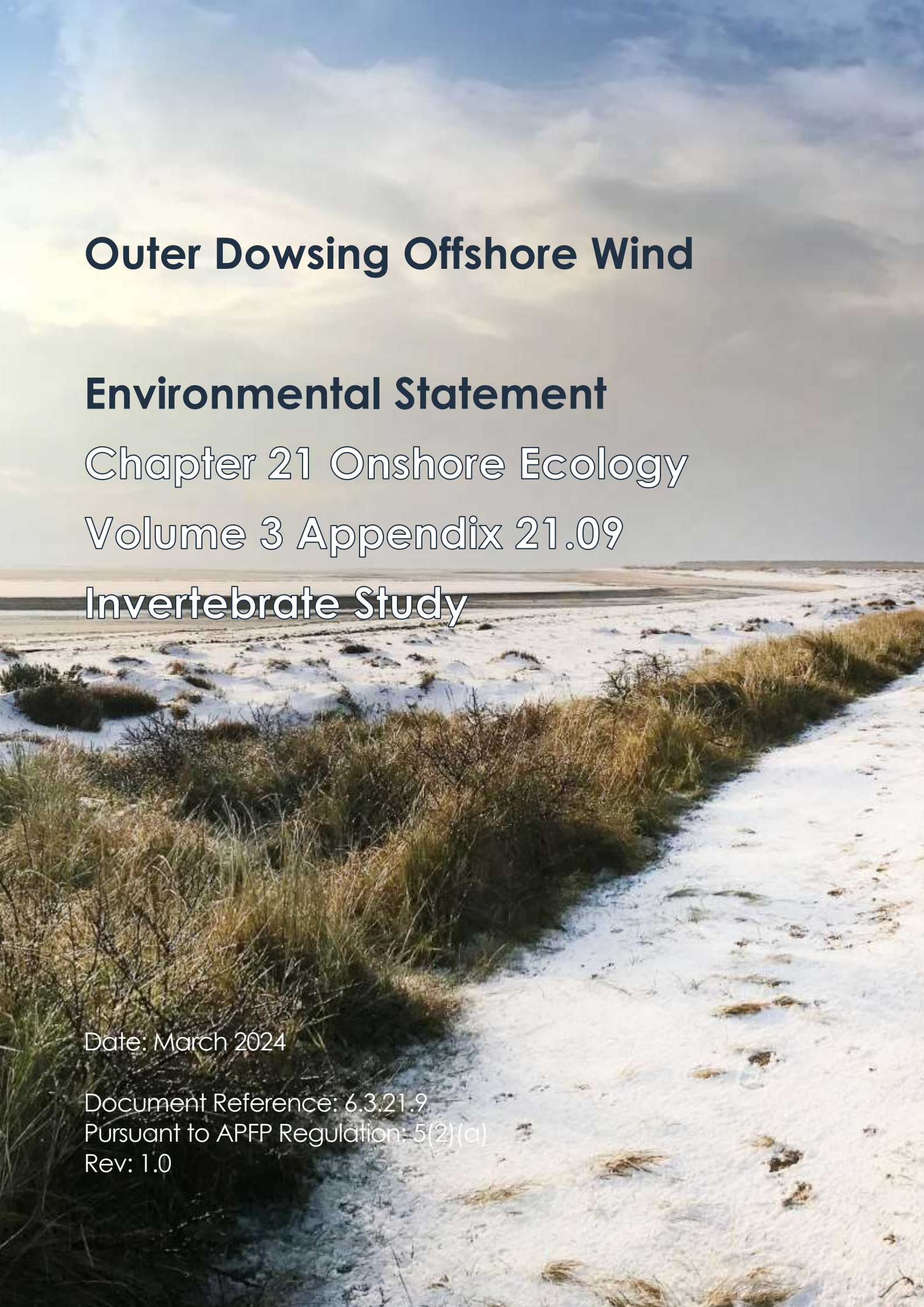

Outer Dowsing Offshore Wind

Environmental Statement

Chapter 21 Onshore Ecology

Volume 3 Appendix 21.09

Invertebrate Study

Date: March 2024

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Volume 3, Appendix 21.09: Invertebrate Study

Outer Dowsing Offshore Wind Environmental Statement

GoBe Consultants Ltd.

Prepared by:

SLR Consulting Limited

7 Wornal Park, Menmarsh Road, Worminghall,
Aylesbury, HP18 9PH

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01	1 March 2024	SLR	GoBe	ODOW

Basis of Report

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Table of Contents

Tables in Text

Acronyms and Abbreviations

Acronyms and Abbreviations	Description
BAP	Biodiversity Action Plan
CIEEM	The Chartered Institute of Ecology and Environmental Management
DCO	Development Consent Order
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
EPS	European Protected Species
ES	Environmental Statement
GLNP	Greater Lincolnshire Nature Partnership
ISIS	Invertebrate Species-habitat Information System
LBAP	Lincolnshire Biodiversity Action Plan
LWT	Lincolnshire Wildlife Trust
MAGIC	Multi-Agency Geographic Information for the Countryside
NERC	Natural Environment and Rural Communities
NSIP	Nationally Significant Infrastructure Project
ODOW	Outer Dowsing Offshore Wind (The Project)
OMH	Open Mosaic Habitat on Previously Developed Land
OS	Ordinance Survey
PEIR	Preliminary Environmental Information Report
SAT	Species Assemblage Type
SSSI	Site of Special Scientific Interest
UK	United Kingdom

Terminology

Term	Definition
400kV cables	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.
Baseline	The status of the environment at the time of assessment without the development in place.
Connection Area	An indicative search area for the NGSS.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP).
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Regulations, including the publication of an Environmental Statement (ES).

Environmental Statement (ES)	The suite of documents that detail the processes and results of the EIA.
Export cables	High voltage cables which transmit power from the Offshore Substations (OSS) to the Onshore Substation (OnSS) via an Offshore Reactive Compensation Platform (ORCP) if required, which may include one or more auxiliary cables (normally fibre optic cables).
Impact	An impact to the receiving environment is defined as any change to its baseline condition, either adverse or beneficial.
Intertidal	The area between Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS).
Landfall	The location at the land-sea interface where the offshore export cables and fibre optic cables will come ashore.
Mitigation	Mitigation measures 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.
Onshore Export Cable Corridor (ECC)	The Onshore Export Cable Corridor (Onshore ECC) is the area within which, the export cables 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 HVAC substation, containing electrical equipment, control buildings, lightning protection masts, communications masts, access, fencing and other associated equipment, structures or buildings; 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.
Preliminary Environmental Information Report (PEIR)	The PEIR was written in the style of a draft Environmental Statement (ES).
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 – to be defined on a receptor-by-receptor basis by the relevant technical specialist.
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, Total Energies 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), Total Energies and GULF.
The Planning Inspectorate	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects (NSIPs).

The Project	Outer Dowsing Offshore Wind, an offshore wind generating station together with associated onshore and offshore infrastructure.

21 Invertebrates Study

21.1 Introduction

1. Outer Dowsing Offshore Wind (ODOW) is a Nationally Significant Infrastructure Project (NSIP). An Environmental Impact Assessment (EIA) has been undertaken, the findings of which are presented within an Environmental Statement (ES), which accompanies the Development Consent Order (DCO) application under the Planning Act 2008.

2. SLR Consulting was commissioned by GoBe Consultants, whom has been instructed by GT R4 Limited (trading as Outer Dowsing Offshore Wind) (the Applicant), to undertake a suite of ecological surveys of those relevant parts of the project site that may be affected by the construction, operation and maintenance, and decommissioning, of the onshore aspects of the Project.

3. This report presents the findings of the terrestrial invertebrate habitat assessment undertaken in 2023 and supports Volume 1, Chapter 21: Onshore Ecology (document reference 6.1.21).

21.2 The Project

4. The Project will include both offshore and onshore infrastructure including an offshore generating station (windfarm) located approximately 54km from the Lincolnshire coastline, export cables to landfall, onshore cables, an onshore substation, connection to the electricity transmission network, and ancillary and associated development (see Volume 1, Chapter 3: Project Description 6.1.3 for full details).

5. The ES references the Project's 'Order Limits' which comprises the extent of the land for which the DCO application has been made. Onshore it reflects the landfall, an approximate 80m wide corridor around a centre line totalling approximately 70km in length in reference to the footprint of the Onshore Export Cable Corridor (ECC), the Onshore substation (OnSS), and a 400kV cable corridor to the National Grid connection area.

6. .Due to the linear footprint of the Project, the Survey Area for some receptors is relatively large-scale, therefore to assist with the interpretation and explanation of associated data, the Order Limits have been split into segments. The extent of these segments has been

aligned with key geographical features such as roads or rivers which cross the Order Limits.

7. The segment names along the route are shown in Table 21.1 below.

Table 21.1: Onshore Segment Names

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 the Connection Area

21.3 Purpose of this Report

8. This report sets out the results of the Terrestrial Invertebrate study for the proposed Order Limits and surrounding habitats, and the nature conservation value of the area to Terrestrial Invertebrates with the potential to be affected by the proposed development. The main purposes of the report are:

- to describe the data collection and assessment methods used;
- to summarise the results of the Terrestrial Invertebrate study; and,
- to begin to identify potentially significant ecological constraints relating to terrestrial invertebrates associated with the development.

21.4 Legislation

9. Three species of invertebrate are protected as European Protected Species (EPS), these are:

- large blue butterflies (*Phengaris arion*) (eggs, caterpillars, chrysalises and adults);
- Fisher's estuarine moths (*Gortyna borelii*) (eggs, caterpillars, chrysalises and adults); and,
- little ramshorn whirlpool snails (*Anisus vorticulus*).

10. These are protected under The Conservation of Habitats and Species Regulations 2017 (as amended) where it is an offence to:

- deliberately kill, injure, disturb or capture them;
- deliberately destroy their eggs;
- damage or destroy their breeding sites and resting places (even when invertebrates are not present); and,
- possess, control or transport them (alive or dead).

11. Many other invertebrate species are protected under the Wildlife and Countryside Act 1981. For any species listed in Schedule 5, it is an offence to intentionally:

- kill, injure or take them; and,
- possess or control them (alive or dead).

12. It is also an offence to intentionally or recklessly:

- damage or destroy a structure or place used for shelter or protection;
- disturb them in a place used for shelter or protection; and
- obstruct access to a place used for shelter or protection.

13. A number of invertebrates are listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006).

21.5 Methodology

14. An EIA Scoping Report (ODOW, 2022) was prepared and submitted to The Planning Inspectorate in July 2022. The Scoping Opinion (Case Reference EN010130, The Planning Inspectorate 2022) provided by the Planning Inspectorate in response to the Scoping Report, contained comments from Natural England regarding the need to carry out invertebrate studies across all SSSIs within the scoping area along the Lincolnshire Coast, plus any linked land around these sites.

15. In May 2022, the Preliminary Environmental Information Report (PEIR) was submitted. Following the submission, the PEIR Boundary was revised to the Order Limits, which covers a smaller area within the PEIR Boundary.

16. The scope of the invertebrate survey has been refined to suit this scope and is set out below.

21.5.1 Desk Study

17. In August 2023, a desk study was undertaken for the Order Limits and land within a 2km surrounding radius. The desk study involved a review of the following sources of information for terrestrial invertebrates:

- Information on statutory designated sites for nature conservation and geological interest and priority habitats, for the Order Limits and 2km radius, was obtained from the Multi-Agency Geographical Information System (MAGIC) website managed by Natural England; and,
- Greater Lincolnshire Nature Partnership (GLNP) for information regarding protected and notable species, and locally designated sites with invertebrate interest.

21.6 Study Area

18. A study to identify habitats of potential importance to terrestrial invertebrates was undertaken based on Dobson, J.R., (2021) and Dobson, J.R., (2011). Targeted locations were identified following review of UK Habitat survey data collected in 2023, aerial photography and Ordinance Survey (OS) maps. Areas were identified with the likelihood to contain features of importance to invertebrate species (as outlined in Kirby, P., 2013): Habitat Management for Invertebrates). Habitats known to be suitable for invertebrates listed in the UK Biodiversity Action Plan or Lincolnshire Biodiversity Action Plan (LBAP) were also targeted, with the locations of all habitats of potential importance detailed on Figure 21.10.1.

19. The study area for terrestrial invertebrates has been determined as 100m from the Order Limits due to the lack of mobility and strong habitat fidelity of the majority of notable and endangered invertebrate species. This has been extended to 500m where there are sites of known invertebrate importance to ensure that connectivity between these sites and the project has been accounted for.

20. Habitat information from UK Habitat Surveys, aerial photographs, and maps were reviewed and compared with broad habitat types from Pantheon (Webb, J. *et al*., 2018) (a database tool developed by Natural England and the Centre for Ecology & Hydrology to analyse invertebrate sample data) to evaluate associated habitats and resources, assemblage types (adapted from the Invertebrate Species-habitat Information System [ISIS]), and habitat fidelity scores. The broad habitat types and habitat information were also assessed to identify the potential Species Assemblage Types (SATs) likely to be associated which are an indicator of Invertebrate Assemblages of Importance.

21. SATs are assemblages of invertebrates characterised by ecologically restricted species and have generally been derived from sites with conservation value for invertebrates and these have been characterised into twenty-six types. Typically, SATs have a varied number of invertebrate species associated with them. However, each SAT has a specific default target number of species to achieve favourable condition (and therefore potentially meet the criteria for designation as a site of conservation value for invertebrates) since relatively few if any sites will contain all species associated with the SAT.

21.7 Limitations

22. This report does not identify features and habitats with the potential to support aquatic Invertebrate Assemblages of Importance or assess the likelihood of significant rare or endangered aquatic invertebrate species to be present.

23. Record searches which result in a lack of species records within an area may not reflect an actual absence of that species but could simply be a function of limited recording/survey effort in that area.

24. No specific surveys for invertebrate species were undertaken. As no habitat was found that was impacted significantly this is not considered a significant limitation.

21.8 Results

21.8.1 Desk Study Results

21.8.1.1 Designated Sites

25. The desk study identified eight statutory designated sites with invertebrate interest, the closest being Sea Bank Clay Pit SSSI directly adjacent to the Project. The statutory designated sites identified are listed in Table 21.2.

Table 21.2: Statutory Designated Sites within the Survey Area

Site Name	Distance from the Order Limits (km)	Nearest Segment	Compass Direction	Area of Designation (ha)	Description
Sea Bank Clay Pits SSSI	0	ECC 1: Landfall to A52 – Hogsthorpe	ENE	17	Supports a rich aquatic invertebrate fauna, notably beetles, including several nationally scarce species and others new to the County.
Gibraltar Point SSSI/Ramsar	4.2	ECC 5: Low Road to Steeping River	E	581	Ramsar: Gibraltar Point has an appreciable assemblage and number of rare wetland invertebrate species, representing an important habitat of a number of Red Data Book invertebrates four of which are listed as endangered including, the moth *Gymnacyla canella* and fungus gnat *Rhymosia connexa* and eight species listed as rare including marsh moth *Athetis pallustris* and scarce pug *Eupithecia extensaria*. Gibraltar point supports a notable number of dragonfly species with up to 13 being recorded notably hairy dragonfly *Brachytron pratense.* SSSI: Gibraltar Point supports important communities of invertebrates, notably Lepidoptera, Diptera and Coleoptera, including 12 species which are nationally rare.
Bratoft Meadows SSSI	3.1	ECC 4: A158 Skegness Road to Low Road	WNW	2.2	The site as a whole attracts large numbers of butterflies and 18 species of terrestrial mollusc are recorded.

Site Name	Distance from the Order Limits (km)	Nearest Segment	Compass Direction	Area of Designation (ha)	Description
Candlesby Hill SSSI	6.5	ECC 3: Marsh Lane to A158 - Skegness Road	WNW	1.81	Butterflies are present in large numbers and 17 species of mollusc have been recorded.
Hoplands Wood SSSI	6.6	ECC 2: A52 - Hogsthorpe to Marsh Lane	W	14.4	Of two hundred species of moths recorded the buttoned snout *Hypena rostralis* is notable.
Saltfleetby-Theddlethorpe Dunes SSSI	12.1	ECC 1: Landfall to A52 – Hogsthorpe	NNW	972	Ten species of dragonfly breed in the open water provided by ponds and dykes. Invertebrates recorded include several notable moths and nationally rare species from the moth and beetle families.
Calceby Marsh SSSI	13.4	ECC 1: Landfall to A52 – Hogsthorpe	W	10.8	Over past years, Calceby Marsh has been very well surveyed for moths, and at least four notable species have been recorded here. The site is one of the few stations in the county, outside the Cambridgeshire Fens, where the marsh moth occurs.
Swaby Valley SSSI	14.1	ECC 1: Landfall to A52 – Hogsthorpe	WNW	3.5	Scattered hawthorn scrub provides structural diversity and sheltered conditions favourable to some fifteen species of butterfly

26. A further 15 non-statutory designated sites were identified, in addition to six Lincolnshire Wildlife Trust (LWT) Reserves. The closest were seven sites either within the Order Limits or directly adjacent to it. The non-statutory designated sites and LWT Reserves identified are listed in Table 21.3.

Table 21.3: Non-Statutory Designated Sites and LWT Reserves withing the Survey Area

Site Name	Distance from the Order Limits (km)	Nearest Segment of the ECC	Compass Direction	Area/Length of Site (ha/km)	Description
Chapel Six Marshes	0	ECC 1: Landfall to A52 – Hogsthorpe	E	12.9ha	Main Habitats: Coarse or rank grassland, lake, reedbed, scrub - scattered/dense (also ditch, marsh/fen, non-native plantation - on ancient/new, pond and scrub - scattered/dense) A 750 m stretch of coast and is partly a LWT Reserve. Not specifically noted for invertebrate interest but sufficiently diverse with brackish water and dunes that presence of notable invertebrates is likely. Fauna recorded includes green-veined white (*Pieris napi*), small tortoiseshell (*Aglais urticae*), and common darter (*Sympetrum striolatum*).
Hogsthorpe Pit	0	ECC 1: Landfall to A52 – Hogsthorpe	SW	1.4ha	Main Habitat: Standing water, willow carr and grassland. Not specifically noted for invertebrate interest but sufficiently diverse with wetland habitats that presence of notable invertebrates is possible. Common dragonflies have been recorded.
Marsh Yard to Anderby Creek Dunes	0	ECC 1: Landfall to A52 – Hogsthorpe	N	16.8ha	Main Habitat: coarse or rank grassland, scrub – scattered/dense (also semi-improved, neutral grassland, non-native plantation and reedbed) Not specifically noted for invertebrate interest but dunes and other habitats suggest presence of notable invertebrates is possible. Invertebrates noted included common blue (*Polyommatus icarus*), brown argus (*Aricia agestis*), meadow brown (*Maniola jurtina*), gatekeeper (*Pyronia Tithonus*), peacock (*Aglais io*), and common darter.

Site Name	Distance from the Order Limits (km)	Nearest Segment of the ECC	Compass Direction	Area/Length of Site (ha/km)	Description
Wolla Bank South	0	ECC 1: Landfall to A52 – Hogsthorpe	ENE	5ha	Main Habitat: Coarse or rank grassland, semi-improved, neutral grassland and reedbed (also drain and pond). Not specifically noted for invertebrate interest but habitats suggest presence of notable invertebrates is possible. Invertebrates noted include common blue, ringlet (*Aphantopus hyperantus*), small skipper (*Thymelicus sylvestris*), shaded broad-bar (*Scotopteryx chenopodiata*), common blue (*Enallagma cyathigerum*) & blue-tailed (*Ischnura elegans*) damselfly, common darter, and four-spotted chaser (*Libellula quadrimaculata*).
Havenside	0	ECC 10: Church End Lane to The Haven	W	33.1ha	Main Habitat: Coarse or rank grassland (also new-native plantation, scrub, semi-improved neutral grassland, improved grassland, ditch, pond, coastal grazing marsh, marsh and reedbed). The mosaic of woodland, grassland and wetland is very valuable in the local context and of significant value to local invertebrate populations. The linear nature of the site provides a good wildlife corridor through Boston.
Risegate Eau	0	ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove	W	9km	Main Habitat: Coarse or rank grassland, drain, linear reedbed, scrub. A good diversity of insects include: Essex skipper (*Thymelicus lineola*), common blue, gatekeeper, shaded broad bar, blood vein (*Timandra comae*), silver Y (*Autographa gamma*), Roesel's bush-cricket (*Metrioptera roeselii*), common carder bee (*Bombus pascuorum*), brown hawker (*Aeshna grandis*) and common darter. Leslie Hebdon's records show that there is an excellent selection of bees, wasps, and

Site Name	Distance from the Order Limits (km)	Nearest Segment of the ECC	Compass Direction	Area/Length of Site (ha/km)	Description
					other insects west of Allen's Bridge. One of these, the large garden bumblebee, or ruderal bumblebee (*Bombus ruderatus*), is a nationally notable UK BAP species, while the nationally rare tawny longhorn beetle (*Paracorymbia fulva*) is listed as RDB3. The abundance of dandelion (*Taraxacum officinale*) and white dead-nettle (*Lamium album*) is important in providing food for bees immediately after they emerge from hibernation.
Moulton Marsh	0	ECC 14: Surfleet Marsh OnSS/Marsh Drove to Weston Marsh NG Substation	NE	28.3ha	Main Habitat: native plantation, reedbed, saltmarsh and saline lagoon (also coarse grassland, drain) Frequently flooded, saltmarsh. Two, large saline ponds with little aquatic or marginal vegetation but some important invertebrate species typical of saline lagoons of SSSI quality.
South Bank Fosdyke	0.05	ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove	NNE	1.9km	Main Habitat: Coarse or rank grassland, saltmarsh (also scattered scrub, unimproved neutral grassland, mudflat). Not specifically noted for invertebrate interest but sufficiently diverse with saltmarsh habitats that presence of notable invertebrates is possible. Abundant snail, grasshopper and butterfly species observed.
Frampton Hall	0.3	ECC 11: The Haven to Marsh Road	WNW	21.3ha	Main Habitat: Parkland (including a mosaic of semi-natural woodland, scrub, semi-improved neutral grassland, semi-improved calcareous grassland, improved grassland, coarse or rank grassland, ditch, pond) Veteran trees are abundant and include horse chestnut (*Aesculus hippocastanum*), pedunculate oak (*Quercus robur*) and walnut (*Juglans regia*). Some mature exotic species as well. Not

Site Name	Distance from the Order Limits (km)	Nearest Segment of the ECC	Compass Direction	Area/Length of Site (ha/km)	Description
					specifically noted for invertebrate interest but veteran trees in a parkland habitat suggest that presence of notable deadwood invertebrates is likely.
Chapel Point Dunes, North	0.3	ECC 1: Landfall to A52 – Hogsthorpe	ESE	3.4ha	Main Habitats: Coarse or rank grassland, sand dune, scrub – scattered/dense. Not specifically noted for invertebrate interest but dunes and other habitats suggest presence of notable invertebrates is possible. Invertebrates recorded include common blue, ruddy darter (*Sympetrum sanguineum*) and common darter.
Surfleet Bank	0.5	ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove	SW	0.8km	Main Habitat: Neutral grassland (also scrub, coarse or rank grassland, semi-improved calcareous grassland) A 540m long strip of sandy embankment and adjacent flat pasture on the north-western side of the tidal River Welland. Good quality neutral grassland, especially on the northwest facing slope, supporting a selection of butterflies and day flying moths, as well as many soil mounds created by black ants (*Lasius niger*).
Surfleet Seas End Saltmarsh	0.7	ECC 14: Surfleet Marsh OnSS/Marsh Drove to Weston Marsh NG Substation	WSW	1.7km	Main Habitat: River, marsh, calcareous grassland (also saltmarsh, mudflat, anthills, steep slopes, seasonally wet/damp areas. Not specifically noted for invertebrate interest but sufficiently diverse with saltmarsh habitats that presence of notable invertebrates is possible.
Vernatt's Drain	0.7	ECC 14: Surfleet Marsh OnSS/Marsh Drove to Weston Marsh NG Substation	SW	10.7km	Main Habitat: Drain, calcareous grassland, neutral grassland, reedbed, coarse grassland (also scattered non-planted trees, tussocky vegetation, steep slopes. South-facing

Site Name	Distance from the Order Limits (km)	Nearest Segment of the ECC	Compass Direction	Area/Length of Site (ha/km)	Description
					slopes, earthworks/hummocky ground). Amongst the invertebrates present are small skipper, small heath (*Coenonympha pamphilus*), ringlet, meadow brown, gatekeeper, smoky wainscot moth (*Mythimna impure*), common blue damselfly and Roesel's bush-cricket.
Chapel Point Dunes, South	1.0	ECC 1: Landfall to A52 – Hogsthorpe	SE	7.7ha	Main Habitat: Sand dune Not specifically noted for invertebrate interest but sand dune habitats suggest that presence of notable invertebrates is possible. Amongst the invertebrates recorded are cinnabar (*Tyria jacobaeae*), brown-tail moth (*Euproctis chrysorrhoea*), orange tip (*Anthocharis cardamines*), and most notably several green hairstreak (*Callophrys rubi*).
Huttoft Carr Terrace to Marsh Yard Dunes	1.4	ECC 1: Landfall to A52 – Hogsthorpe	N	10.4ha	Main Habitat: Coarse or rank grassland, sand dune, scrub – scattered/dense (also native plantation) Not specifically noted for invertebrate interest but sand dune habitats suggest that presence of notable invertebrates is possible. Invertebrates noted include Essex skipper, painted lady (*Vanessa cardui*), red admiral (*Vanessa Atalanta*), and cinnabar.
Anderby Marsh LWT Reserve	0	ECC 1: Landfall to A52 – Hogsthorpe	NNE	24ha	Main Habitat: Traditional coastal grazing marsh Not specifically noted for invertebrate interest but dunes, grazing marsh and other habitats suggest presence of notable invertebrates is possible.
Chapel Six Marshes	0	ECC 1: Landfall to	E	2.2ha	Main Habitat: coarse or rank grassland, lake, reedbed, scrub – scattered/dense

Site Name	Distance from the Order Limits (km)	Nearest Segment of the ECC	Compass Direction	Area/Length of Site (ha/km)	Description
LWT Reserve		A52 – Hogsthorpe			Not specifically noted for invertebrate interest but dunes and other habitats suggest presence of notable invertebrates is possible.
Wolla Bank Pit LWT Reserve	0	ECC 1: Landfall to A52 – Hogsthorpe	ENE	4ha	Main Habitat: Flooded clay pits, reed bed, chalk grassland. Potential for invertebrate assemblages related to open water on disturbed mineral sediments Invertebrates include many species of lepidoptera and odonata.
Moulton Marsh LWT Reserve	0	ECC 14: Surfleet Marsh OnSS/Marsh Drove to Weston Marsh NG Substation	NE	36ha	Main Habitat: Broad-leaved woodland, scrub, saline lagoons, shallow tidal scrapes, grassland, saltmarsh. Saltmarsh and saline lagoons suggest potential for invertebrate assemblages to be present.
Chapel Pit LWT Reserve	0.3	ECC 1: Landfall to A52 – Hogsthorpe	ESE	3ha	Main Habitat: Open water and reedbeds Potential for invertebrate assemblages related to open water on disturbed mineral sediments
Frampton Marsh LWT Reserve	0.7	ECC 11: The Haven to Marsh Road	E	172ha	Main Habitat: Saltmarsh The reserve is part of the most mature saltmarsh in The Wash and is exceptionally rich in invertebrates.

21.8.2 Priority Habitats

27. Priority habitats identified within the study area included coastal sand dunes, mudflats, reedbeds, coastal and floodplain grazing marsh, deciduous woodland, hedgerows and Rivers, Canals, and Drains.

28. Coastal sand dunes were assessed as having high potential for terrestrial invertebrates due to the Potential SATs of sandy beaches to be present, assemblages which contain highly specialised species that are adapted to an extreme environment.

29. Mudflats were assessed as having low potential for terrestrial invertebrates as these are more associated with marine invertebrates.

30. Reedbeds were assessed as having high potential for terrestrial invertebrates due to the Potential SATs of reed-fen and pools to be present. This assemblage type is characterised by a number of groups, but especially two-winged flies and beetles. The larvae of *Donacia, Notiphila,* and *Erioptera squalida* are closely associated with emergent wetland plants. Many of the *sciomyzid* parasitoids and predators of wetland snails require shallow water or fluctuating water levels that bring potential prey within reach of ovipositing females. Shallow water, either submerging bottom sediments or over dense submerged plants is also essential for most of the fly larvae which respire through 'rat-tails' (*Ptychoptera*) or floating posterior spiracles (*Odontomyia, Oplodontha*).

31. Coastal and floodplain grazing marsh were assessed as having high potential for terrestrial invertebrates due to the Potential SATs of saltmarsh & transitional brackish marsh to be present. This assemblage type is characterised by species in several different taxonomic groups, but mainly beetles and two-winged flies. Species such as *Bembidion ephippium* and *Pogonus littoralis* occupy patches of low vegetation dominated by *Salicornia, Limonium,* and *Aster* etc which contain temporary saline pools. Species such as *Brachygluta helferi* and *Melieria picta* occupy higher areas of coarse grass and accumulations of tidal litter at the high-water mark. Areas of coastal and floodplain grazing marsh which were heavily grazed, drying out or otherwise not functioning as the habitat were assessed as having low potential.

32. Deciduous woodland was assessed as having low potential for terrestrial invertebrates as these areas lacked sufficient deadwood, epiphyte fauna or fungal fruiting bodies to qualify them as SATs.

33. Hedgerows were assessed as having low potential for terrestrial invertebrates as these areas lacked areas where scrub or woodland grades into, or is interspersed with open areas of grassland, heathland or early successional vegetation types to qualify them as SATs. The juxtaposition of open vegetation with woody development is important to insects with complex life cycles that require different microhabitats at different stages of development.

34. Rivers, Canals, and Drains were assessed as having low potential for terrestrial invertebrates as these areas lacked areas of shingle or sand and marginal vegetation to

qualify them as SATs for terrestrial invertebrates, although these may be important for aquatic invertebrates.

35. Areas of Priority Habitats within each segment, along with their importance for terrestrial invertebrates, are detailed in Table 21.4.

Table 21.4: Priority Habitats within the Study Area

Priority Habitat	Total within Order Limits	Total for Habitat survey area (100m buffer)	Potential for Terrestrial Invertebrate Interest
ECC 1: Landfall to A52 – Hogsthorpe			
Coastal sand dunes (ha)	6.70	N/A	High
Mudflats (ha)	2.50	N/A	Low
Reedbeds (ha)	3.05	N/A	High
Hedgerows (km)	2.55	4.81	Low
Rivers, Canals, and Drains (km)	14.36	22.97	Low
ECC 2: A52 - Hogsthorpe to Marsh Lane			
Coastal and floodplain grazing marsh (ha)	6.77	N/A	Low
Hedgerows (km)	2.53	4.74	Low
Rivers, Canals, and Drains (km)	13.60	21.66	Low
ECC 3: Marsh Lane to A158 - Skegness Road			
Coastal and floodplain grazing marsh (ha)	3.07	N/A	Low
Hedgerows (km)	0.80	1.87	Low
Rivers, Canals, and Drains (km)	5.52	10.49	Low
ECC 4: A158 – Skegness Road to Low Road			
Coastal and floodplain grazing marsh (ha)	3.02	N/A	Low
Hedgerows (km)	0.14	0.74	Low
Rivers, Canals, and Drains (km)	7.60	13.07	Low
ECC 5: Low Road to Steeping River			
Coastal and floodplain grazing marsh (ha)	14.37	N/A	Low
Deciduous woodland (ha)	0.43	N/A	Low
Hedgerows (km)	0	3.66	Low
Rivers, Canals, and Drains (km)	0	50.04	Low
ECC 6: Steeping River to Fodder Dike Bank/Fen Bank			
Coastal and floodplain grazing marsh (ha)	1.54	N/A	Low

Priority Habitat	Total within Order Limits	Total for Habitat survey area (100m buffer)	Potential for Terrestrial Invertebrate Interest
Hedgerows (km)	0	1.21	Low
Rivers, Canals, and Drains (km)	0	30.22	Low
ECC 7: Fodder Dike Bank/Fen Bank to Broadgate			
Hedgerows (km)	0	1.95	Low
Rivers, Canals, and Drains (km)	0	38.30	Low
ECC 8: Broadgate to Ings Drove			
Coastal and floodplain grazing marsh (ha)	0.16	N/A	Low
Hedgerows (km)	0	3.07	Low
Rivers, Canals, and Drains (km)	0	51.07	Low
ECC 9: Ings Drove to Church End Lane			
Hedgerows (km)	0	3.90	Low
Rivers, Canals, and Drains (km)	0	31.57	Low
ECC 10: Church End Lane to The Haven			
Lowland mixed deciduous woodland (ha)	2.36	N/A	Low
Mudflats (ha)	0.77	N/A	Low
Hedgerows (km)	0.74	1.53	Low
Rivers, Canals, and Drains (km)	6.79	11.84	Low
ECC 11: The Haven to Marsh Road			
Coastal and floodplain grazing marsh (ha)	1.60	N/A	High
Lowland mixed deciduous woodland (ha)	0.01	N/A	Low
Mudflats (ha)	0.90	N/A	Low
Hedgerows (km)	0.63	1.52	Low
Rivers, Canals, and Drains (km)	7.79	15.57	Low
ECC 12: Marsh Road to Fosdyke Bridge			
Coastal and floodplain grazing marsh (ha)	0.79	N/A	High
Coastal saltmarsh (ha)	2.07	N/A	High
Mudflats (ha)	1.06	N/A	Low
Hedgerows (km)	0.55	1.38	Low
Rivers, Canals, and Drains (km)	10.15	15.61	Low
ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove			
Hedgerows (km)	0.53	0.90	Low
Rivers, Canals, and Drains (km)	9.41	14.72	Low

Priority Habitat	Total within Order Limits	Total for Habitat survey area (100m buffer)	Potential for Terrestrial Invertebrate Interest
ECC 14: Surfleet Marsh OnSS/Marsh Drove to Weston Marsh NG Substation			
Coastal saltmarsh (ha)	3.46	N/A	Low
Lowland mixed deciduous woodland (ha)	0.53	N/A	Low
Lowland calcareous grassland (ha)	4.14	N/A	Low
Mudflats (ha)	2.02	N/A	Low
Hedgerows (km)	1.56	3.92	Low
Rivers, Canals, and Drains (km)	12.35	21.38	Low

21.8.3 Lincolnshire Biodiversity Action Plan

36. The LBAP lists 19 invertebrate species as being of importance in the county. These are listed along with habitat associations in Table 21.5.

Table 21.5: LBAP invertebrate species with habitat and assemblage associations

Common Name	Species	Order	Broad biotope	Habitat	Specific assemblage type	Specific Assemblage Name
Mire pill-beetle	*Curimopsis nigrita*	Coleoptera	Wetland	acid & sedge peats	W312	Sphagnum bog
Brush-thighed seed-eater	*Harpalus froelichii*	Coleoptera	Open habitats	short sward & bare ground	F111	Bare sand & chalk
Set-aside downy-back	*Ophonus laticollis*	Coleoptera	Open habitats	short sward & bare ground	F111	Bare sand & chalk
Oolite downy-back	*Ophonus stictus*	Coleoptera	Open habitats	short sward & bare ground	F111	Bare sand & chalk
Yellow pogonus	*Pogonus luridipennis*	Coleoptera	Coastal	saltmarsh	M311	Saltmarsh & transitional brackish marsh
Hazel pot beetle	*Cryptocephalus coryli*	Coleoptera	Open habitats; tree-associated	arboreal; tall sward & scrub	F001	Scrub edge

Common Name	Species	Order	Broad biotope	Habitat	Specific assemblage type	Specific Assemblage Name
Six-spotted beetle	*Cryptocephalus sexpunctatus*	Coleoptera	Open habitats; tree-associated	arboreal; tall sward & scrub	F001	Scrub edge
Stag beetle	*Lucanus cervus*	Coleoptera	Tree-associated	decaying wood	A211	Heartwood decay
Moss carder-bee	*Bombus muscorum*	Hymenoptera	Open habitats	tall sward & scrub	F002	Rich flower resource
Large garden bumblebee	*Bombus ruderatus*	Hymenoptera	Open habitats	tall sward & scrub	F002	Rich flower resource
A mining bee	*Colletes halophilus*	Hymenoptera	Coastal; open habitats	brackish pools & ditches; saltmarsh	F002	Rich flower resource
Shining guest ant	*Formicoxenus nitidulus*	Hymenoptera	Open habitats	tall sward & scrub	F001, F003	Scrub edge, Scrub-heath & moorland
Chalk carpet	*Scotopteryx bipunctaria*	Lepidoptera	Open habitats	short sward & bare ground	F112	Open short sward
Chequered skipper	*Carterocephalus palaemon*	Lepidoptera	Open habitats	tall sward & scrub	F001	Scrub edge
Small heath	*Coenonympha pamphilus*	Lepidoptera	Open habitats	short sward & bare ground	F112	Open short sward
Grayling	*Hipparchia semele*	Lepidoptera	Open habitats	short sward & bare ground	F111	Bare sand & chalk
Wall	*Lasiommata megera*	Lepidoptera	Open habitats	short sward & bare ground	F112	Open short sward
Duke of Burgundy	*Hamearis lucina*	Lepidoptera	Open habitats	tall sward & scrub	F001	Scrub edge
Norfolk hawker	*Anaciaeschna isoceles*	Odonata	Wetland	acid & sedge peats	W314	Reed-fen & pools

21.8.4 Greater Lincolnshire Nature Partnership Records

37. No records of invertebrates were returned in the data set provided by GLNP within the Order Limits or the surrounding 2km study area.

21.9 Habitat Survey

38. The study completed in September 2023 identified Pantheon habitats and assemblages of potential importance to terrestrial invertebrates or habitats likely to be used by LBAP invertebrate species. Locations of habitats are shown in Figure 21.10.1 and detailed with Pantheon Habitat and potential SATs present in Table 21.6.

39. The following details the Pantheon Habitats present in each segment of the route. Each Pantheon Habitat is described at first occurrence only.

21.9.1 ECC 1: Landfall to A52 – Hogsthorpe.

40. C21 Saltmarsh. A habitat dominated by plants and covered by saltwater at high tide. They are restricted to less exposed shorelines, characterised by net deposition of fine sediment. However, they are still defined by levels of salinity and tidal disturbance. Potential for saltmarsh & transitional brackish marsh SAT to be present in this habitat.

41. C23 Sandy Beach. A habitat which includes the drift line and immediate upper intertidal and supralittoral zones of seashore dominated by sand and, to a lesser extent, shingle. The habitat is saline and subject to tidal disturbance, augmented by storm surges at irregular intervals. Potential for sandy beaches SAT to be present in this habitat.

42. C24 Brackish Pools & Ditches. A habitat influenced by both saline and fresh water. This often means that the water is saline but less saline than the sea. Such habitats occur in pools and ditches in the upper saltmarsh or alongside freshwater seepages. Potential for saltmarsh and transitional brackish marsh, and open water on disturbed mineral sediments SAT's to be present in this habitat.

43. F21 Tall Sward and Scrub. Tall sward and scrub species are associated with areas of dense herbage or partial shade where a humid microclimate is maintained at ground level. Dominance by woody plants is limited by exposure, grazing or cutting of vegetation, but they often form an important component of the habitat. Potential for rich flower resource SAT to be present in this habitat.

44. F22 Short Sward and Bare Ground. In lowland areas, short sward and bare ground habitat is where disturbance removes vegetation to create areas of bare or sparsely vegetated ground. Potential for open short sward, rich flower resource, and open water on disturbed mineral sediments SAT's to be present in this habitat.

45. W24 Marshland. Marshland habitat is associated with still open water bodies and littoral areas on mineral substrates that may be subject to repeated disturbance, for example by flooding or grazing. Floodplain sites may be inundated for varying periods, either by surface run-off or by rising groundwater. Potential for reed-fen and pools, undisturbed fluctuating marsh, and open water on disturbed mineral sediments SAT's to be present in this habitat.

21.9.2 ECC 2: A52 - Hogsthorpe to Marsh Lane.

46. F21 Tall Sward and Scrub. Potential for rich flower resource SAT to be present in this habitat.

47. F22 Short Sward and Bare Ground. Potential for open short sward, rich flower resource, and open water on disturbed mineral sediments SAT's to be present in this habitat.

48. Open Mosaic Habitat on Previously Developed Land. Potential SATs present in Open Mosaic Habitat include open short sward, rich flower resource, scrub edge, bare sand and chalk, and open water on disturbed mineral sediments.

21.9.3 ECC 3: Marsh Lane to A158 - Skegness Road

49. No habitats identified.

21.9.4 ECC 4: A158 Skegness Road to Low Road

50. F21 Tall Sward and Scrub. Potential for rich flower resource SAT to be present in this habitat.

51. F22 Short Sward and Bare Ground. Potential for open short sward, rich flower resource, and open water on disturbed mineral sediments SAT's to be present in this habitat.

52. Open Mosaic Habitat on Previously Developed Land. Potential SATs present in Open Mosaic Habitat include open short sward, rich flower resource, scrub edge, bare sand and chalk, and open water on disturbed mineral sediments.

21.9.5 ECC 5: Low Road to Steeping River

53. F21 Tall Sward and Scrub. Potential for rich flower resource SAT to be present in this habitat.

54. F22 Short Sward and Bare Ground. Potential for open short sward, rich flower resource, and open water on disturbed mineral sediments SAT's to be present in this habitat.

55. W24 Marshland. Potential for reed-fen and pools, undisturbed fluctuating marsh, and open water on disturbed mineral sediments SAT's to be present in this habitat.

56. Open Mosaic Habitat on Previously Developed Land. Potential SATs present in Open Mosaic Habitat include open short sward, rich flower resource, scrub edge, bare sand and chalk, and open water on disturbed mineral sediments.

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

57. F21 Tall Sward and Scrub. Potential Sfor rich flower resource SAT to be present in this habitat.

21.9.7 ECC 7: Fodder Dike Bank/Fen Bank to Broadgate

58. F21 Tall Sward and Scrub. Potential for rich flower resource SAT to be present in this habitat.

21.9.8 ECC 8: Broadgate to Ings Drove

59. No habitats identified.

21.9.9 ECC 9: Ings Drove to Church End Lane

60. No habitats identified.

21.9.10 ECC 10: Church End Lane to The Haven

61. C24 Brackish Pools & Ditches. Potential for saltmarsh & transitional brackish marsh, and open water on disturbed mineral sediments SAT's to be present in this habitat.

21.9.11 ECC 11: The Haven to Marsh Road

62. F22 Short Sward and Bare Ground. Potential for open short sward, rich flower resource, and open water on disturbed mineral sediments to be present in this habitat.

21.9.12 ECC 12: Marsh Road to Fosdyke Bridge

63. C21 Saltmarsh. Potential for saltmarsh & transitional brackish marsh SAT to be present in this habitat.

64. C24 Brackish Pools & Ditches. Potential for saltmarsh & transitional brackish marsh, and open water on disturbed mineral sediments SAT's to be present in this habitat.

65. C25 Saline Lagoon. A relatively rare aquatic habitat heavily influenced by sea water but not wave action. Subjected to evaporation or precipitation makes them vary between hyper-saline and weakly saline throughout the season. Potential for saltmarsh & transitional brackish marsh, and open water on disturbed mineral sediments SAT's to be present in this habitat.

21.9.13 ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove

66. No habitats identified.

21.9.14 ECC 14: Surfleet Marsh OnSS/Marsh Drove to Weston Marsh NG Substation

67. No habitats identified.

Table 21.6: Land parcels with habitat quality for Invertebrates, Pantheon Habitats, and potential SATs present.

Section	Land Parcel ID	Assessed Habitat Quality for Invertebrates	Pantheon Habitats Present	Potential SATs Present
ECC 1: Landfall to A52 – Hogsthorpe	5093	M	F21: Tall Sward & Scrub F23: Short Sward & Bare Ground	Rich flower resource Open short sward Open water on disturbed mineral sediments
ECC 1: Landfall to A52 – Hogsthorpe	5104	M	F23: Short Sward & Bare Ground F21: Tall Sward & Scrub	Rich flower resource Open short sward Open water on disturbed mineral sediments
ECC 1: Landfall to A52 – Hogsthorpe	5116	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	7301	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	7390	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	7804	H	C24: Brackish pools & Ditches F21: Tall Sward & Scrub F23: Short Sward & Bare Ground	Saltmarsh and transitional brackish marsh Rich flower resource Open short sward

Section	Land Parcel ID	Assessed Habitat Quality for Invertebrates	Pantheon Habitats Present	Potential SATs Present
				Open water on disturbed mineral sediments
ECC 1: Landfall to A52 – Hogsthorpe	7941	M	C21: Saltmarsh	Saltmarsh & transitional brackish marsh
ECC 1: Landfall to A52 – Hogsthorpe	8272	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	8279	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	8290	M	F21: Tall Sward & Scrub F23: Short Sward & Bare Ground	Rich flower resource Open short sward Open water on disturbed mineral sediments
ECC 1: Landfall to A52 – Hogsthorpe	8292	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	8293	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	8465	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	8487	M	F21: Tall Sward & Scrub	Rich flower resource
ECC 1: Landfall to A52 – Hogsthorpe	8496	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	8499	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	8501	M	C23: Sandy Beach	Sandy beaches
ECC 1: Landfall to A52 – Hogsthorpe	8752	H	C24: Brackish pools & Ditches W24: Marshland	Saltmarsh and transitional brackish marsh Open water on disturbed mineral sediments Reed-fen and pools, undisturbed fluctuating marsh
ECC 1: Landfall to A52 – Hogsthorpe	9516	M	C23: Sandy Beach	Sandy beaches

Section	Land Parcel ID	Assessed Habitat Quality for Invertebrates	Pantheon Habitats Present	Potential SATs Present
ECC 1: Landfall to A52 – Hogsthorpe	9534	M	F21: Tall Sward & Scrub	Rich flower resource
ECC 1: Landfall to A52 – Hogsthorpe	12278	M	F21: Tall Sward & Scrub	Rich flower resource
ECC 1: Landfall to A52 – Hogsthorpe	12280	M	W22: Lake	Open water on disturbed mineral sediments
ECC 1: Landfall to A52 – Hogsthorpe	18560	H	C24: Brackish pools & Ditches F21: Tall Sward & Scrub	Saltmarsh and transitional brackish marsh Open water on disturbed mineral sediments Rich flower resource
ECC 2: A52 - Hogsthorpe to Marsh Lane	7410	M	F23: Short Sward & Bare Ground F21: Tall Sward & Scrub W22: Lake	Rich flower resource Open short sward Open water on disturbed mineral sediments
ECC 4: A158 Skegness Road to Low Road	9748	M	F23: Short Sward & Bare Ground F21: Tall Sward & Scrub	Rich flower resource Open short sward Open water on disturbed mineral sediments
ECC 5: Low Road to Steeping River	6154	M	F23: Short Sward & Bare Ground	Rich flower resource Open short sward Open water on disturbed mineral sediments
ECC 5: Low Road to Steeping River	6290	M	F21: Tall Sward & Scrub	Rich flower resource
ECC 5: Low Road to Steeping River	19097	M	W22: Lake W24: Marshland	Reed-fen and pools, undisturbed fluctuating marsh Open water on disturbed mineral sediments
ECC 6: Steeping River to Fodder Dike Bank/Fen Bank	23854	M	F21: Tall Sward & Scrub	Rich flower resource
ECC 7: Fodder Dike Bank/Fen Bank to Broadgate	24727	H	F21: Tall Sward & Scrub	Rich flower resource
ECC 10: Church End Lane to The Haven	8720	M	F23: Short Sward & Bare Ground C24: Brackish pools & Ditches	Rich flower resource Open short sward

Section	Land Parcel ID	Assessed Habitat Quality for Invertebrates	Pantheon Habitats Present	Potential SATs Present
				Open water on disturbed mineral sediments Saltmarsh and transitional brackish marsh
ECC 11: The Haven to Marsh Road	7100	M	F23: Short Sward & Bare Ground	Rich flower resource Open short sward Open water on disturbed mineral sediments
ECC 12: Marsh Road to Fosdyke Bridge	6885	M	C25: Saline Lagoon C21: Saltmarsh	Open water on disturbed mineral sediments Saltmarsh & transitional brackish marsh
ECC 12: Marsh Road to Fosdyke Bridge	6890	M	C24: Brackish pools & Ditches C21: Saltmarsh	Saltmarsh & transitional brackish marsh Open water on disturbed mineral sediments

21.10 Conclusion

68. The majority of the study area was found to be of low value for terrestrial invertebrates, with the majority being agricultural, or heavily grazed land with other habitats being small in area, or heavily fragmented.

69. A total of eight designated and 15 non-designated sites were found to have important assemblages or notable and endangered invertebrate species present.

70. Priority habitats of coastal sand dunes, reedbeds and coastal and floodplain grazing marsh were found to be important habitats for terrestrial invertebrates although degraded areas of coastal and floodplain grazing marsh were assessed as having low potential and unlikely to be important for terrestrial invertebrates.

71. No protected species of terrestrial invertebrate are likely to be present within the habitats of the Order Limits.

72. A total of 19 species were found to be identified as locally important in the LBAP. Habitat associations of these suggest they will be present in areas identified as having medium or high terrestrial invertebrate quality, including short sward and bare ground, saltmarsh, tall sward and scrub, and brackish pools and ditches.

73. A total of 34 land parcels were identified as having importance for terrestrial invertebrates, four of these being assessed as high quality, the remainder as medium quality. These included areas also designated for nature conservation or as Priority habitat which is not degraded.

74. There are likely to be a range of other notable and endangered species present in the wider area, however it is unlikely that habitats are of sufficient quality or size to hold significant populations of these species, and loss of individuals is likely to be quickly made up from populations in more suitable habitats.

References

Chartered Institute of Ecology and Environmental Management (CIEEM) (2018) Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland https://cieem.net/wp-content/uploads/2019/02/Combined-EclA-guidelines-2018-compressed.pdf [Accessed 3rd October 2023]

Dobson, J.R. (2011). Phase I for Bugs? A Tested Methodology for Rapid Preliminary Assessment of Invertebrate Habitat Potential by Non-specialists. Presented at IEEM/Royal Entomological Society Conference: EIA and the Planning System - Will Insects Survive?

Dobson, J.R. and Fairclough, J.. (2021). Rapid Assessments of the Potential Value of Invertebrate Habitats: Applications for Planning and Nature Conservation ('Phase I for Bugs')Rapid Assessments of the Potential Value of Invertebrate Habitats: Applications for Planning and Nature Conservation ('Phase I for Bugs') In Practice 112; pp. 44-48.

Drake C.M, Lott D.A, Alexander K.N.A and Webb J. (2007). Natural England Research Report NERR005 Surveying terrestrial and freshwater invertebrates for conservation evaluation. Natural England, Peterbrough

Greater Lincolnshire Nature Partnership (2013) Local Wildlife Site Guidelines for Greater Lincolnshire, 3rd Edition. Local Wildlife Site Guidelines for Greater Lincolnshire (glnp.org.uk).

Kirby, P., (2013), Habitat Management for Invertebrates. Pelagic Publishing. Exeter

Lincolnshire Biodiversity Action Plan: Action for Wildlife in Lincolnshire, 2nd Edition. (2006) Available at CHttpHandler.ashx (southkesteven.gov.uk).

Lincolnshire Wildlife Trust Website. https://www.lincstrust.org.uk/nature-reserves/frampton-marsh (Accessed on 11th November 2022).

Lush, M.J., Kirby, P., Shepherd, P. (2013) *Open Mosaic Habitat Survey Handbook*. ExeGesIS Spatial Data Management Ltd, Powys.

MAGIC Website. Magic Map Application (defra.gov.uk) [Accessed 7th November 2022].

Outer Dowsing Ltd. (2022) Outer Dowsing Offshore Wind Farm Environmental Impact Assessment Scoping Report.

Webb, J., Heaver, D., Lott, D., Dean, H.J., van Breda, J., Curson, J., Harvey, M.C., Gurney, M., Roy, D.B., van Breda, A., Drake, M., Alexander, K.N.A. and Foster, G. (2018). Pantheon - database version 3.7.6 at: http://www.brc.ac.uk/pantheon/ [Accessed 03/10/2023].

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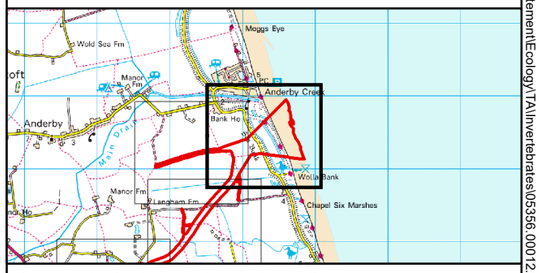
Legend

- Order Limits
- Landfall Trenchless Works Area
- Transition Joint Bay Area
- Order Limits 100 m Buffer

Pantheon Habitats

- C21 : Saltmarsh
- C23 : Sandy Beach
- F21 : Tall Sward and Scrub
- F23 : Short Sward and Bare Ground
- W24 : Marshland



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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.1

OUTER DOWSING OFFSHORE WIND

Date: 20/02/2024
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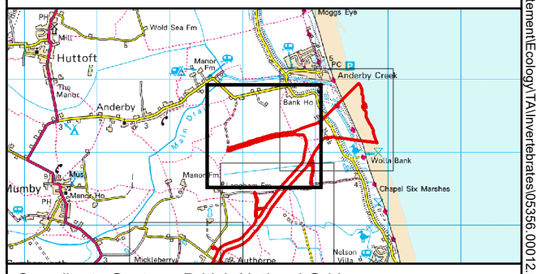
Legend

- Order Limits
- Transition Joint Bay Area
- Order Limits 100 m Buffer

Pantheon Habitats

- F21 : Tall Sward and Scrub



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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.2

OUTER DOWSING OFFSHORE WIND

Date: 20/02/2024
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Revision: 0.1

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EMBER LANE
Path (um)
Path (um)
Track
Path (um)
Track
Track
STONE'S LANE

Legend

- Order Limits
- Order Limits 100 m Buffer

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.3

OUTER DOWSING OFFSHORE WIND

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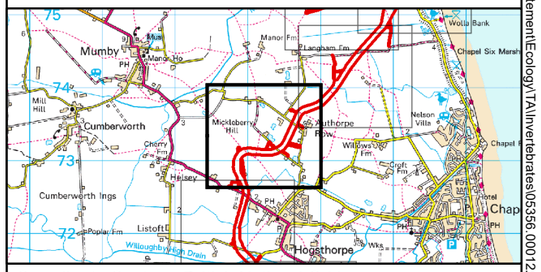
552500
553000
553500
554000
374000
373500
373000

N

Path (um)
GREEN LANE (TRACK)
Track
WILLEY'S LANE
LANGHAM ROAD
Track
LOWGATE ROAD
Track
Track
Track
Track
LANGHAM ROAD
ECC 1: Landfall to A52 - Hogsthorpe
ECC 2: A52 - Hogsthorpe to Marsh Lane

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.4

OUTER DOWSING OFFSHORE WIND

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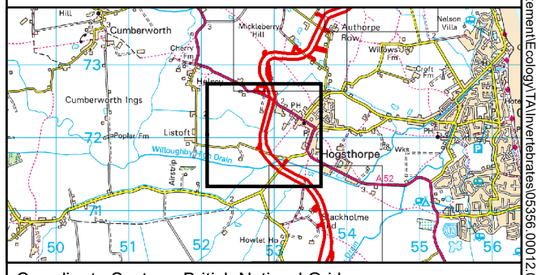
552500
553000
553500
372500
372000
371500
N
BRACKEN LANE
A52
Track
Path
WESTEND
Track
THAMES STREET
THAMES CRESCENT
CARSON CLOSE
TAVERN LANE
ECC 1: Landfall to A52 - Hogsthorpe
ECC 2: A52 - Hogsthorpe to Marsh Lane
Path (um)
HIGH STREET
Track
Path
Path (um)
GP
SOUTHEND
ST MARY'S CLOSE
LISTOFT LANE
Path (um)
LANE
SLOOTHBY HIGH LANE
Path (um)
Path (um)
Path (um)
GP
552500
553000
553500

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.5

OUTER DOWSING OFFSHORE WIND

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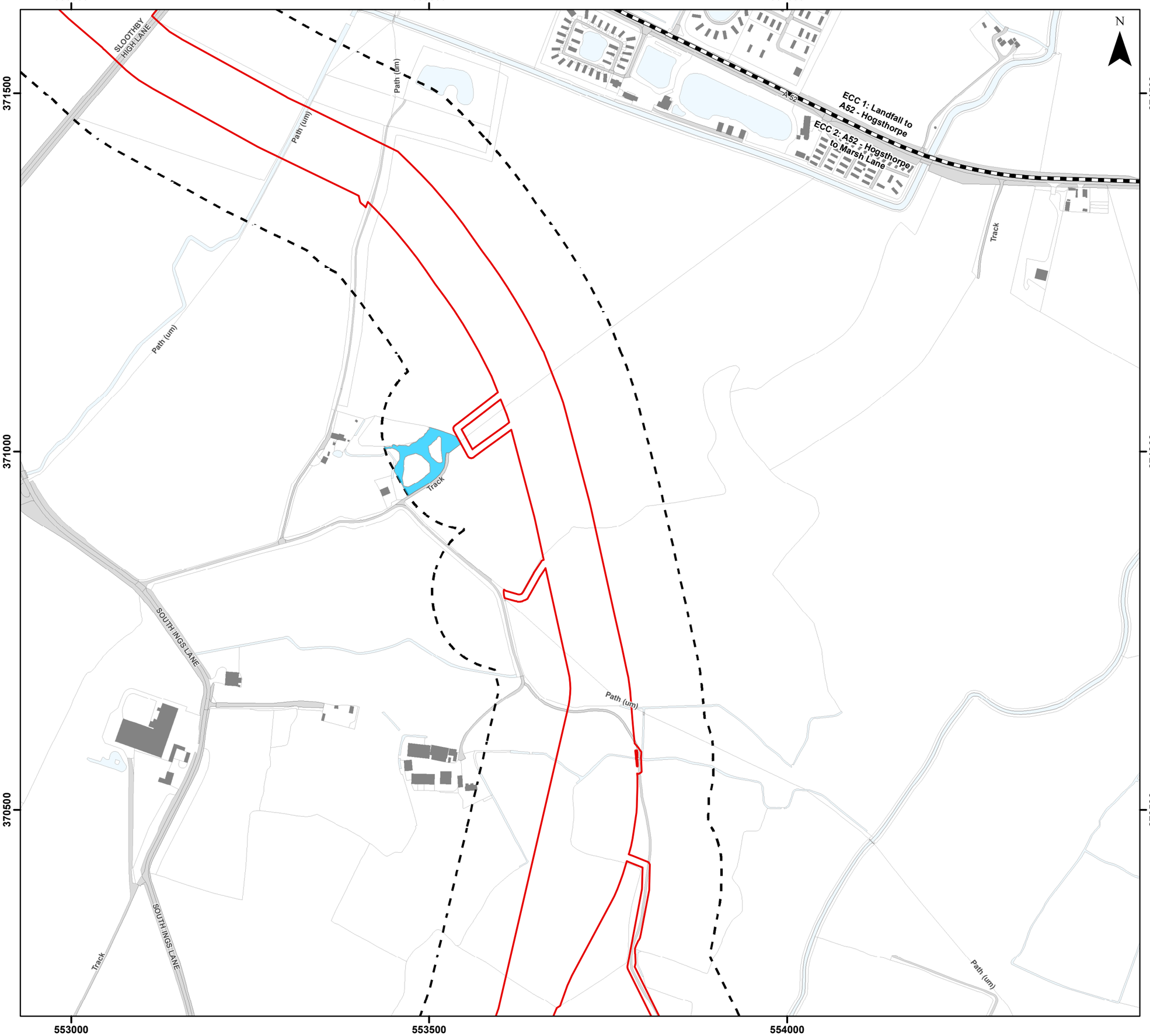
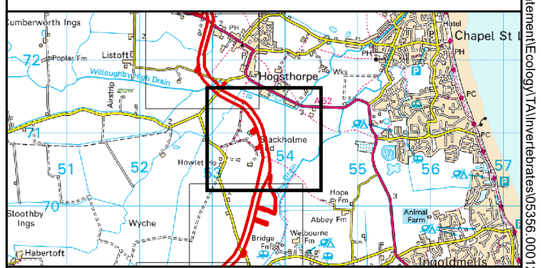


Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer

Pantheon Habitats

- W22 : Lake



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.6

OUTER DOWSING OFFSHORE WIND

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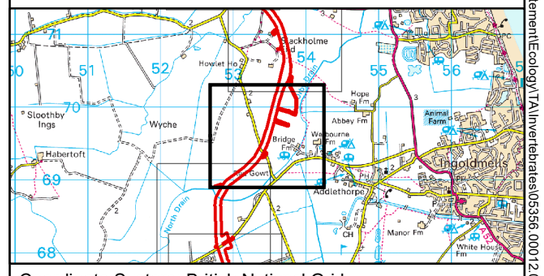
553000
553500
554000
370000
369500
369000
N
Track
Track
Track
SOUTH INGS LANE
Track
Track
ECC 2: A52 - Hogsthorpe to Marsh Lane
ECC 3: Marsh Lane to A158 - Skegness Road
ORBY ROAD
Red Gowt
GP
GP

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.7

OUTER DOWSING OFFSHORE WIND

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SLR

552000
552500
553000
553500
369000
368500
368000

N

GP

MARSH LANE

ECC 2: A52 - Hogsthorpe to Marsh Lane

ECC 3: Marsh Lane to A158 - Skegness Road

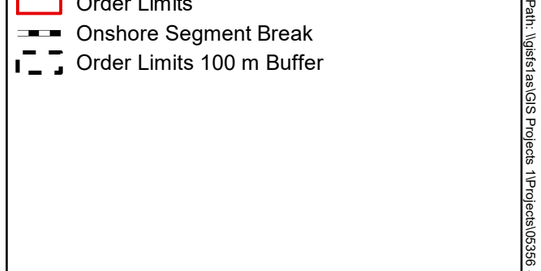
Track

Track

MARSH LANE

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.8

OUTER DOWSING OFFSHORE WIND

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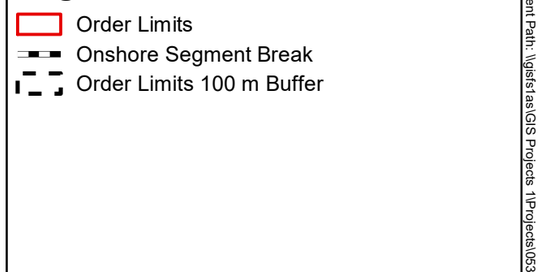
552500
553000
553500
368000
367500
367000
N
Track
Track
MARSH LANE
ECC 2: A52 - Hogsthorpe to Marsh Lane
ECC 3: Marsh Lane to A158 - Skegness Road
MARSH LANE
Track
Track
Track
ROAD

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.9

OUTER DOWSING OFFSHORE WIND

Date: 20/02/2024
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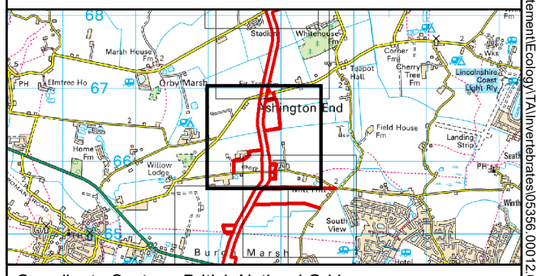
SLR

552000
552500
553000
553500
367000
366500
366000
N
ROAD
Track
GP
YOUNGER'S LANE
YOUNGER'S LANE

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.10

OUTER DOWSING OFFSHORE WIND

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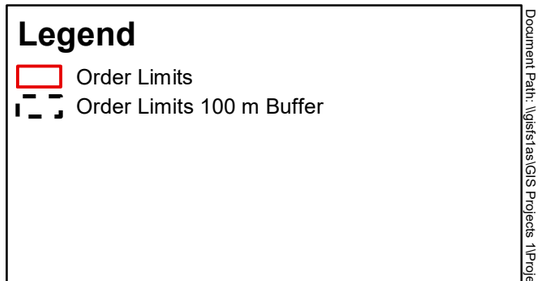
552500
553000
553500
554000
366000
365500
365000

N

YOUNGER'S LANE
YOUNGER'S LANE
HIDE'S
GP
MIDDLEMARSH
Track
ROAD

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.11

OUTER DOWSING OFFSHORE WIND

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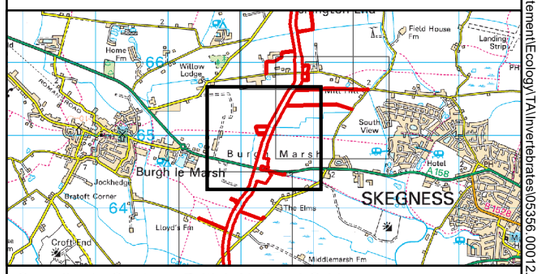
552000
552500
553000
365500
365000
364500
N
Track
Track
Track
Track
Track
Track
SKEGNESS ROAD
A158
ECC 3: Marsh Lane to A158 - Skegness Road
ECC 4: A158 Skegness Road to Low Road
Lay-by
SKEGNESS ROAD
Lay-by
A158
Track
Track

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.12

OUTER DOWSING OFFSHORE WIND

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Legend

- Order Limits
- Order Limits 100 m Buffer

Pantheon Habitats

- F21 : Tall Sward and Scrub

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.13

OUTER DOWSING OFFSHORE WIND

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SLR

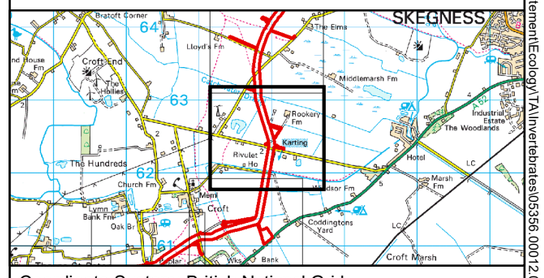
551500
552000
552500
363000
362500
362000
N
Track
Track
Track
Track
Track
MIDDLEMARSH ROAD
LOW ROAD
ECC 4: A158 Skegness Road to Low Road
ECC 5: Low Road to Steeping River
Track
Path (um)
PINCHBECK LANE
LOW ROAD
PINCHBECK LANE
Path (um)
Path (um)

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer

Pantheon Habitats

- F21 : Tall Sward and Scrub
- F23 : Short Sward and Bare Ground



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.14

OUTER DOWSING OFFSHORE WIND

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551000
551500
552000
361500
361000
N
PINCHBECK LANE
SYCAMORE CL
CHURCH LANE
Path (um)
GUTHERAM DROVE (TRACK)
Track
Lay-by
A 52
Weighbridge
CHURCH
CROFT
GP
ROAD
HAVEN

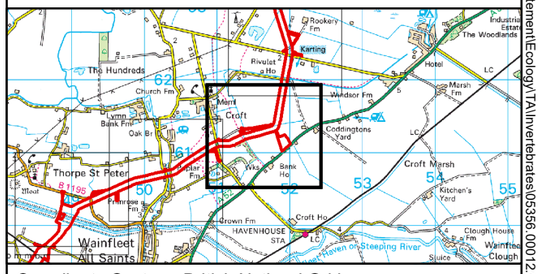
Legend

Order Limits

Order Limits 100 m Buffer

Pantheon Habitats

F21 : Tall Sward and Scrub



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.15

OUTER DOWSING OFFSHORE WIND

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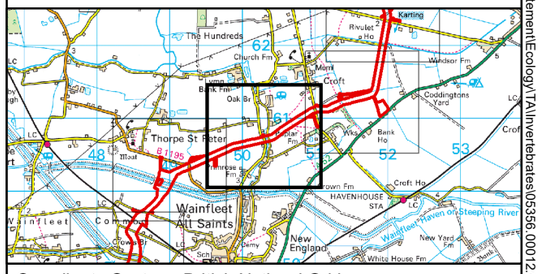
550000
550500
551000
361000
360500
N
GP
GP
CROFT LANE
Path (um)
WEDLAND
GP
Track
ROAD
CROFT
Path (um)
A52
CROFT

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.16

OUTER DOWSING OFFSHORE WIND

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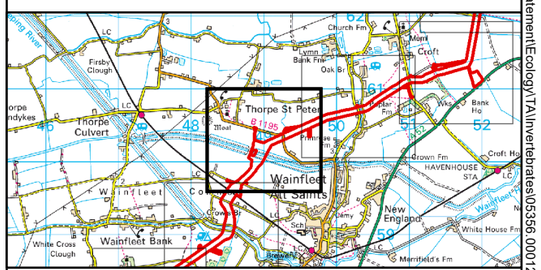
548500
549000
549500
360500
360000
N
WEDLAND LANE
SPILSBY ROAD
GP
GREEN LANE
WAINFLEET ROAD
B 1195
Track
WAINFLEET ROAD
BREWSTER LANE

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.17

OUTER DOWSING OFFSHORE WIND

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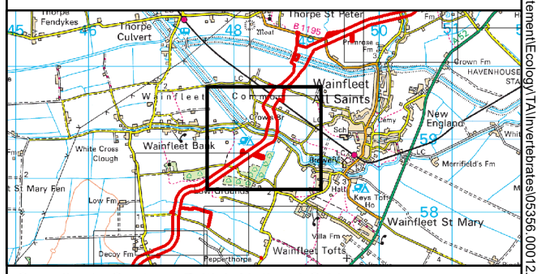
548000
548500
549000
359500
359000
358500
N
CROW'S LANE
COLLISON GATE
ECC 5: Low Road to Steeping River
ECC 6: Steeping River to Fodder Dike Bank/Fen Bank
MILL LANE
Track
Path (um)
MATT PITS LANE
WASHDIKE LANE
CHURCH LANE
GP
Path (um)

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.18

OUTER DOWSING OFFSHORE WIND

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SLR

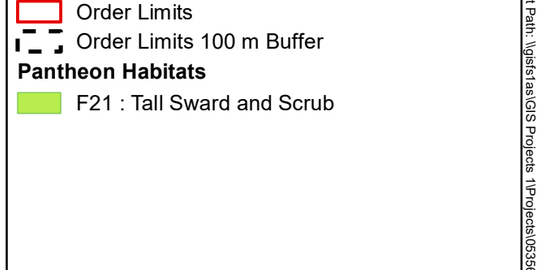
547000
547500
548000
358500
358000
357500
N
Swan Lane (Path)
CHURCH LANE
GP
HALL GATE (TRACK)
Path (um)
HALL GATE (TRACK)
Path (um)
Path (um)
Path (um)
Path (um)
Path (um)
SCALD GATE
Track

Legend

Order Limits
Order Limits 100 m Buffer

Pantheon Habitats

F21 : Tall Sward and Scrub



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.19

OUTER DOWSING OFFSHORE WIND

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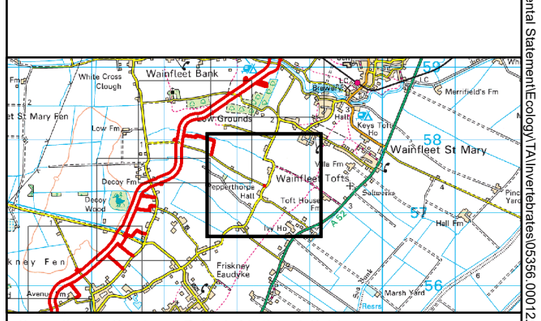
SLR

548000
548500
549000
358000
357500
357000
N
SCALD GATE
ACRES GATE (TRACK)
POLAR BANK (TRACK)
LOW ROAD
Track
Path (um)
ABRAHAM'S LANE (TRACK)
Track
IVY LANE
IVY LANE
LOW ROAD
A 52

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.20

OUTER DOWSING OFFSHORE WIND

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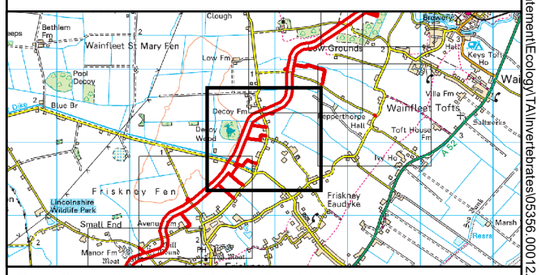
546500
547000
547500
357500
357000
356500
N
Track
BURGH ROAD
Track
FEN BANK
GP
ECC 6: Steeping River to Fodder Dike Bank/Fen Bank
ECC 7: Fodder Dike Bank/Fen Bank to Broadgate
FEN DIKE ROAD
BURGH ROAD
ARMSTRONG'S LANE
LOW ROAD

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer

Pantheon Habitats

- F21 : Tall Sward and Scrub



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.21

OUTER DOWSING OFFSHORE WIND

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Revision: 0.1

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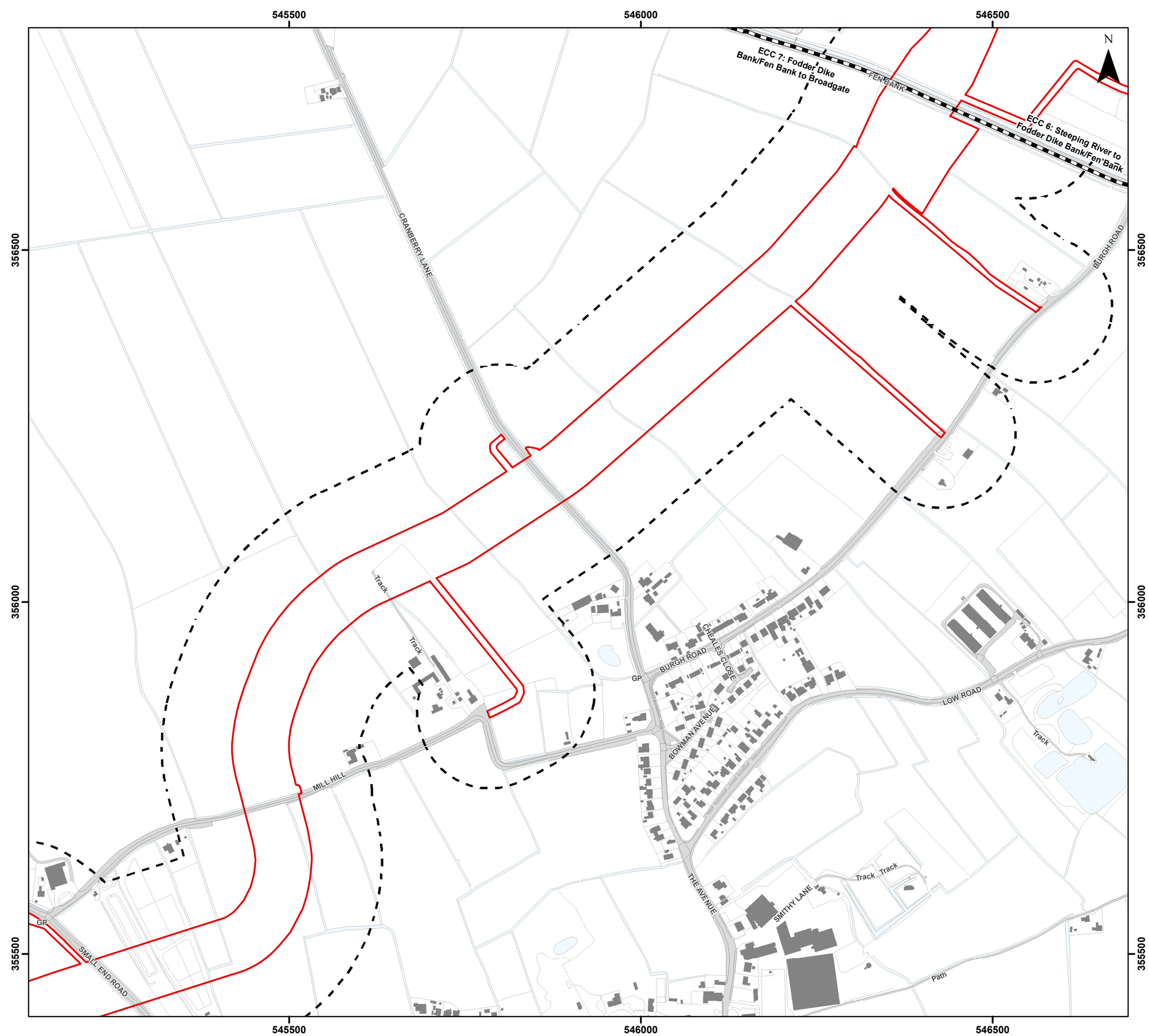
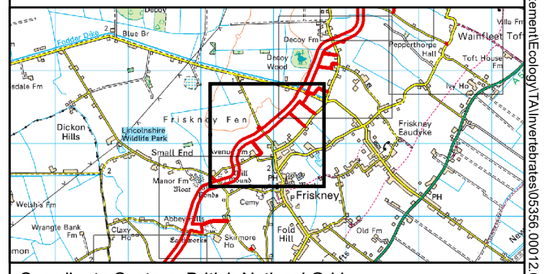


Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.22

OUTER DOWSING OFFSHORE WIND

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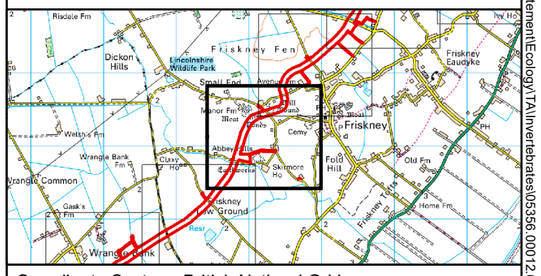
544500
545000
545500
355500
355000
354500
N
SMALL END ROAD
MILL HILL
Track
GP
SMALL END ROAD
CHURCH LANE
GP
Track
HOWGARTH LANE
Track
SKIRMORE ROAD
HOWGARTH LANE
YAWLING GATE
Path (um)

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.23

OUTER DOWSING OFFSHORE WIND

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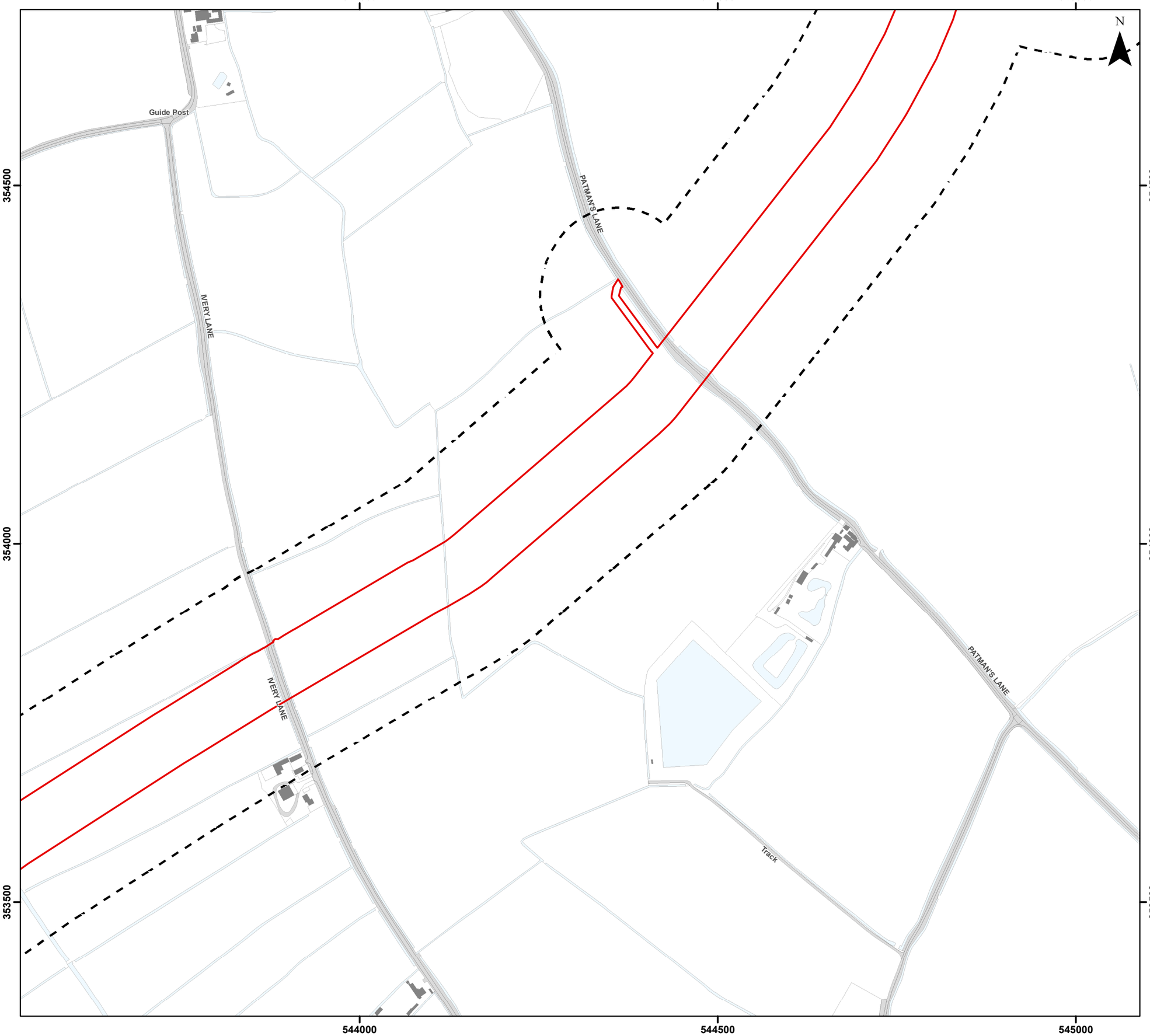
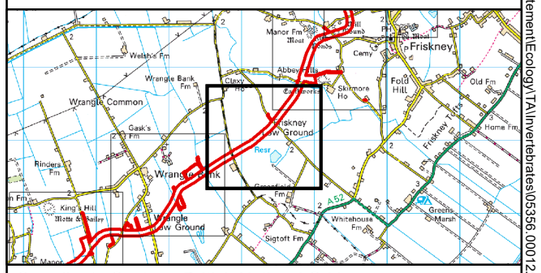


Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.24

OUTER DOWSING OFFSHORE WIND

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542500
543000
543500
354000
353500
353000
N
CHINA STREET
BULL DROVE
WRANGLE BANK
LOVE LANE
Track
ECC 7: Fodder Dike to Broadgate
ECC 8: Broadgate to Ings Drove
BROAD GATE
CRAGMIRE LANE
Track
Track
Track
Track
Track
Track
Legend
Order Limits
Onshore Segment Break
Order Limits 100 m Buffer
Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000
A3 Page Size
Environmental Statement
Habitats of Potential Importance for Invertebrates
Figure 21.9.1.25
OUTER DOWSING OFFSHORE WIND
Date: 20/02/2024
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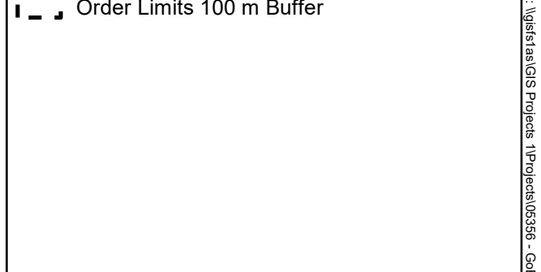
541000
541500
542000
353000
352500
352000
N
WRANGLE BANK
WRANGLE BANK
LOW LANE
PARK LANE
MANOR LANE
PARK LANE
Track
DOUBLE BANK
COMMON ROAD
CRAGMIRE LANE

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.26

OUTER DOWSING OFFSHORE WIND

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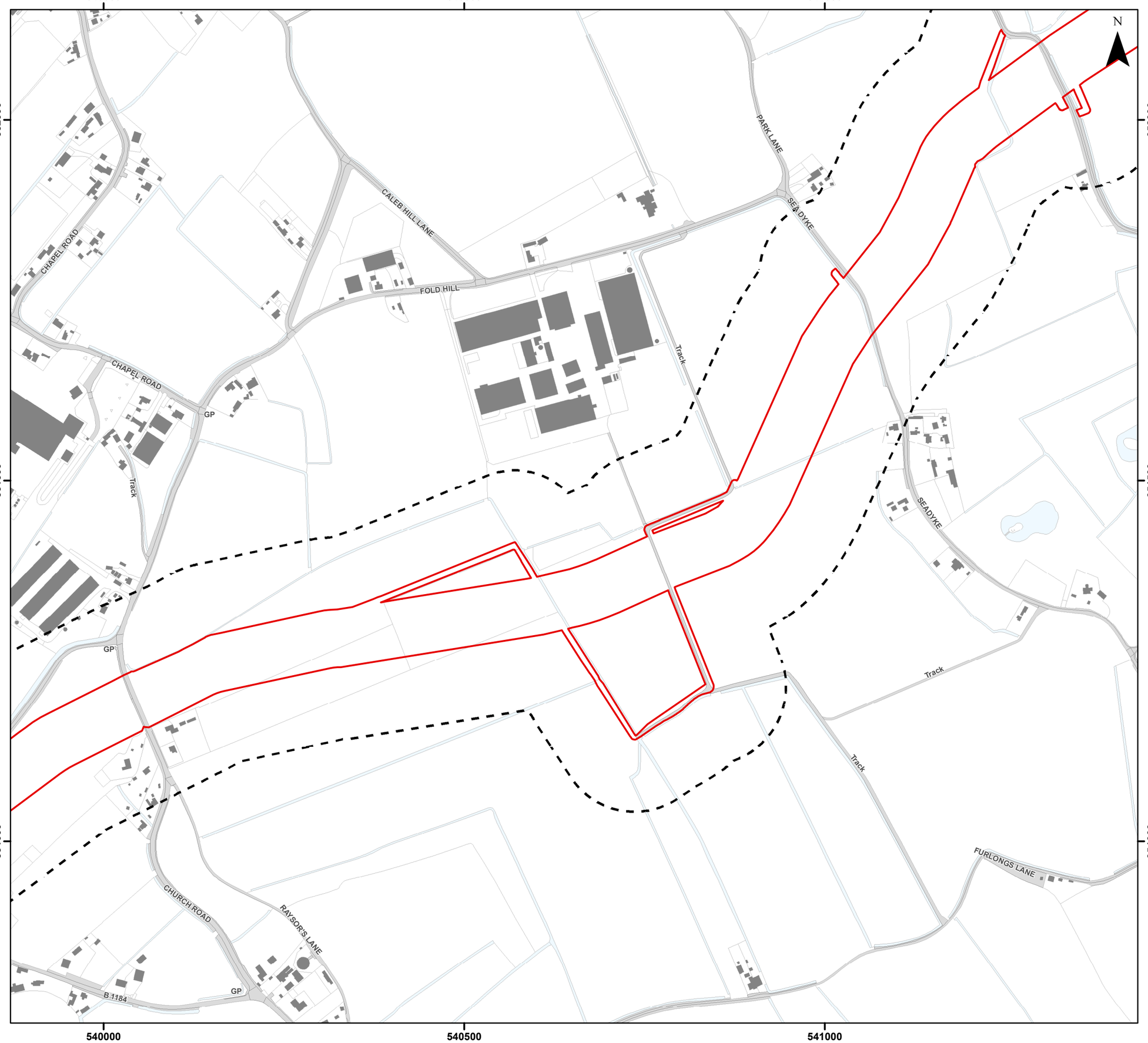
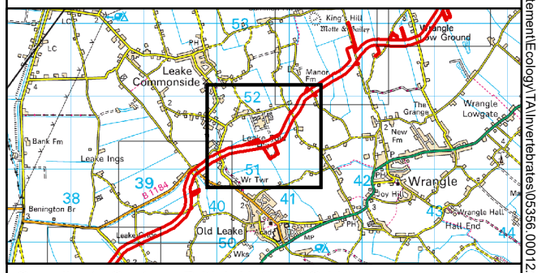


Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.27

OUTER DOWSING OFFSHORE WIND

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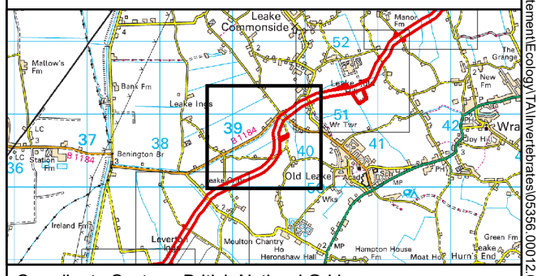
539000
539500
540000
351000
350500
350000
N
GP
B 1184
CHURCH ROAD
Track
THE GRIDE
PODE LANE
SKIPMARSH LANE
CRACK HOLT LANE

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.28

OUTER DOWSING OFFSHORE WIND

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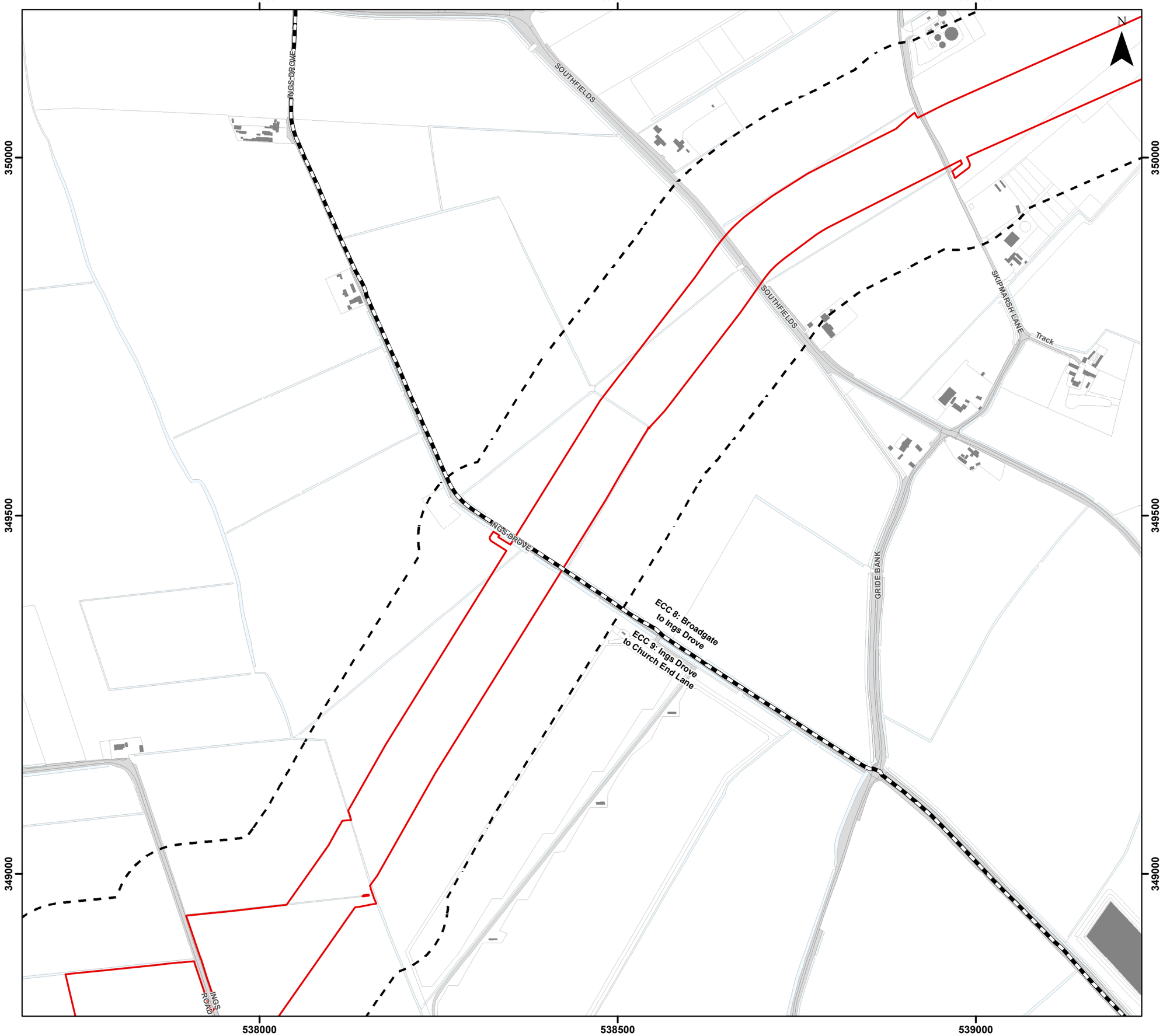
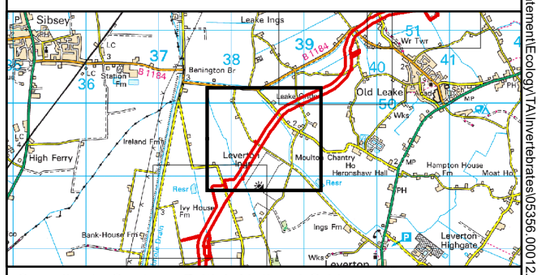


Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.29

OUTER DOWSING OFFSHORE WIND

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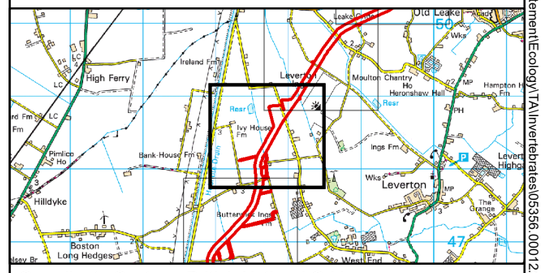
537000
537500
538000
349000
348500
348000

N

INGS ROAD
Track
INGS DROVE
HOBHOLE BANK
INGS ROAD
Track
GP
MIDDLEMERE BANK
INGS DROVE

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.30

OUTER DOWSING OFFSHORE WIND

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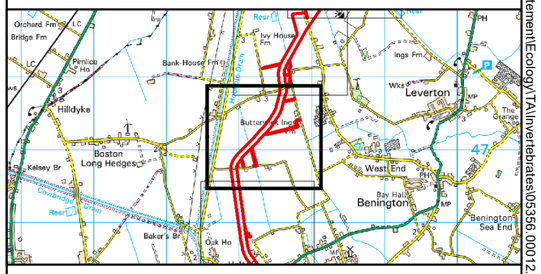
SLR

537000
537500
538000
347500
347000
346500
N
GP
HOBHOLE BANK
DOUBLE BANK
LOWFIELDS LANE
LOWFIELDS LANE
STRAYFLEETS LANE

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.31

OUTER DOWSING OFFSHORE WIND

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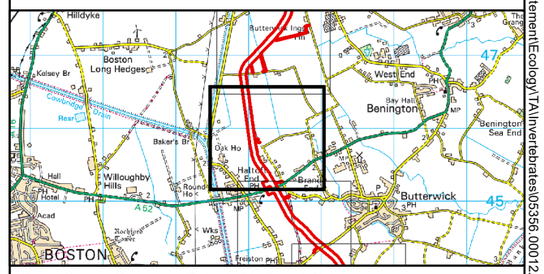
536500
537000
537500
538000
346500
346000
345500
N
HOBHOLE BANK
SWANHOLE LANE
EMERY LANE (TRACK)
Track
DOTAM'S LANE
WEIRS LANE
Track
SWANHOLE LANE
A52
HOMERS LANE
OAK HOUSE LANE
ACORN CLOSE
GP

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.32

OUTER DOWSING OFFSHORE WIND

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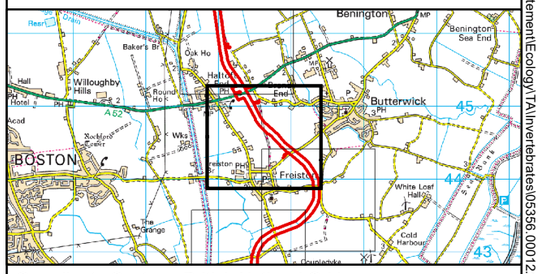
537000
537500
538000
345000
344500
344000
N
GP
FORGE CLOSE
A52
MP
HALTOFT END ESTATE
FOXHOLE LANE (TRACK)
HOMERS LANE
SPITTAL
Track
Path (um)
CHURCH ROAD
Track
FOXHOLE LANE (TRACK)
Track
BUTTERWICK ROAD
PARK LANE
PRIORY ROAD
ECC 9: Ings Drove to Church End Lane
ECC 10: Church End Lane to The Haven
Track
ROWAN FIELDS

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.33

OUTER DOWSING OFFSHORE WIND

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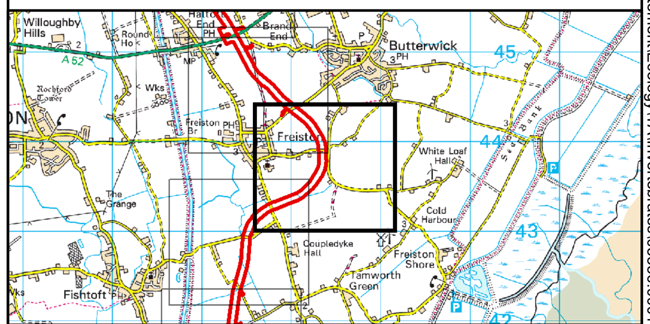
Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.34

OUTER DOWSING OFFSHORE WIND

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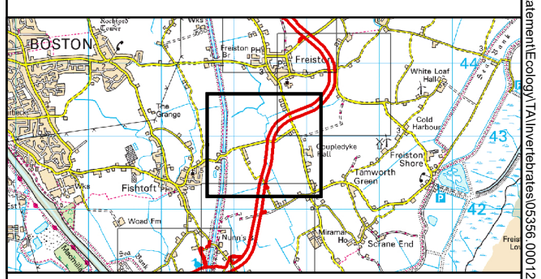
537000
537500
538000
343500
343000
342500
N
CHURCH END ROAD
GP
Track
Track
Track
Track
Track
Post
GROVEFIELD LANE
ECC 9: Ings Drove to Church End Lane
ECC 10: Church End Lane to The Haven
GROVEFIELD

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.35

OUTER DOWSING OFFSHORE WIND

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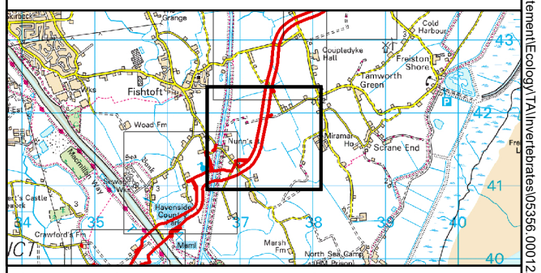
537000
537500
538000
342000
341500
341000
ECC 10: Church End Lane to The Haven
GROVEFIELD
CROPPER'S LANE
Track
CUT END ROAD
Track
Track
Path (um)
WOAD LANE
CUT END ROAD

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.36

OUTER DOWSING OFFSHORE WIND

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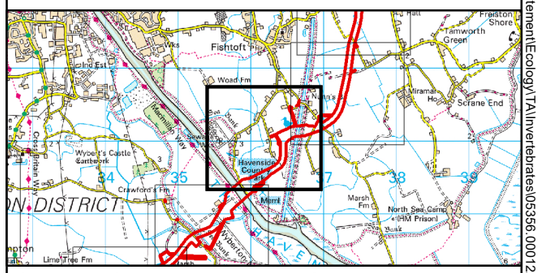
535500
536000
536500
341500
341000
340500
N
SCALP ROAD
PINFOLD LANE
CUT END ROAD
SOUTHFIELD LANE
WOAD LANE
Track
Path (um)
GP
ECC 10: Church End Lane to The Haven
ECC 11: The Haven to Marsh Road

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer

Pantheon Habitats

- C24 : Brackish pools & Ditches



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.37

OUTER DOWSING OFFSHORE WIND

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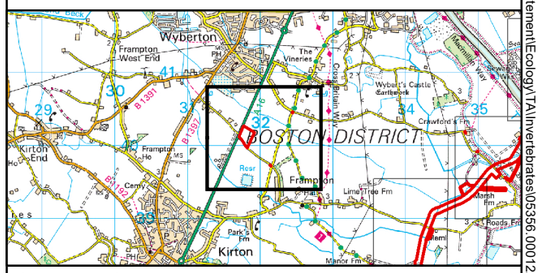
531500
532000
532500
340500
340000
339500
A16
Track
LOW ROAD
STREETWAY
Lay-by
MILLFIELD LANE (WEST)
A16
A16
MILLFIELD LANE (EAST)
HALL LANE
LOW ROAD
GP
THORNIMANS LANE
HALL LANE
Track
N

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.38

OUTER DOWSING OFFSHORE WIND

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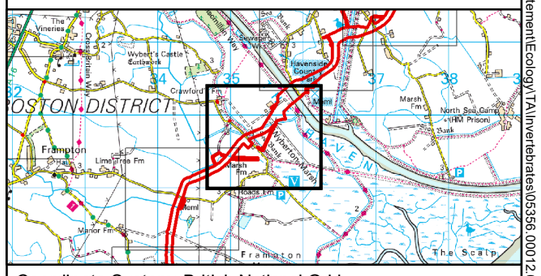
535000
535500
536000
340000
339500
339000
N
Path (um)
GP
Path (um)
Track
Track
ECC 10: Church End Lane to The Haven
ECC 11: The Haven to Marsh Road
Path (um)
Post
Path
Path (um)
Path (um)
Path (um)
Track
WILEY'S LANE (TRACK)
WYBERTON ROADS
Track
Track
Path
FRAMPTON ROADS
GP

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer

Pantheon Habitats

- C24 : Brackish pools & Ditches
- F23 : Short Sward and Bare Ground



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.39

OUTER DOWSING OFFSHORE WIND

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534000
534500
535000
339500
339000
338500
N
FRAMPTON ROAD
Path (um)
Path (um)

Legend

- Order Limits
- Order Limits 100 m Buffer

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.40

OUTER DOWSING OFFSHORE WIND

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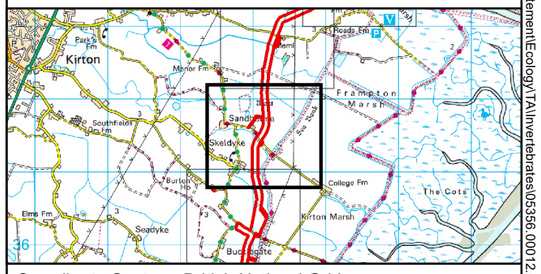
533500
534000
534500
338000
337500
337000
N
SANDHOLME LANE
Track
BURNHAM LANE
Track
Path (um)
Track
SANDHOLME LANE
Path (um)
GP
Track
MARSH LANE (TRACK)
SANDHOLME LANE

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.41

OUTER DOWSING OFFSHORE WIND

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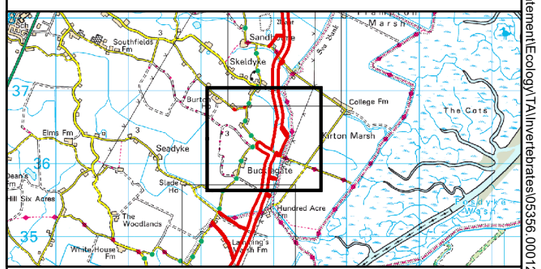
533500
534000
534500
337000
336500
336000
N
NIBB'S LANE
Track
SILT LANE
MARSH ROAD
ECC 11: The Haven to Marsh Road
ECC 12: Marsh Road to Fosdyke Bridge
BUCKLEGATE LANE
Track
Path (um)
MARSH ROAD
Track
BUCKLEGATE LANE
Track
Path (um)

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.42

OUTER DOWSING OFFSHORE WIND

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533000
533500
534000
335500
335000
334500
N
CLOUGH LANE
Path (um)
Track
Track
Track
Track
Track
Track
Path (um)

Legend

- Order Limits
- Order Limits 100 m Buffer

Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.43

OUTER DOWSING OFFSHORE WIND

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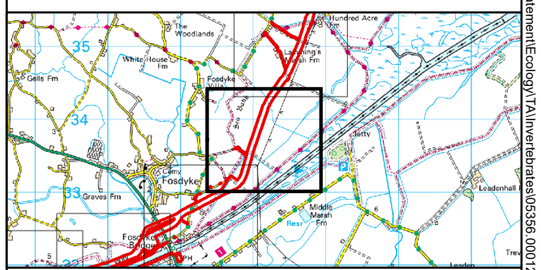
532500
533000
533500
334000
333500
N
Track
Track
THOMPSON'S LANE
Path (um)
POT LANE
Track
Track
CRAVEN'S LANE

Legend

- Order Limits
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.44

OUTER DOWSING OFFSHORE WIND

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531500
532000
532500
533000
333000
332500
332000

POT LANE
WASH ROAD
GRAVEN'S LANE
Track
PUTTOCK GATE
RANDOLPH ROAD
SNAITH AVENUE
OLD MAIN ROAD
PULLOVER LANE
ECC 13: Fosdyke to Surfleet Marsh OnSSMarsh Drove
ECC 12: Marsh Road to Fosdyke Bridge
WASH ROAD
Track
WASH ROAD
Track
Track
A17
MIDDLE MARSH ROAD
SECOND DROVE (TRACK)

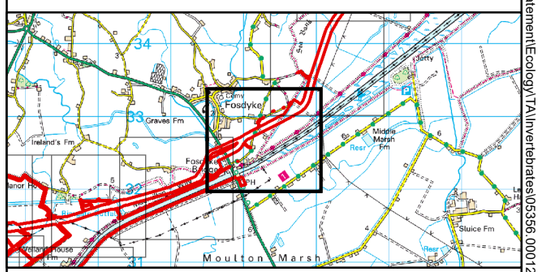
N

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer

Pantheon Habitats

- C21 : Saltmarsh



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.45

OUTER DOWSING OFFSHORE WIND

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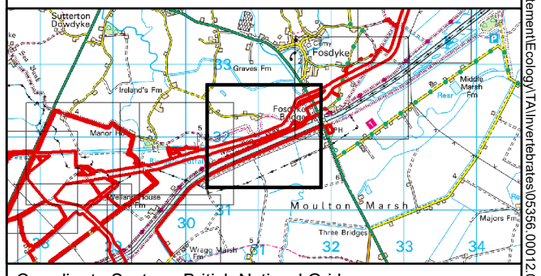
Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.46

OUTER DOWSING OFFSHORE WIND

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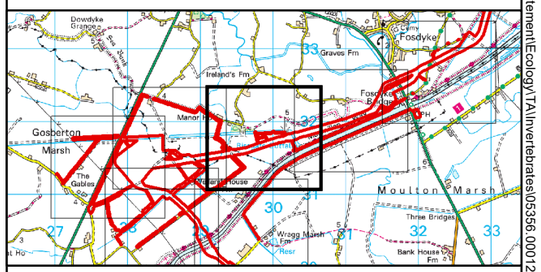
529500
530000
530500
332000
331500
N
MARSH LANE
SMEETON'S LANE
Track
MARSH LANE
Track
Track
Track
Track
Track
ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove
ECC 14: Surfleet Marsh OnSS / Marsh Drove to Connection Area

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.47

OUTER DOWSING OFFSHORE WIND

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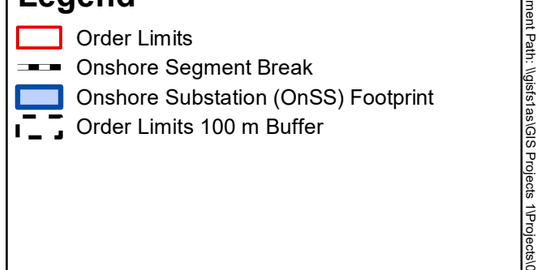
528000
528500
529000
332000
331500
N
Track
A16
Track
Track
Track
Track
ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove

Legend

- Order Limits
- Onshore Segment Break
- Onshore Substation (OnSS) Footprint
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.48

OUTER DOWSING OFFSHORE WIND

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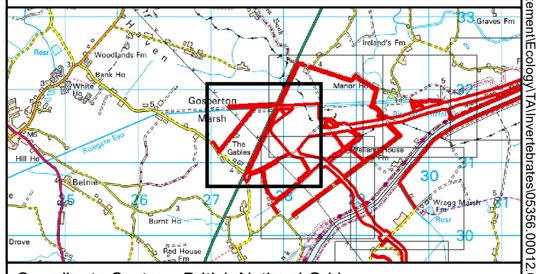
527000
527500
528000
528500
332000
331500
331000
N
A16
GOSBERTON ROAD
GOSBERTON BANK
A16

Legend

- Order Limits
- Onshore Substation (OnSS) Footprint
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.49

OUTER DOWSING OFFSHORE WIND

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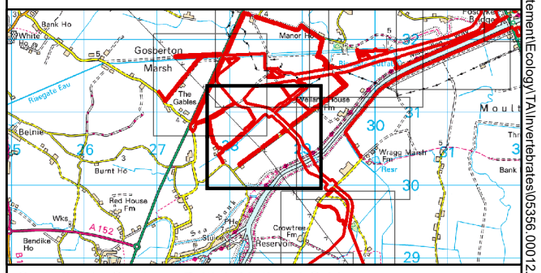
528000
528500
529000
331000
330500
330000
N
Track
MARSH GROVE
SURFLEET BANK
GP
ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove
ECC 14: Surfleet Marsh OnSS / Marsh Drove to Connection Area

Legend

- Order Limits
- Onshore Segment Break
- Onshore Substation (OnSS) Footprint
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.50

OUTER DOWSING OFFSHORE WIND

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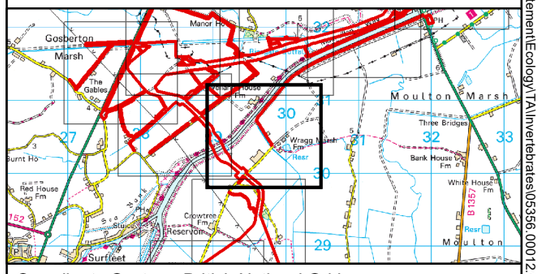
529000
529500
530000
331000
330500
330000
N
ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove
ECC 14: Surfleet Marsh OnSS / Marsh Drove to Connection Area
Track
Track
Track
Track
Weighbridge
WB
MARSH ROAD
Track

Legend

- Order Limits
- Onshore Segment Break
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.51

OUTER DOWSING OFFSHORE WIND

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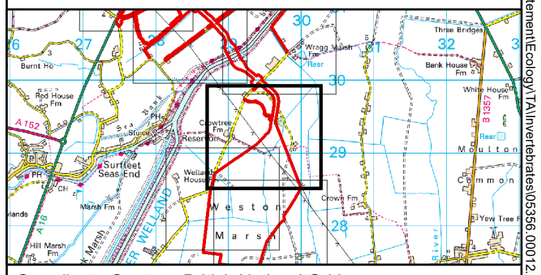
529000
529500
530000
329500
329000
N
MARSH ROAD
Track
Track
Track

Legend

- Order Limits
- Connection Area
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.52

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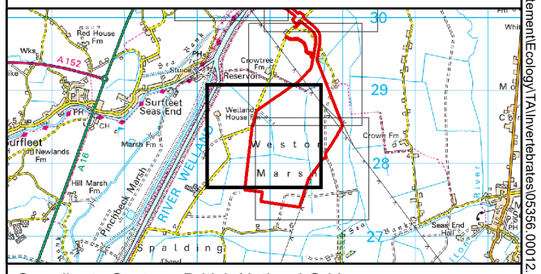
528500
529000
529500
329000
328500
328000
N
MARSH ROAD
Track
MARSH ROAD

Legend

- Order Limits
- Connection Area
- Order Limits 100 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

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Environmental Statement

Habitats of Potential Importance for Invertebrates

Figure 21.9.1.53

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529000
529500
530000
328500
328000
327500
N
Track
Legend
Order Limits
Connection Area
Order Limits 100 m Buffer
Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000
A3 Page Size
Environmental Statement
Habitats of Potential Importance for Invertebrates
Figure 21.9.1.54
OUTER DOWSING OFFSHORE WIND
Date: 20/02/2024
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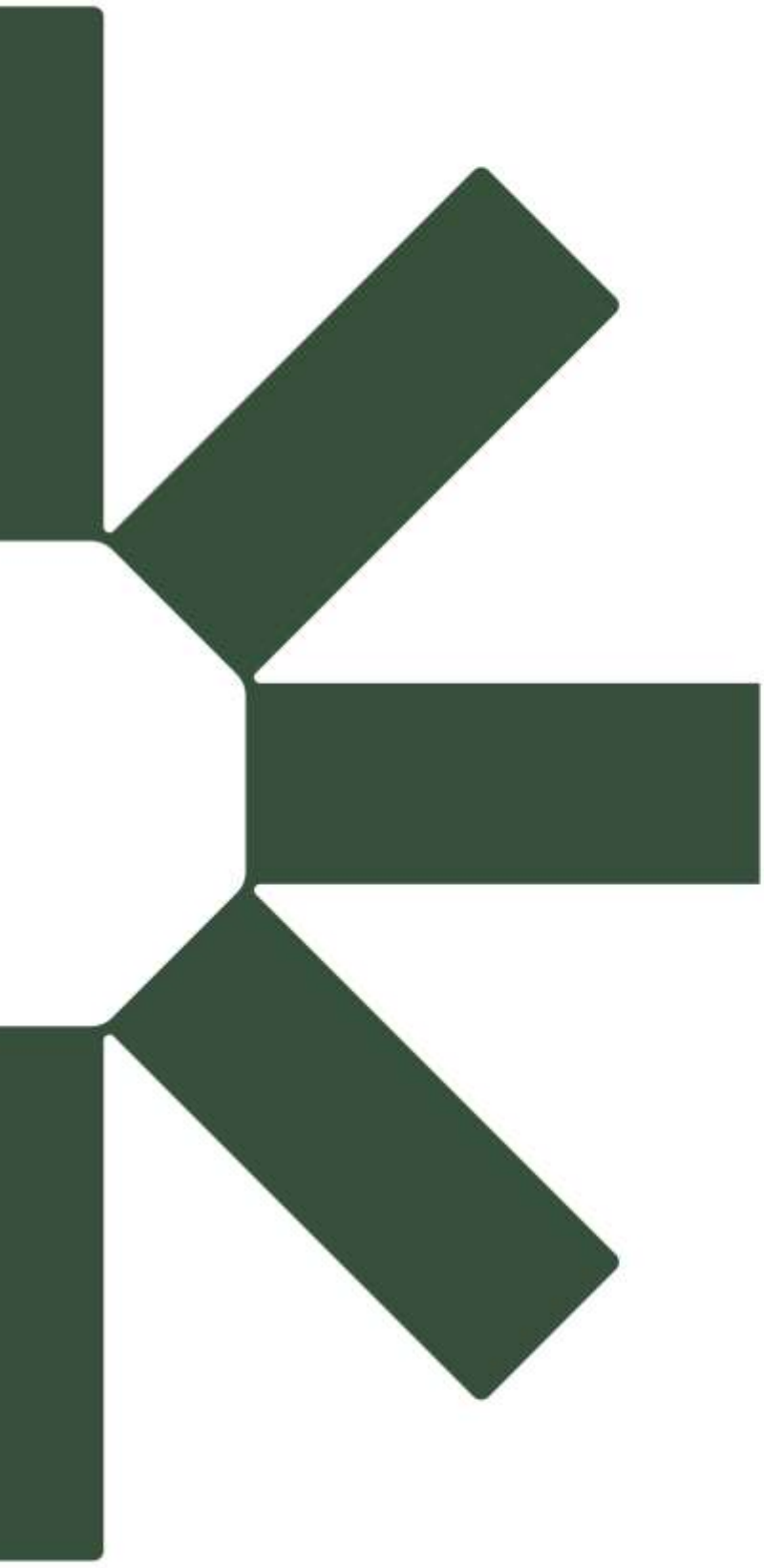

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