBHOLE BANK
SWANHOLE LANE
STRAYFLEETS LANE
EMERY LANE (TRACK)
DOTAM'S LANE
BAKER'S LANE
Track

N

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.31

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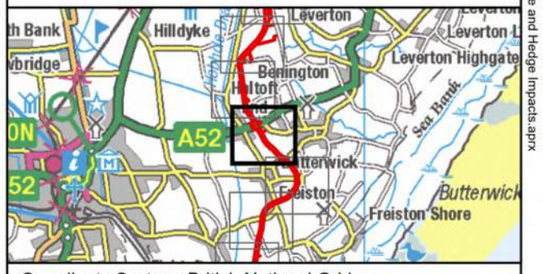
537000
537500
538000
345500
345000
344500
N
SWANHOLE LANE
A52
HOMERS LANE
Weighbridge
OAK HOUSE LANE
ACORN CLOSE
FORGE CLOSE
A52
MP
RALTOFF END ESTATE
GP
FOXHOLE LANE (TRACK)
SPITTAL
Track
CHURCH ROAD
Track
FOXHOLE LANE (TRACK)
Track
BUTTERWICK ROAD

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.32

OUTER DOWSING OFFSHORE WIND

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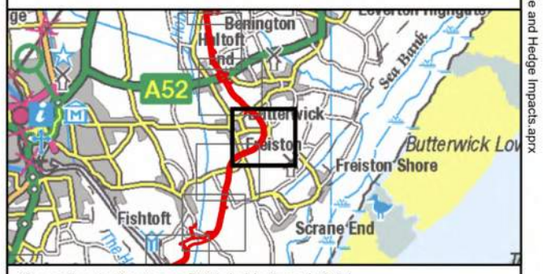
538000
538500
539000
344000
343500
N
PARK LANE
ROWAN FIELDS
CHURCH VIEW
SHORE ROAD
GP
ECC 9
ECC 10
CHURCH END ROAD
DOVES' LANE
Tracks
Track

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.33

OUTER DOWSING OFFSHORE WIND

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537000
537500
538000
343500
343000
342500
N
CHURCHEND ROAD
GP
Track
ECC 10
ECC 9
Post
GROVEFIELD LANE
GROVEFIELD
A52
Butterwick
Freiston
Freiston Shore
Fishtoft
Scrane End
Wyberton

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track

Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.34

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536500
537000
537500
342000
341500
341000
N
GP
Track
PINFOLD LANE
CUT END ROAD
Track
Path (um)
1378
1380
WOAD LANE
1383
CUT END ROAD
Track
Track

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.35

OUTER DOWSING OFFSHORE WIND

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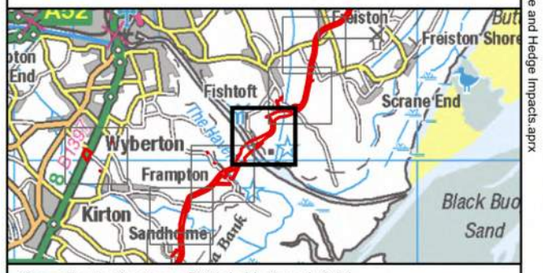
535500
536000
536500
341000
340500
340000
N
SCALP ROAD
SOUTHFIELD LANE
WOAD LANE
Track
Path (um)
GP
Post
ECC 10
ECC 11
1380
1383
1405
3495
3493

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Tree within area of Open Cut / Within Haul Road
- Hedgerow Classed as Historically Important
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.36

OUTER DOWSING OFFSHORE WIND

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534500
535000
535500
340000
339500
339000

N

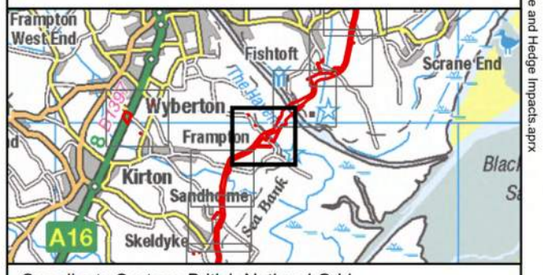
ECC 10
ECC 11

WYBERTON ROAD
GP
Path (um)
Track
WILEY'S LANE (TRACK)
Path (um) WYBERTON ROADS
FRAMPTON ROADS
Path

3495
3493
1447

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Tree within area of Open Cut / Within Haul Road
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.37

OUTER DOWSING OFFSHORE WIND

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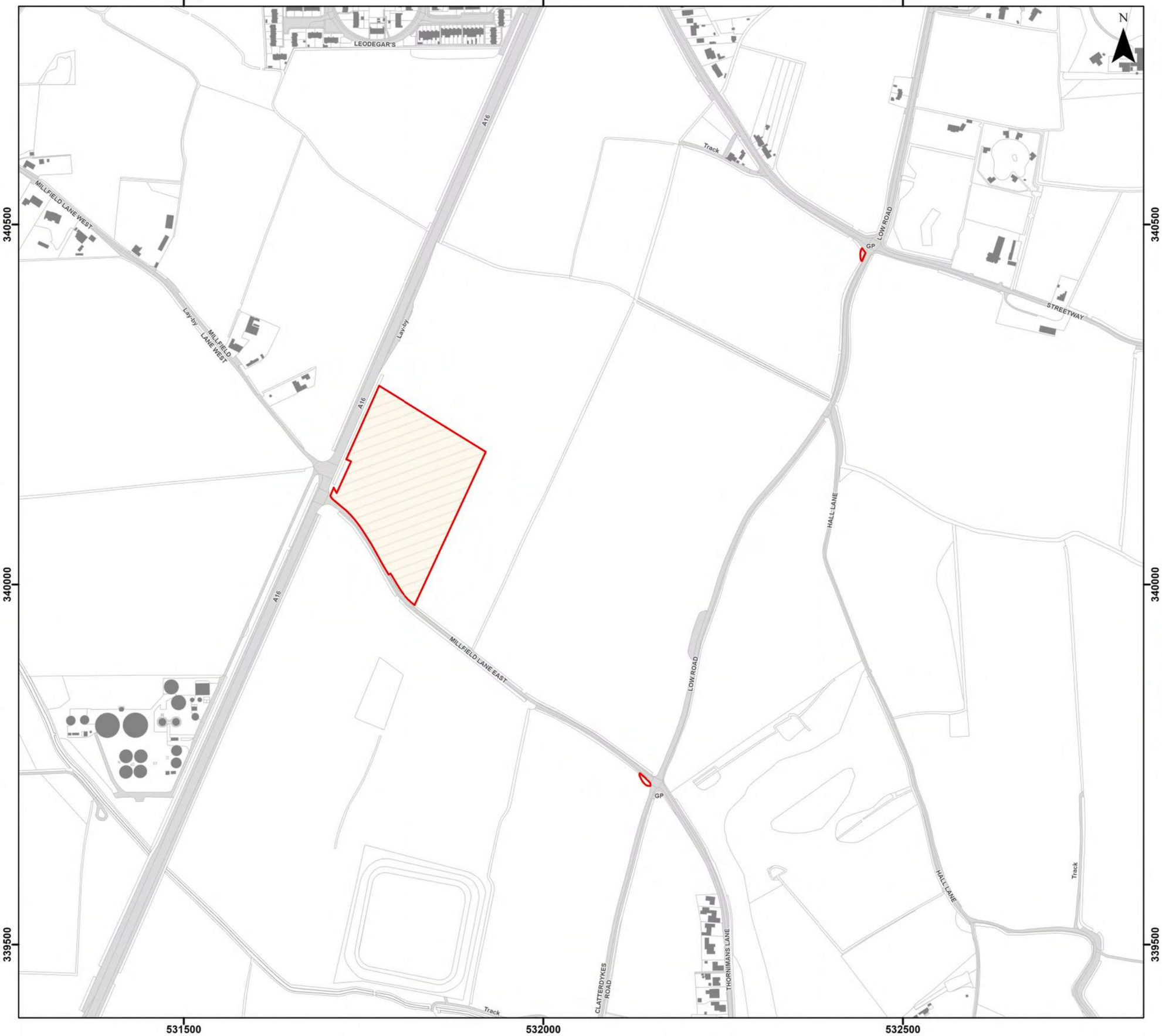
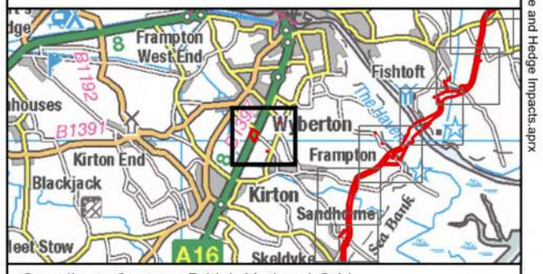


Legend

- Order Limits
- Primary Construction Compound
- Highway Alterations



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.38

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533500
534000
534500
339000
338500
338000
N
FRAMPTON ROAD
FRAMPTON ROAD
Path (um)
Track

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.39

OUTER DOWSING OFFSHORE WIND

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533500
534000
534500
338000
337500
337000
N
SANDHOLME LANE
Track
1499
Track
Track
Path (um)
Track
BURNHAM LANE
SKELDYKE ROAD
GP
MARSH LANE (TRACK)
Path (um)
SANDHOLME LANE
SANDHOLME LANE
ECC 11
NIBB'S LANE

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Not of Ecological or Historical Importance

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.40

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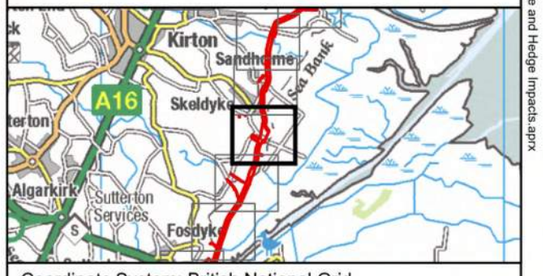
533500
534000
534500
336500
336000
N
NIBB'S LANE
MARSH ROAD
ECC 12
ECC 11
BUCKLEGATE LANE
Track
Path (um)
3808

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Tree within area of Open Cut / Within Haul Road



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.41

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533000
533500
534000
335500
335000
334500
N
CLOUGH LANE
Track
Path (um)
1501
1539
Legend
Order Limits
Onshore Export Cable Corridor (ECC) - Trenchless
Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
Cable Installation Compound
Indicative Haul Road
Enabling Access Track
Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
Hedgerow Not of Ecological or Historical Importance
A16
Skeldyke
Algarkirk
Sutterton Services
Fosdyke
Sutterton Dowdyke
Fosdyke Bridge
Holbeach St Marks
Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000
A3 Page Size
Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts
Figure A4.42
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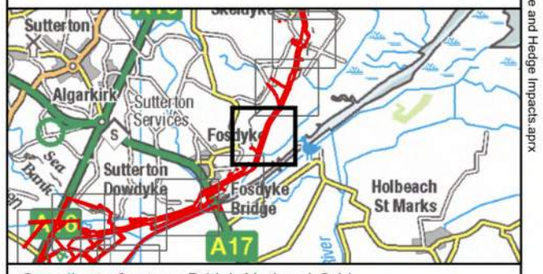
532500
533000
533500
334500
334000
333500
N
1541
HILTON'S LANE
Track
Track
Track
Track
Path (um)
THOMPSON'S LANE
POT LANE
WASH ROAD

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.43

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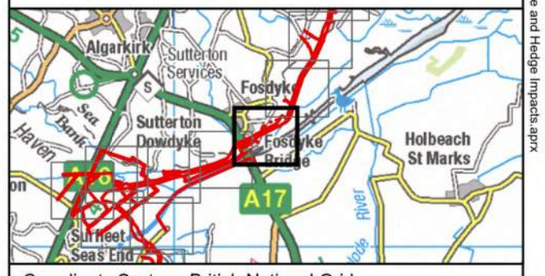
532000
532500
533000
333000
332500
N
BELL LANE
POT LANE
WASH ROAD
CRAVEN'S LANE
PUTTOCK GATE
RANDOLPH ROAD
SNAITH AVENUE
OLD MAIN ROAD
PULLOVER LANE
1928
1677
ECC 12
ECC 13
Track
MIDDLE MARSH ROAD
SECOND DROVE (TRACK)

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Ecologically Important
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.44

OUTER DOWSING OFFSHORE WIND

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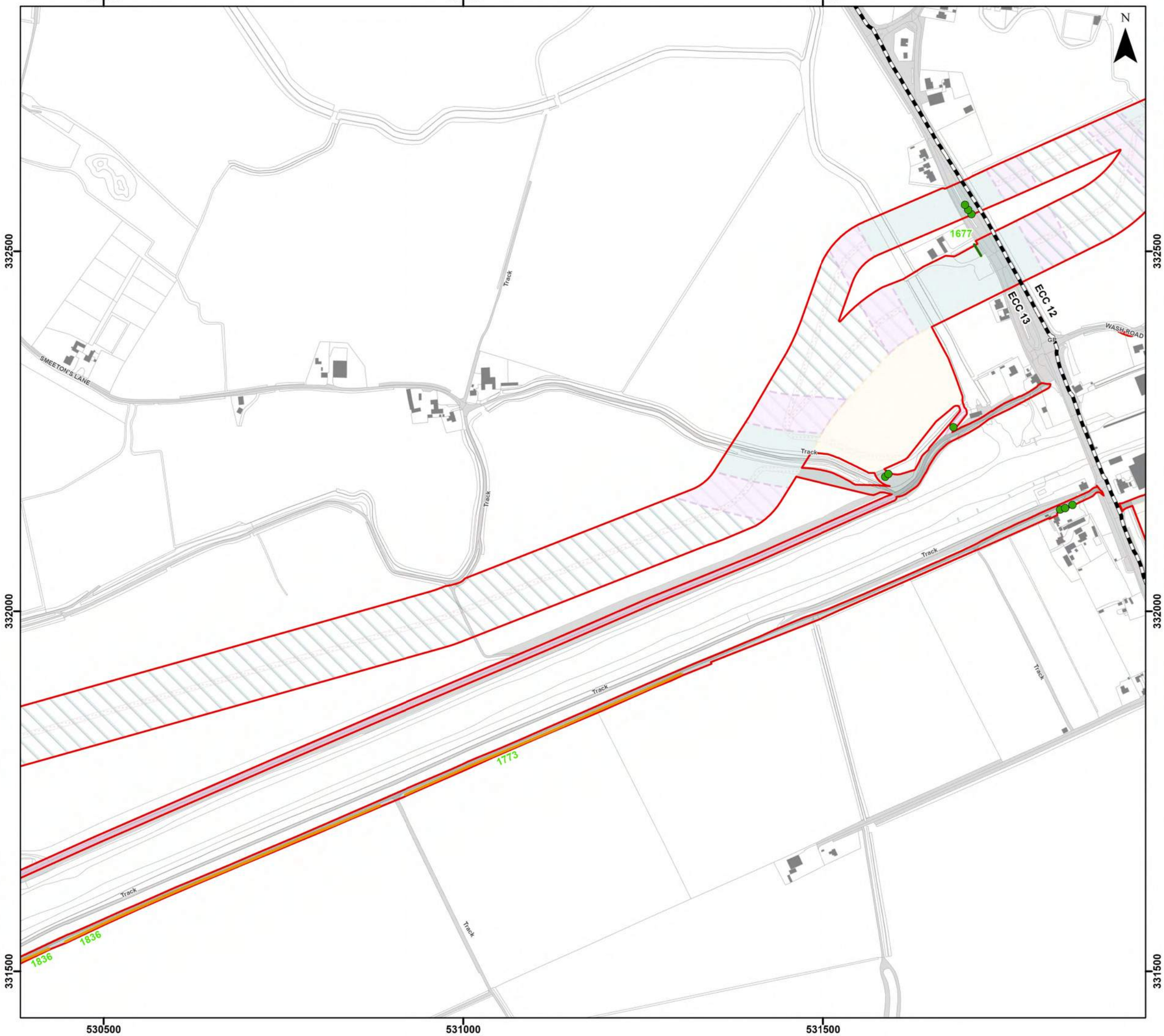
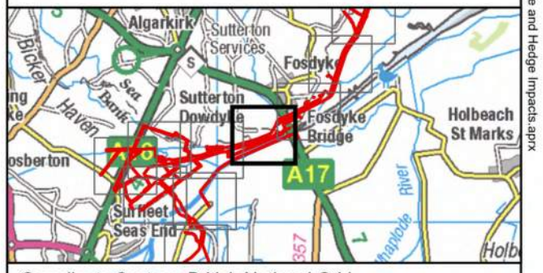


Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Highway Alterations
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.45

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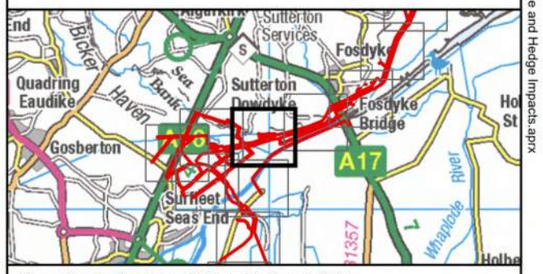
529500
530000
530500
332000
331500
N
MARSH LANE
SMEETON'S LANE
Track
1870
1836
ECC 13
ECC 14

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Maximum Extent of Off-site Mitigation Planting
- Onshore Drainage
- Onshore Drainage and Enabling Access Track
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.46

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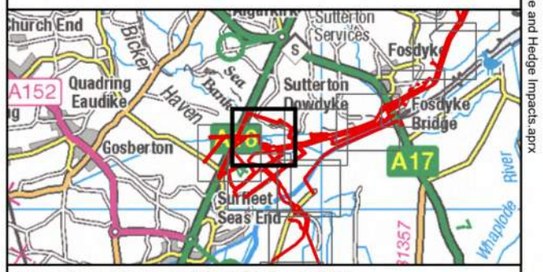
528000
528500
529000
332000
331500
N
Track
A16
1917
ECC 13
ECC 14

Legend

- Order Limits
- Onshore Segment Break
- Onshore Substation (OnSS) Footprint
- Onshore Substation (OnSS) Temporary Construction Compound
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- 400kV Underground Cable Corridor - Open Cut or Trenchless
- Cable Installation Compound
- Permanent Access Track
- Indicative Haul Road
- Maximum Extent of On-site Mitigation Planting
- Maximum Extent of Off-site Mitigation Planting
- Onshore Drainage
- Onshore Drainage and Enabling Access Track
- Enabling Access Track
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

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Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.47

OUTER DOWSING OFFSHORE WIND

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527000 527500 528000 528500

332000

331500

331000

N

A16

1917

Track

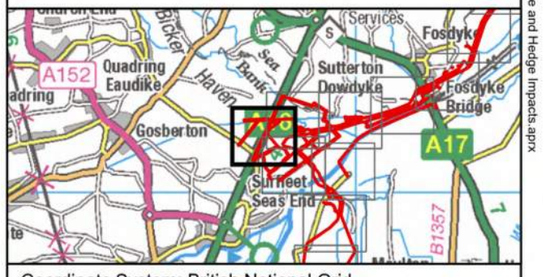
GOSBERTON ROAD

GOSBERTON BANK

A16

Legend

- Order Limits
- Onshore Substation (OnSS) Footprint
- Onshore Substation (OnSS) Temporary Construction Compound
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- 400kV Underground Cable Corridor - Trenchless
- 400kV Underground Cable Corridor - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Permanent Access Track
- Indicative Haul Road
- Maximum Extent of On-site Mitigation Planting
- Maximum Extent of Off-site Mitigation Planting
- Onshore Drainage
- Onshore Drainage and Enabling Access Track
- Enabling Access Track
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.48

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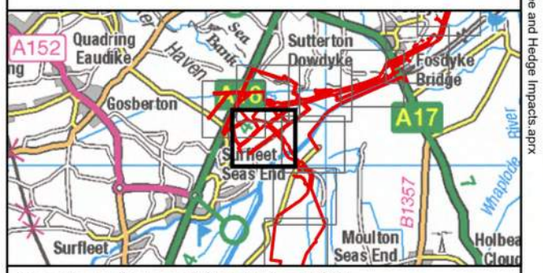
528000
528500
529000
331000
330500
330000
N
1917
1950
Track
ECC 13
ECC 14
MARSH GROVE
SURFLEET BANK
GP
Track
Track
Track

Legend

- Order Limits
- Onshore Segment Break
- Onshore Substation (OnSS) Footprint
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- 400kV Underground Cable Corridor - Trenchless
- 400kV Underground Cable Corridor - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Permanent Access Track
- Indicative Haul Road
- Maximum Extent of On-site Mitigation Planting
- Maximum Extent of Off-site Mitigation Planting
- Onshore Drainage
- Onshore Drainage and Enabling Access Track
- Enabling Access Track
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.49

OUTER DOWSING OFFSHORE WIND

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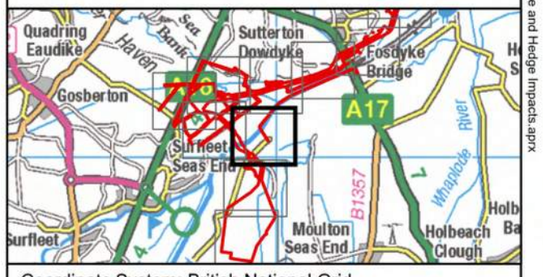
529000
529500
530000
331000
330500
330000
N
ECC 13
ECC 14
1950
Track
Track
Track
Track
Weighbridge
WB
MARSH ROAD

Legend

- Order Limits
- Onshore Segment Break
- 400kV Underground Cable Corridor - Trenchless
- 400kV Underground Cable Corridor - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Maximum Extent of Off-site Mitigation Planting
- Onshore Drainage
- Onshore Drainage and Enabling Access Track
- Enabling Access Track
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.50

OUTER DOWSING OFFSHORE WIND

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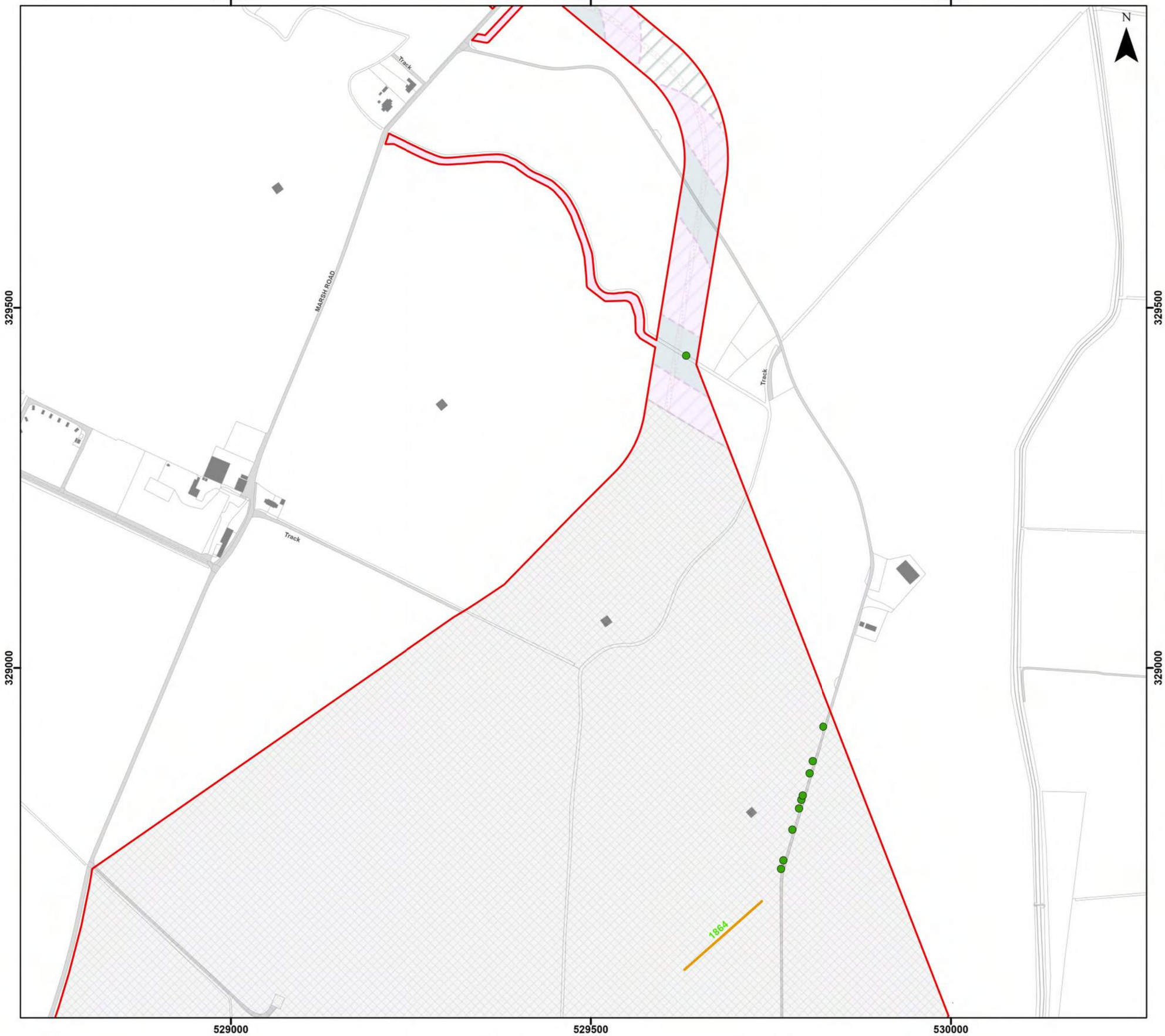
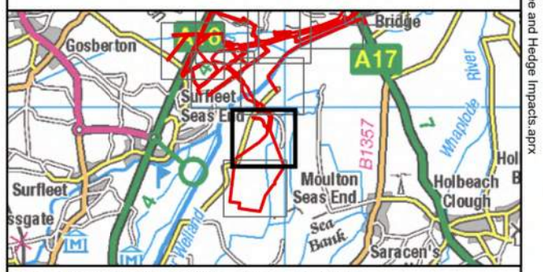


Legend

- Order Limits
- 400kV Underground Cable Corridor - Trenchless
- 400kV Underground Cable Corridor - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Connection Area
- Tree Location (Includes Individual Trees, Lines of Trees and Trees in Woodland)
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.51

OUTER DOWSING OFFSHORE WIND

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528500 529000 529500 530000

328500 328000 327500

N

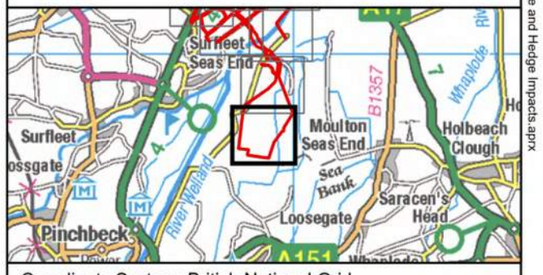
MARSH ROAD

1864

Track

Legend

- Order Limits
- Connection Area
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts

Figure A4.52

OUTER DOWSING OFFSHORE WIND

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554700
554800
554900
375400
375300
375200
N
1986
Legend
Order Limits
Onshore Export Cable Corridor (ECC) - Trenchless
Primary Construction Compound
Temporary Construction Compound (Laydown Area)
Enabling Access Track
Hedgerow Classed as Historically Important
Bank Ho
Sea Bank
Coordinate System: British National Grid
0 12.5 25 50 Metres
Scale: 1:1,000
A3 Page Size
Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 1986
Figure A5.1
OUTER DOWSING OFFSHORE WIND
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553600
553700
553800
373700
373600
373500
N
LANGHAM ROAD
57

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Hedgerow Classed as Historically Important

Coordinate System: British National Grid

0 12.5 25 50 Metres

Scale: 1:1,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 57
Figure A5.2

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553400
553500
553600
373300
373200
373100
N
91
71
99
1980
1981
107
96
97
Legend
Order Limits
Onshore Export Cable Corridor (ECC) - Trenchless
Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
Cable Installation Compound
Indicative Haul Road
Enabling Access Track
Hedgerow Classed as Historically Important
Mickleberry Hill
Authorpe Row
Wil
Coordinate System: British National Grid
0 12.5 25 50 Metres
Scale: 1:1,000
A3 Page Size
Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 71, 96 and 107
Figure A5.3
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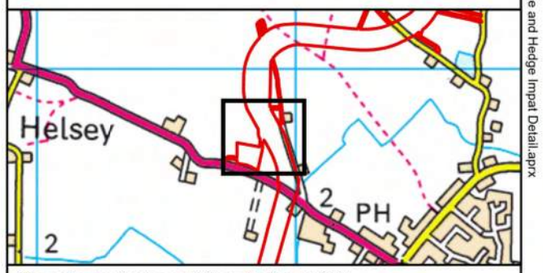
552800
552900
553000
372800
372700
372600
N
213
183
201
197
203
211
ECC 1
ECC 2

Legend

- Order Limits
- Onshore Segment Break
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Primary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

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Scale: 1:1,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 201
Figure A5.4

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553000
553100
553200
371700
371600
371500
N
LISTOFT
LANE
SLOOTHBY HIGH LANE
1940
157
2

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Hedgerow Classed as Historically Important

Coordinate System: British National Grid

0 12.5 25 50 Metres

Scale: 1:1,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 157 and 1940
Figure A5.5

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552500
552600
552700
365500
365400
365300
N
248
550
168
Legend
Order Limits
Onshore Export Cable Corridor (ECC) - Trenchless
Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
Cable Installation Compound
Indicative Haul Road
Enabling Access Track
Tree within area of Open Cut / Within Haul Road
Hedgerow Classed as Historically Important
Coordinate System: British National Grid
0 12.5 25 50 Metres
Scale: 1:1,000
A3 Page Size
Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 168 and 248
Figure A5.6
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548700
548800
548900
360000
359900
359800
N
719
Legend
Order Limits
Onshore Export Cable Corridor (ECC) - Trenchless
Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
Cable Installation Compound
Indicative Haul Road
Hedgerow Not of Ecological or Historical Importance
Primro
F
LC
Wainflee
Common
All Saints
Coordinate System: British National Grid
0 12.5 25 50 Metres
Scale: 1:1,000
A3 Page Size
Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 719
Figure A5.7
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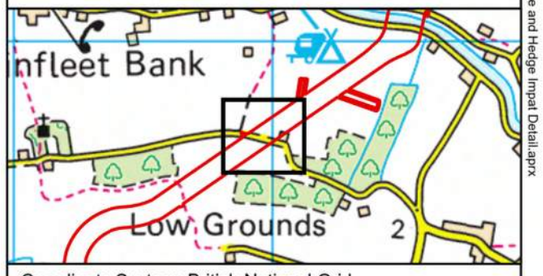
547900
548000
548100
358700
358600
358500
N
n/a

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Tree within area of Open Cut / Within Haul Road



Coordinate System: British National Grid

0 12.5 25 50 Metres

Scale: 1:1,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Tree Line
Figure A5.8

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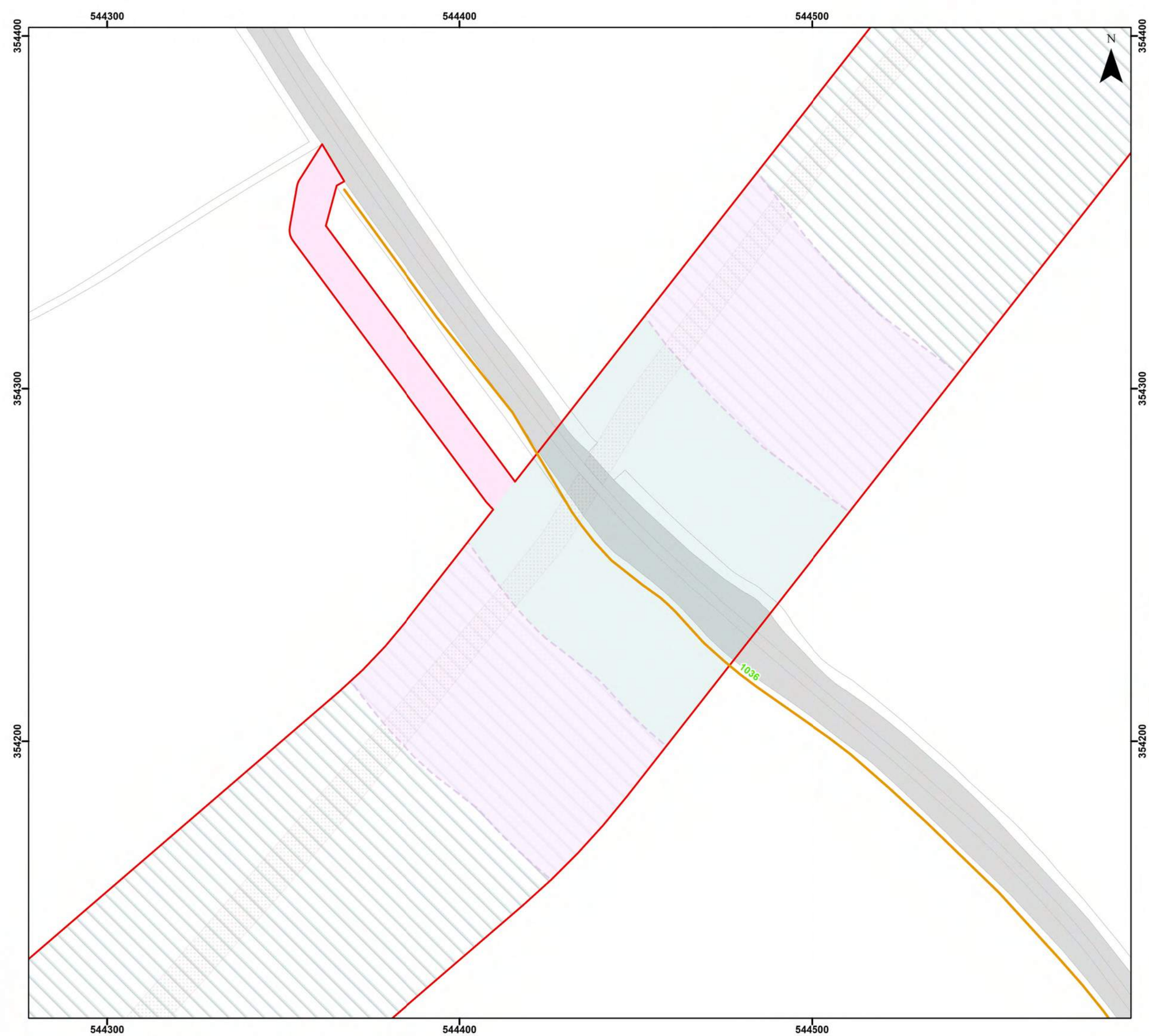
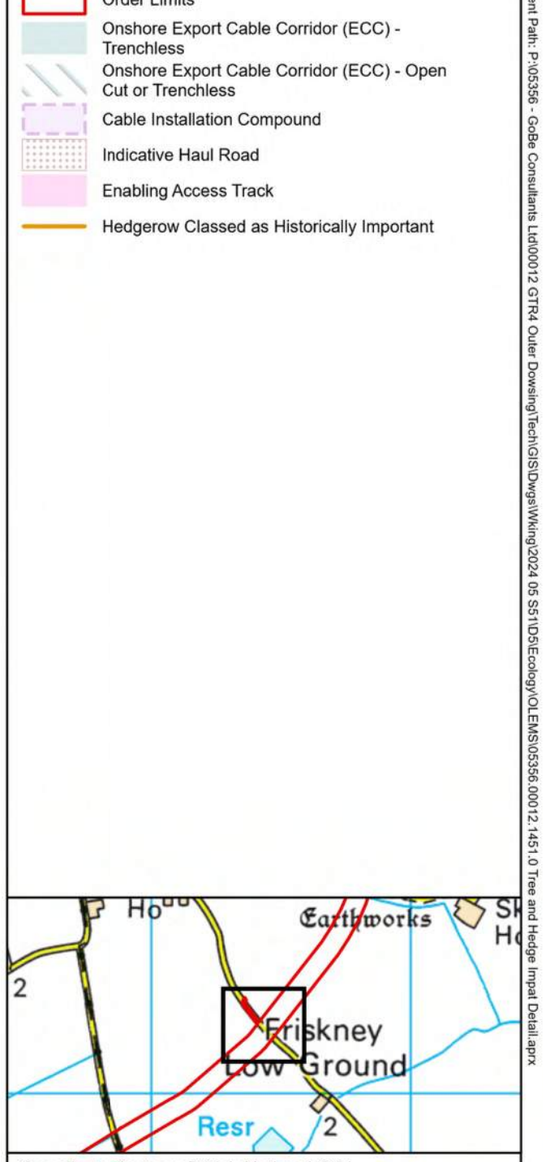


Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 12.5 25 50 Metres

Scale: 1:1,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 1036
Figure A5.9

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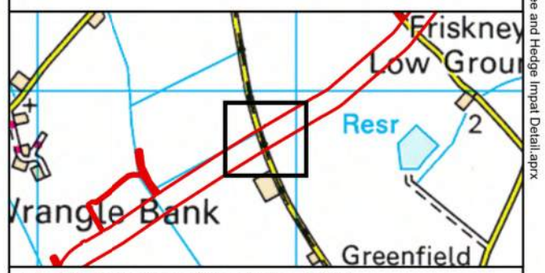
543800
543900
544000
353900
353800
353700
N
IVERY LANE
1954

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 12.5 25 50 Metres

Scale: 1:1,000

A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 1954
Figure A5.10

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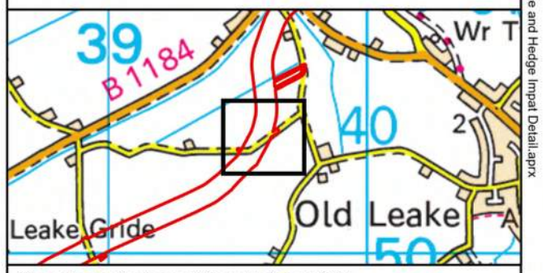
539500
539600
539700
350500
350400
N
1175
PODE LANE

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Enabling Access Track
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

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Scale: 1:1,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 1175
Figure A5.11

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537500
537600
537700
348300
348200
348100
N
1323
Legend
Order Limits
Onshore Export Cable Corridor (ECC) - Trenchless
Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
Cable Installation Compound
Indicative Haul Road
Enabling Access Track
Hedgerow Not of Ecological or Historical Importance
Ivy House Fm
Coobhole Drain
Coordinate System: British National Grid
0 12.5 25 50 Metres
Scale: 1:1,000
A3 Page Size
Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 1323
Figure A5.12
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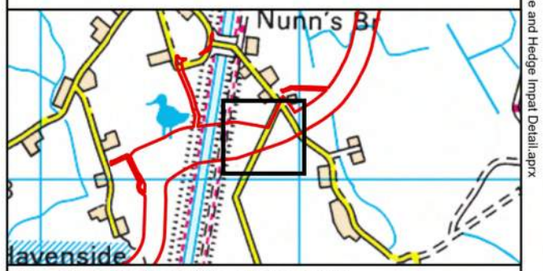
536800
536900
537000
341300
341200
341100
N
1378
1380
1383
WOAD LANE

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Indicative Haul Road
- Hedgerow Classed as Historically Important



Coordinate System: British National Grid

0 12.5 25 50 Metres

Scale: 1:1,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 1380
Figure A5.13

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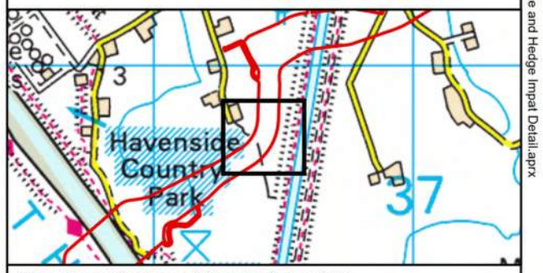
536300
536400
536500
340800
340700
340600
N
Track
1405

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Cable Installation Compound
- Indicative Haul Road
- Hedgerow Not of Ecological or Historical Importance



Coordinate System: British National Grid

0 12.5 25 50 Metres

Scale: 1:1,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Hedge 1405
Figure A5.14

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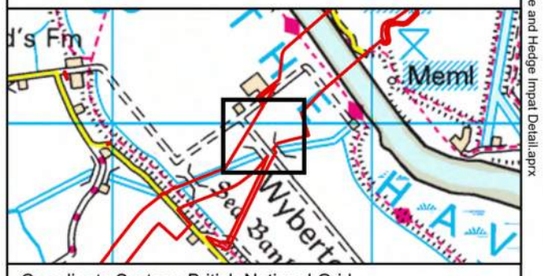
535500
535600
535700
340000
339900
N
3495
3493

Legend

- Order Limits
- Onshore Export Cable Corridor (ECC) - Trenchless
- Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
- Secondary Construction Compound
- Cable Installation Compound
- Temporary Access Track
- Indicative Haul Road
- Enabling Access Track
- Tree within area of Open Cut / Within Haul Road



Coordinate System: British National Grid

0 12.5 25 50 Metres

Scale: 1:1,000 A3 Page Size

Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Tree Line
Figure A5.15

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533800
533900
534000
336100
336000
335900
N
3808
Legend
Order Limits
Onshore Export Cable Corridor (ECC) - Trenchless
Onshore Export Cable Corridor (ECC) - Open Cut or Trenchless
Cable Installation Compound
Indicative Haul Road
Enabling Access Track
Tree within area of Open Cut / Within Haul Road
3
Kirto
Bucklegate
Coordinate System: British National Grid
0 12.5 25 50 Metres
Scale: 1:1,000
A3 Page Size
Outline Plans
Outline Landscape and Ecological Strategy (OLEMS)
Trees and Hedgerows Potential Impacts Detail: Tree 3808
Figure A5.16
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