



# Immingham Green Energy Terminal

TR030008

Volume 6

6.4 Environmental Statement Appendices

Appendix 8.B: Preliminary Ecological Appraisal Report

Planning Act 2008

Regulation 5(2)(a) and 5(2)(l)

Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009 (as  
amended)

September 2023

# Infrastructure Planning

## Planning Act 2008

The Infrastructure Planning  
(Applications: Prescribed Forms and  
Procedure) Regulations 2009 (as amended)

# Immingham Green Energy Terminal

## Development Consent Order 2023

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## 6.4 Environmental Statement Appendices

### Appendix 8.B: Preliminary Ecological Appraisal Report

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<b>Regulation Reference</b>	APFP Regulation 5(2)(a) and 5(2)(l)
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## Executive Summary

<p><b>Site Details</b></p>	<p>Land off Kings Road, Queens Road and Laporte Road Immingham (central grid reference TA 198 146)</p> <p>Total Site equating to approximately 121 hectares (ha), of which approximately 56 ha is terrestrial land.</p>
<p><b>Project Details</b></p>	<p>Alteration of harbour facility for the construction, operation and maintenance of a new import/export terminal; consisting of a new jetty into the Humber Estuary, associated loading/unloading infrastructure and pipelines, as well as various other terrestrial infrastructure elements for the processing of green ammonia into green hydrogen fuel (including temporary construction areas). The new terminal may also be used in the future for the import of liquefied carbon dioxide to connect to adjacent carbon transport and storage networks for sequestration in the North Sea and import/export of other liquid bulks.</p>
<p><b>Ecological Features that may be affected by the Project</b></p>	<p><u>Designated Sites:</u></p> <p>Humber Estuary Special Protection Area (“SPA”)/Special Area of Conservation (“SAC”)/Ramsar/Site of Special Scientific Interest (“SSSI”)</p> <p>Laporte Road Brownfield Site Local Wildlife Site (“LWS”)</p> <p>Homestead Park Pond LWS</p> <p><u>Habitats:</u></p> <p>Various habitats present including:</p> <ul style="list-style-type: none"> <li>• Abandoned/fallow arable farmland currently comprising overgrown tall poor semi-improved grassland and scattered scrub, species-poor unmanaged hedgerows and ditches overgrown with common reed (West Site).</li> <li>• Scrub and ephemeral/short perennial vegetation (East Site – Ammonia Storage area, Pipeline Corridor, Queens Road Temporary Construction Area).</li> <li>• Hardstanding (East Site – Hydrogen Production area, Pipeline Corridor, Queens Road Temporary Construction Area).</li> <li>• Plantation woodland (East Site – Ammonia Storage area).</li> <li>• Cultivated arable farmland (Laporte Road Temporary Construction Area).</li> <li>• mature deciduous woodland (Pipe Rack and Jetty Access Road Corridor).</li> </ul> <p>Some development enabling work has been undertaken in the West Site in 2014/2015 to create a new road access off Kings Road, and to install drainage pursuant to an existing planning consent.</p> <p><u>Protected Species:</u></p> <p>Breeding birds – mosaic of habitats within the Site Boundary (grassland, woodland and scrub) suitable to support nesting birds.</p> <p>Otter and water vole – ditches present within the West Site hold some suitability to support these species however the foraging resource is</p>



	<p>considered to be sub-optimal because they are heavily overgrown with common reed (<i>Phragmites australis</i>). Ditches present within the Pipe Rack and Jetty Access Road Corridor, and adjacent to the Laporte Road Temporary Construction Area are also suitable to support these species.</p> <p>Great crested newt – several waterbodies located within 250m of the Site Boundary which may be suitable to support this species.</p> <p>Bats (roosting) – there are a large number of mature trees within the deciduous woodland within the Pipe Rack and Jetty Access Road Corridor that are confirmed to be suitable for roosting bats.</p> <p>Bats (foraging/commuting) – areas of mature woodland and extensive scrub habitats present within the Pipe Rack and Jetty Access Road Corridor and East Site – Ammonia Storage area suitable for use by foraging/ commuting bats.</p>
<p><b>Recommendations for further survey and assessment</b></p>	<p>Habitats Regulations Assessment (“HRA”) – none of the terrestrial habitat (i.e. land above mean high water) within the Site Boundary has been identified through further ornithology surveys as being functionally linked to the Humber Estuary (see Environmental Statement (“ES”) <b>Chapter 10: Ornithology [TR030008/APP/6.2]</b>). A HRA has been undertaken for the Project and is supported by survey data and assessment work presented in <b>Chapter 8: Nature Conservation (Terrestrial Ecology)</b>, <b>Chapter 9: Nature Conservation (Marine Ecology)</b> and <b>Chapter 10: Ornithology [TR030008/APP/6.2]</b>.</p> <p>Following completion of this Preliminary Ecological Appraisal (“PEA”), further surveys have been undertaken for the following species/species groups throughout the 2022 and 2023 survey seasons and are reported in the relevant appendices of the ES:</p> <ul style="list-style-type: none"> <li>• Wintering birds – surveys of grassland/scrub within West Site and arable farmland within the Laporte Road Temporary Construction Area.</li> <li>• Breeding birds – surveys of grassland/scrub habitat within West Site and the dense scrub and mature woodland within the East Site – Ammonia Storage area and the Pipe Rack and Jetty Access Road Corridor.</li> <li>• Otter and water vole – surveys of all potentially suitable ditches within the Site Boundary.</li> <li>• Great crested newt – environmental DNA (“eDNA”) surveys of any ponds suitable for the species within 250 m of the Site Boundary.</li> <li>• Bats (roosting) – Preliminary Roost Features (“PRF”) appraisal of all suitable mature trees within the woodland impacted by the Pipe Rack and Jetty Access Road Corridor.</li> <li>• Bats (roosting) - Emergence surveys of trees with high/ moderate bat roost potential following completion of PRF survey that will be removed for the Project.</li> <li>• Bats (foraging/commuting) – series of seasonal walked survey transects and periods of remote static detector deployment in spring, summer and autumn of mature woodland and dense areas of scrub impacted by Pipe Rack and Jetty Access Road Corridor and East Site – Ammonia Storage area.</li> </ul>

<p><b>Recommendations for Mitigation</b></p>	<ul style="list-style-type: none"> <li>• Avoidance of permanent woodland loss is recommended; however, it is not possible to avoid all woodland loss within the footprint of the Project, and therefore as much of the mature woodland within Long Strip woodland (located within the Pipe Rack and Jetty Access Road Corridor) should be retained (and protected during the construction phase) as possible.</li> <li>• Likely to require mitigation to ensure breeding birds are not disturbed during construction phase, (including the requirement to remove vegetation/undertake initial site clearance works outside the breeding bird season March to September inclusive, where possible).</li> <li>• Bats - where bat roosts or evidence of potential roosts are identified within trees located within Long Strip woodland which are to be removed, a European Protected Species Mitigation (“EPSM”) licence may be required from Natural England, or works may be able to proceed under a Bat Class Licence.</li> <li>• Otter – should holts be identified within the Site Boundary which cannot be avoided, an EPSM licence may be required from Natural England.</li> <li>• Water vole – where this species is identified, a development mitigation licence may be required from Natural England, or works may be able to proceed under a Water Vole Class Licence, which puts seasonal limitations on water vole displacement through habitat manipulation.</li> </ul>
<p><b>Opportunities for Biodiversity Enhancements</b></p>	<p>There are likely to be limited opportunities for biodiversity enhancements within the Site Boundary given the industrial nature of the Project and the various safety requirements that will be embedded within the design of the infrastructure/ buildings.</p> <p>Opportunities to meet the planning policy requirements in respect of biodiversity enhancement (see Annex B) should be identified where possible in the Ecological Impact Assessment (“EclA”) process.</p>

# 1 Introduction

## 1.1 Background

- 1.1.1 This Preliminary Ecological Appraisal Report (“PEAR”) has been prepared by AECOM on behalf of Associated British Ports (“ABP”) (hereafter referred to as “the Applicant”), to assess the ecological constraints in connection with the proposed Immingham Green Energy Terminal (“IGET”) (hereafter referred to as the Project). The Project is located on the south side of the Port of Immingham (hereafter referred to as “the Port”), on land adjacent to Kings Road, Queens Road and Laporte Road, Immingham, as shown by the Site Boundary in **Figure 1** in **Annex F**. All land situated within this Site Boundary is hereafter referred to as “the Site”.
- 1.1.2 The assessment of ecological constraints has been undertaken with reference to current good practice (5) and forms part of the technical information commissioned by the Applicant in connection with the Project. The PEAR addresses relevant wildlife legislation and planning policy as summarised in Annex B and is consistent with the requirements of *British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development* (Ref 1-2).
- 1.1.3 This PEAR sets out the baseline ecological conditions within the Site Boundary, and provides evidence to support the scope of further habitat and protected species surveys undertaken and reported in **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]**. This PEAR only considers terrestrial elements<sup>1</sup> of the Project as marine elements are considered in **Chapter 9: Nature Conservation (Marine Ecology) [TR030008/APP/6.2]**. Breeding and wintering birds are also excluded from this PEAR and are considered in **Chapter 10: Ornithology [TR030008/APP/6.2]**.

## 1.2 The Site

- 1.2.1 The Site is located on the south side of the Port and is centred on Ordnance Survey National Grid Reference TA 200 146. The Site comprises several distinct land parcels off Kings Road, Queens Road and Laporte Road in Immingham required to provide sufficient area for the pipeline infrastructure, hydrogen production facility and access road connecting the terrestrial areas of the Project with the new jetty. The locations of works areas are shown on **Figure 1** in **Annex F**. The total Project area is approximately 121ha, of which approximately 56 ha is terrestrial land and for the purposes of this PEAR has been considered and referred to throughout in broad terms as follows:
- a. West Site (Work No. 7) – approximately 21ha of former arable cultivated land bounded (as determined by Google Earth aerial map regression) by industrial land to the north and east, a landfill to the south and the A1173 (Kings Road) to the west, off Kings Road. This will be the location where hydrogen production, liquefaction storage and loading take place.

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<sup>1</sup> All habitats up to Mean High Water are included within the terrestrial ecology elements of the Project.

- b. East Site – Hydrogen Production area (Work No. 5) – approximately 5ha of land on the north side of Queens Road, the central portion of which has relatively recently been cleared and used for port-related storage.
- c. East Site – Ammonia Storage area (Work No. 3) – approximately 3ha of land south of Laporte Road currently in use for port-related storage.
- d. Pipe Rack and Jetty Access Road Corridor (Work No. 2) – approximately 1ha of mature woodland within Long Strip woodland, which connects the new jetty to East Site – Hydrogen Production area.
- e. Laporte Road Temporary Construction Area (Work No. 9) – approximately 12ha of arable land adjacent to Polynt Factory, which was under wheat/maize crop regime at the time of the Phase 1 Habitat survey.
- f. Queens Road Temporary Construction Area (Work No. 8) – approximately 1ha of land on the north side of Queens Road, which has been recently cleared for construction of the new ABP Customs Facility, and which is mainly bare ground.
- g. Pipeline Corridor – connecting pipeline between East Site – Ammonia Storage area and West Site (Work No. 6), being laid underground mainly on the north side of Queens Road. A culvert will be constructed beneath Laporte Road (connecting East Site – Hydrogen Production area and East Site – Ammonia Storage area).

1.2.2 The West Site is identified in the North East Lincolnshire Local Plan (Ref 1-3) for employment development as Site ELR001 “Imm-Port Enterprise Zone”. Some development enabling works were completed on the Site (drainage and road infrastructure) in 2014/2015 relating to a planning consent for industrial/ port-related development (Planning Reference: DM/1027/13/OUT), although no further development of the West Site has since been progressed.

### 1.3 Purpose of the Preliminary Ecological Appraisal

1.3.1 The approach and methodology followed to inform this PEAR is provided in **Annex C**. This PEAR presents ecological information obtained from the following studies or surveys:

- a. Desk-study undertaken during March 2022 and updated in May 2023 to obtain records of designated sites, notable habitats<sup>2</sup> and protected and notable species<sup>3</sup> within 2km of the Site Boundary (the area covered by the desk study is hereafter referred to as the Study Area);

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<sup>2</sup>Notable habitats are taken as principal habitats for the conservation of biodiversity listed under Section 41 of the *Natural Environment and Rural Communities Act 2006* (Ref 1-4); habitats listed under the Lincolnshire Biodiversity Action Plan (BAP) (Ref 1-5); hedgerows identified as being ‘important’ under the wildlife criteria of the *Hedgerow Regulations 1997* (Ref 1-6), ancient woodlands and veteran trees.

<sup>3</sup>Notable species are taken as principal species for the conservation of biodiversity listed under Section 41 of the *Natural Environment and Rural Communities Act 2006* (Ref 1-4); any species listed in an IUCN Red Data Book; and any other species listed under the Lincolnshire BAP.

- b. Extended Phase 1 habitat survey of the West Site conducted on the 21 March 2022, and further extended Phase 1 habitat surveys of habitats within the remaining Site Boundary in April, May and June 2022 and February, March and April 2023<sup>4</sup> to determine the presence/potential presence of Important Ecological Features (“IEFs”)<sup>5</sup>; and
- c. Detailed botanical survey of woodland and woodland ground flora habitats within Long Strip woodland; and
- d. Appraisal of habitats within the Site Boundary by a terrestrial invertebrate specialist to assess the potential for habitats that could be of value to terrestrial invertebrates and thus merit further specialist survey to inform the EclA.

1.3.2 The purpose of the PEAR is to provide a high-level ecological appraisal of the Site, specifically to:

- a. Establish ecological baseline conditions and determine the presence of IEFs (or those that could be present), as far as is possible.
- b. Identify potential ecological constraints to the Project and make initial recommendations to avoid impacts on IEFs, where possible.
- c. Identify requirements for mitigation, where possible, including mitigation measures that will be required and those that may be required (depending on results of further surveys or final Project design).
- d. Establish any requirements for more detailed surveys.
- e. Identify any opportunities offered by the Project to deliver biodiversity enhancements.

1.3.3 The methodology followed for undertaking the desk study and field surveys is detailed in **Annex C**, including any limitations to the preliminary assessment.

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<sup>4</sup> The Phase 1 Habitat surveys were not undertaken concurrently due to the evolution of the Project design throughout 2022 and early 2023, which meant additional land parcels were subsequently progressively added to the Site Boundary.

<sup>5</sup> Important Ecological Features are habitats, species, ecosystems and their functions and processes that are of conservation importance and could potentially be affected by the Project.

## 2 Ecological Baseline, Constraints and Recommendations

### 2.1 Overview

- 2.1.1 The following sections detail the results of the desk and field-based studies undertaken to inform this PEAR. Where necessary, recommendations for mitigation measures to protect known IEFs, or further surveys to determine the presence or likely absence of IEFs, are provided.
- 2.1.2 The PEA identified further surveys required to collate sufficient baseline data to inform the EclA; these were undertaken throughout 2022 and 2023 and are summarised in **Table 3**. **Table 3** provides signposting to where the further survey information can be found within the relevant chapters of the ES; **Chapter 8: Nature Conservation (Terrestrial Ecology) [TR030008/APP/6.2]** and **Chapter 10: Ornithology [TR030008/APP/6.2]**.
- 2.1.3 With regard to background ecology data, 'recent' records are considered to be those no older than ten years from the date of the desk study. Records outside of this period are historical and have only been reported where more recent records for a feature do not exist, or where they are considered potentially relevant to the appraisal. Exceptions to this are detailed in the appropriate sections below.
- 2.1.4 In addition to desk-study data requested from the Lincolnshire Environmental Records Centre ("LERC"), documents pertaining to the following potentially relevant planning applications were reviewed:
- 2.1.5 A planning application on the West Site from 2013 for redevelopment of the site (Planning Reference: DM/1027/13/OUT). An ES was prepared for the application by ECUS in December 2013 and reported the results of a Phase 1 Habitat survey and protected species surveys for breeding and wintering birds, badger, otter and water vole (Ref 1-7).
- 2.1.6 A planning application granted by NELC in 2021 for a new Border Control post on Queens Road at the entrance to Immingham Docks (Planning Ref: DM/1057/20/SCR), which is immediately adjacent to the Pipeline Corridor and Queens Road Temporary Construction Area. An ecology report for the site was prepared by Ecology & Forestry Ltd for Alan Wood & Partners in November 2021. The ecology survey included land partly within the Pipeline Corridor and Queens Road Temporary Construction Area.
- 2.1.7 A planning application granted by NELC in 2020 for a variation of conditions for a materially altered landform associated with the landfill site, which is adjacent to the southern boundary of the West Site (Planning Ref: DM/0968/19/FUL). An ecology report for the site was prepared by FPCR for FCC Environment Ltd in August 2019.



## 2.2 Designated Sites

### Desk Study

2.2.1 **Table 1** summarises the designated sites situated within the Study Area. These are shown in Lincolnshire Desk Study Record Report (**Annex E**). The desk study was originally undertaken in March 2022 and was updated in May 2023. The locations of the designated sites in relation to the Site Boundary are shown on **Figure 2** in **Annex F**.

**Table 1: Designated Sites within the Desk Study Area**

Designated Site	Reason for Designation	Location of Designated Site Relative to the nearest part of the Terrestrial Site Boundary <sup>6</sup>
<b>Statutory</b>		
Humber Estuary SPA	<p><b>Article 4.1 qualification - bird species regularly occurring in numbers of 1% or more of the Great Britain populations</b></p> <p><u>Wintering:</u></p> <p>Avocet <i>Recurvirostra avosetta</i></p> <p>Bittern <i>Botaurus stellaris</i></p> <p>Hen harrier <i>Circus cyaneus</i></p> <p>Golden plover <i>Pluvialis apricaria</i></p> <p>Bar-tailed godwit <i>Limosa lapponica</i></p> <p><u>Passage:</u></p> <p>Ruff <i>Philomachus pugnax</i></p> <p><u>Breeding:</u></p> <p>Bittern <i>Botaurus stellaris</i></p> <p>Marsh harrier <i>Circus aeruginosus</i></p> <p>Avocet <i>Recurvirostra avosetta</i></p> <p>Little tern <i>Sternula albifrons</i></p> <p><b>Article 4.2 qualification - bird species regularly occurring in numbers of 1% or more of the biogeographical populations of migratory species</b></p> <p><u>Wintering:</u></p> <p>Shelduck <i>Tadorna tadorna</i></p>	Adjacent to Pipe Rack and Jetty Access Road Corridor

<sup>6</sup>Where designated sites are situated outside of the Site Boundary, the distance and direction is given at the closest point of the designated site from the nearest terrestrial part of the Site.

Designated Site	Reason for Designation	Location of Designated Site Relative to the nearest part of the Terrestrial Site Boundary <sup>6</sup>
	<p>Knot <i>Calidris canutus</i> Dunlin <i>Calidris alpina</i> Black-tailed godwit <i>Limosa limosa</i> Redshank <i>Tringa totanus</i></p> <p><u>Passage:</u> Knot Dunlin Black-tailed godwit Redshank</p> <p><b>Article 4.2 qualification – used regularly by over 20,000 waterbirds in any season</b></p> <p>The recorded five-year peak mean in 1996/97 – 2000/01 was 153,934 individual waterbirds<sup>7</sup> in the non-breeding season.</p>	
<p>Humber Estuary Ramsar</p>	<p><b>Criterion 1:</b> Site is a representative example of a near-natural estuary with the following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons.</p> <p><b>Criterion 3:</b> Breeding colony of grey seals (<i>Halichoerus grypus</i>) (at Donna Nook) Breeding natterjack toad <i>Bufo calamita</i> (at Saltfleetby-Theddlethorpe)</p> <p><b>Criterion 5:</b> Supports a waterfowl assemblage of international importance.</p> <p><b>Criterion 6:</b> Supports the following species/populations occurring at levels of international importance: Wintering: Shelduck Golden plover</p>	<p>Adjacent to Pipe Rack and Jetty Access Road Corridor</p>

<sup>7</sup> Waterbirds as defined by the Ramsar Convention



Designated Site	Reason for Designation	Location of Designated Site Relative to the nearest part of the Terrestrial Site Boundary <sup>6</sup>
	<p>Red knot Dunlin Black-tailed godwit Bar-tailed godwit Common redshank</p> <p><b>Criterion 8:</b> Migratory river <i>Lampetra fluviatilis</i> and sea lamprey <i>Petromyzon marinus</i></p>	
Humber Estuary SAC	<p><b>Habitats that are a primary reason for selection of this site:</b> Estuaries Mudflats and sandflats not covered by seawater at low tide</p> <p><b>Habitats and species present as a qualifying feature, but not a primary reason for selection of this site:</b> Sandbanks which are slightly covered by sea water all the time Coastal lagoons Salicornia and other annuals colonizing mud and sand Atlantic salt meadows <i>Glauco-Puccinellietalia maritimae</i> Embryonic shifting dunes Shifting dunes along the shoreline with <i>Ammophila arenaria</i> Fixed coastal dunes with herbaceous vegetation Dunes with <i>Hippopha rhamnoides</i> Sea lamprey River lamprey Grey seal</p>	Adjacent to Pipe Rack and Jetty Access Road Corridor
Humber Estuary SSSI	<p>A component of the Humber Estuary SAC/SPA/Ramsar. Designated for its nationally important estuary habitats, including intertidal mudflats, sandflats and coastal saltmarsh that support:</p> <p>nationally important numbers of wintering and passage wildfowl and waders</p> <p>nationally important assemblage of breeding birds associated with open lowland waters and their margins</p>	Adjacent to Pipe Rack and Jetty Access Road Corridor

Designated Site	Reason for Designation	Location of Designated Site Relative to the nearest part of the Terrestrial Site Boundary <sup>6</sup>
	breeding grey seal sea lamprey river lamprey vascular plant assemblage invertebrate assemblage	
Laporte Road Brownfield Site LWS	Former industrial site (approximately 3ha) comprising species-rich brownfield habitat. Designated for its open mosaic habitats on previously developed land that qualify under criterion BM1 (Brownfield Mosaic) of the Lincolnshire Local Wildlife Site Selection Criteria (Ref 1-8). Diverse assemblage of breeding birds and butterflies. Water vole population on north-western boundary ditch (North Beck Drain).	100m south of Laporte Road Temporary Construction Area
Homestead Park Pond LWS	Mosaic of scrub, neutral grassland and standing open water (large angling pond).	2km north-west

### Constraints and Recommendations

- 2.2.2 The habitat within the West Site is dominated by tall-swarded grassland (see **Section 2.3.4**) having been taken out of agricultural cultivation approximately ten years ago. Consequently, the habitats within the West Site are not suitable for high tide roosting/loafing/feeding waterbirds from the nearby Humber Estuary SPA/ Ramsar. This is because there is insufficient visual scanning distance for waterbirds to observe approaching ground-based predators, and they therefore typically avoid taller swarded grassland.
- 2.2.3 Nevertheless, to support the assessment, wintering bird surveys were undertaken on the West Site in February and March 2022 to determine whether the habitats were used by SPA/Ramsar waterbirds (and thus merited a detailed suite of wintering bird surveys). The results of the survey are presented in **Appendix 10.A [TR030008/APP/6.4]**. No SPA/ Ramsar waterbirds were recorded within the West Site Boundary and it is concluded that the land within the West Site is not functionally linked to the Humber Estuary SPA/Ramsar. This is consistent with the findings of previous wintering bird surveys undertaken within the Site in winter 2011/12 for a planning application for development (DM/1027/13/OUT), which also concluded that the land was not functionally linked to the Humber Estuary SPA/Ramsar (even when the land was under a more regular cultivation regime and thus would be potentially more suitable for waterbirds).

- 2.2.4 Land within the boundary of the Queens Road Temporary Construction Area is unsuitable for SPA/Ramsar waterbirds as it is a small plot, that is relatively enclosed by the mature hedgerow along the southern boundary to Queens Road and therefore does not provide sufficient scanning distances for birds.
- 2.2.5 Land within the boundary of the Laporte Road Temporary Construction Area was identified in the Phase 1 Habitat survey as having the potential to support wintering SPA/Ramsar waterbirds, and therefore specific surveys of this land were undertaken over winter 2022/23 to inform an assessment of whether it was functionally linked to the Humber Estuary. The results of the survey are presented in **Appendix 10.A [TR030008/APP/6.4]**. No important numbers<sup>8</sup> of SPA/Ramsar waterbirds were recorded within the Laporte Road Temporary Construction Area and it is concluded that the land is not functionally linked to the Humber Estuary SPA/Ramsar.
- 2.2.6 There is no other suitable potential habitat for overwintering SPA Ramsar waterbirds within the Site Boundary.
- 2.2.7 There is no suitable habitat within any part of the Site Boundary for the SPA/Ramsar qualifying breeding species: bittern, marsh harrier or avocet. Marsh harrier has been previously recorded overflying the West Site in 2013 (for planning application DM/1027/13/OUT) but there are no extensive areas of reedbed/marsh habitat that would be suitable as nesting habitat; the reedbed habitat within the West Site is restricted to narrow bands within/ on the margins of the ditches that do not provide suitable habitat for this species.
- 2.2.8 Potential air quality pathways by which the Project could impact the designated terrestrial habitats of the Humber Estuary SAC/Ramsar/SSSI have been subject to further investigation. A HRA has been completed to determine whether there are any likely significant effects on the Humber Estuary SPA/Ramsar site features of importance.
- 2.2.9 Given the distance of the Homestead Park Pond LWS from the Project (2km), and the lack of habitat connectivity between the Project and this LWS, it is concluded that there will be no direct impacts on the LWS. Laporte Road Brownfield Site LWS is located approximately 100m south of the Laporte Road Temporary Construction Area; however, it is on the south side of North Beck Drain, which precludes the potential for direct impacts from the Project to occur. Therefore, these designations are not considered further in this PEAR.

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<sup>8</sup> Numbers of SPA/ Ramsar waterbirds >1% of the five-year mean Humber Estuary population is typically used to determine whether terrestrial land is important for waterbirds and thus functionally linked to the Humber Estuary SPA/ Ramsar.

## 2.3 Habitats

### Desk Study

2.3.1 **Table 2** summarises the records of notable habitats and protected or notable flora<sup>9</sup> (including veteran trees<sup>10</sup>) within the Study Area.

**Table 2 Notable Habitats and Protected and Notable Flora within Study Area**

Habitat/Flora Feature	Reason for Conservation Interest	Location of Habitat/Flora Relative to the West Site <sup>11</sup>	Location of Habitat/Flora Relative to Other Terrestrial Infrastructure
Deciduous woodland	Priority Habitat Inventory (Natural Environment and Communities [NERC] Act S41)	160m south-west (small area off woodland on west side of A1173)	160m south-west (small area off woodland on west side of A1173)
		515m north-east ('Long Strip' woodland, off Laporte Road)	Partially within Project boundary (Pipe Rack and Jetty Access Road Corridor)
Intertidal mudflats	Priority Habitat Inventory (Natural Environment and Communities [NERC] Act S41)	1.1km north-east (coastal habitats within Humber Estuary SAC/ SPA/Ramsar/SSSI)	Adjacent to Pipe Rack and Jetty Access Road Corridor.

### Field Survey

2.3.2 Summary descriptions of the habitats within the Site Boundary are provided below and shown on Figure 3 in Annex F, with specific features highlighted by Target Notes ("TNs"). Target Note descriptions and photographs are provided in **Annex C**.

#### *West Site*

2.3.3 The West Site comprises three distinct fields separated by ditches/hedgerows and was formally cultivated until its abandonment from agricultural production approximately ten years ago. Some initial enabling activities have been undertaken in the northern portion of the West Site (off King's Road) to create a new access road and interconnecting roads/pavements/drainage infrastructure (in around 2014/ 15); this is Phase 1 of the consented outline development (Planning Reference: DM/1027/13/OUT) of Site E1/3 in the NELC Local Plan.

<sup>9</sup> For this assessment 'flora' includes: vascular and non-vascular plants, fungi and lichens.

<sup>10</sup> For this assessment the definition of a veteran tree is taken from Annex 2 of the National Planning Policy Framework (Ref 1-9) (glossary): "A tree which, because of its great age, size or condition is of exceptional value for wildlife, in the landscape, or culturally."

<sup>11</sup>Where features are situated outside of the Site Boundary, the distance and direction are given at the closest point of the designated site from the Site

#### Poor Semi-improved Grassland

- 2.3.4 Cultivated land which has been set-aside (taken out of agricultural productivity) for at least ten years is the predominant habitat within the West Site, which has reverted to rank grassland with tall ruderals (**Annex C**; TN1). The vegetation comprises a mixture of common tall grass and ruderal plant species that mainly includes false oat-grass (*Arrhenatherum elatius*), tall fescue (*Schedonorus arundinaceus*), tufted hair-grass (*Deschampsia cespitosa*), meadow foxtail (*Alopecurus pratensis*), great willowherb (*Epilobium hirsutum*), common fleabane (*Pulicaria dysenterica*), bristly oxtongue (*Helminthotheca echioides*), broad-leaved dock (*Rumex obtusifolius*), curled dock (*Rumex crispus*), wild teasel (*Dipsacus fullonum*) and spear thistle (*Cirsium vulgare*).
- 2.3.5 Around areas with impeded drainage and/or bare ground the following plant species were prevalent: hard rush (*Juncus inflexus*), brown sedge (*Carex disticha*), creeping bent (*Agrostis stolonifera*), smooth meadow-grass (*Poa pratensis*), colt's-foot (*Tussilago farfara*), dandelion (*Taraxacum officinalis* agg.), smooth tare (*Ervum tetrasperma*), common vetch (*Vicia sativa*) and cut-leaved crane's-bill (*Geranium dissectum*).

#### Scattered Scrub

- 2.3.6 Goat willow (*Salix caprea*) scrub and smaller patches of bramble (*Rubus fruticosus* agg.) have colonised the western and eastern parts of the West Site (**Annex C**; TN2); it is assumed from a review of aerial photography that these fields have been left undisturbed for longer than the central field, which remains predominantly grassland habitat.

#### Swamp

- 2.3.7 Areas dominated by common reed and so is consistent with the swamp habitat category occurs in most of the ditches within the West Site.

#### Ditches

- 2.3.8 There are several man-made ditches alongside the road infrastructure in the northern part of the West Site that link up to the wider ditch network (**Annex C**; TN3). Based on a review of historical aerial photography, these ditches appear to have been created as part of the West Site enabling works around five years ago. These have now become overgrown with dense stands of common reed. There are also two ditches present which form boundaries between the three fields (running north to south), which are also overgrown with dense stands of common reed. The ditches are approximately 1.5m wide, with fluctuating water depth (between 10cm and 60cm) and have a very slow flow.
- 2.3.9 There is a ditch present along the southern boundary of the West Site (between the fields and the adjacent landfill), which is approximately 1.5m wide. This ditch supports no aquatic or emergent vegetation predominately due to shading from overhanging hedgerow present on the south side of the ditch.

#### Hedgerows

- 2.3.10 Species-poor hedgerows occur alongside the southern boundary and central ditches that form the field boundaries. Hawthorn (*Crateagus monogyna*) is the dominant species, with blackthorn (*Prunus spinosa*) occasional and dog rose (*Rosa canina* agg.) rare. The unmanaged hedgerows (approximately 3m tall and 3m wide) are insufficiently species-rich and lack supporting features that would result in them being potentially classified as ‘Important’ hedgerows, as defined by The Hedgerows Regulations 1997 (Ref 1-6) criteria.

#### *East Site – Hydrogen Production Area*

- 2.3.11 This part of the Site is dominated by hardstanding and is currently in use for port related storage. The hardstanding area is surrounded by a windbreak of mature Monterrey cypress (*Cupressus macrocarpa*).

#### *East Site – Ammonia Storage Area*

##### Dense/ Scattered Scrub

- 2.3.12 Aerial photography indicates that this triangular piece of land was under arable cultivation until around 2007, after which the cultivation of the site was abandoned. Since then the habitat has become invaded by bramble and establishing silver birch, goat willow and butterfly-bush (*Buddleja davidii*) scrub, which is dense in parts. The scrub surrounds a central square portion of the site, which has been cleared and appears to have been used periodically for storage since c. 2009 (**Annex C**; TN4).

##### Ephemeral/Short Perennial

- 2.3.13 The central area of this part of the site has been cleared and used for port storage since around 2009, although the surface remains unsealed, having been laid with crushed aggregate (**Annex C**; TN4). Consequently, some scattered vegetation is becoming established with species indicative of pioneer communities on nutrient-poor substrate, such as groundsel (*Senecio vulgaris*), yellowwort (*Blackstonia perfoliate*) and common ragwort (*Senecio jacobaea*). This habitat lacks the variety of topography and diversity of ecological habitats to meet the criteria of the UK Priority habitat type “*open mosaic habitat on previously disturbed land*”.

#### *Pipe Rack and Jetty Access Road Corridor*

##### Mature Broad-leaved Woodland

- 2.3.14 A narrow band of woodland approximately 40m in width located on the north side of Laporte Road; the same woodland band also continues south from Laporte Road and is essentially split into two halves by the road, although only the northern section is within the Site Boundary. The woodland is bound to the north by the flood embankment (beyond which is the estuary), to the south by Laporte Road, to the north-west by industrial land (Associated Petroleum Terminal) and to the south-east by arable farmland. The woodland (including the section south of Laporte Road) is subject to a Tree Preservation Order (“TPO”). A Public Right



of Way (bridleway) runs through the eastern extent of the woodland connecting Laporte Road with the public right of way along the top of the flood embankment.

- 2.3.15 The canopy comprises abundant ash (*Fraxinus excelsior*) and frequent pedunculate oak (*Quercus robur*) (**Annex C**; TN5). The understorey mainly comprises hawthorn (*Crateagus monogyna*), elder (*Sambucus nigra*) and wych elm (*Ulmus glabra*), with occasional dog rose (*Rosa canina* agg.), blackthorn (*Prunus spinosa*) and wild privet (*Ligustrum vulgare*). The field layer is dominated by common nettle (*Urtica dioica*), with frequent bramble (*Rubus fruticosus* agg.), false brome (*Brachypodium sylvaticum*), wood avens (*Geum urbanum*) and occasional cleavers (*Galium aparine*), rough meadow-grass (*Poa trivialis*), wood dock (*Rumex sanguineus*), ivy (*Hedera helix*), herb-Robert (*Geranium robertianum*) and hogweed (*Heracleum sphondylium*). However, the diversity of ground flora is constrained by the relatively dense canopy and extensive low growing bramble shrub in parts.
- 2.3.16 There is evidence of previous conservation work within the woodland undertaken in around 2016, and involved some scattered tree-planting. There is evidence of fly tipping in places throughout the woodland.
- 2.3.17 A small drainage ditch runs along the western boundary, and physically separates the woodland from the industrial land to the west. The ditch was mostly dry at the time of the Phase 1 Habitat survey, with no species either within the channel or on the bankside/margins to indicate it held water on a regular basis. The ditch is culverted beneath Laporte Road, and connects into the main drainage ditch at the landward toe of the flood embankment (**Annex C**; TN6), where it forms part of the drainage system that outfalls into the Humber Estuary via a tidal sluice on North Beck Drain.

#### *Laporte Road Temporary Construction Area*

- 2.3.18 This part of the site is located within a large arable field fronting the Humber Estuary, which was under wheat/maize crop at the time of the Phase 1 Habitat survey in spring 2023. The field is bound to the west by Long Strip woodland, to the south by Laporte Road and the Polynt Factory, to the north by a large drainage ditch and flood embankment and to the east by North Beck Drain.

#### *Queens Road Temporary Construction Area*

##### Ephemeral/short perennial

- 2.3.19 The dominant habitat within this part of the Site Boundary is an area of relatively recently cleared land, which is laid to crushed aggregate having been used for port-related storage (**Annex C**; TN7). Some ephemeral/short perennial species are beginning to colonise the hardstanding through natural succession including mayweed (*Tripleurospermum* sp.), mugwort (*Artemisia vulgaris*), greater willowherb (*Epilobium hirsutum*), sow thistle (*Sonchus* sp.), ragwort (*Senecio jacobaea*), coltsfoot (*Tussilago farfara*) and common bird's-foot trefoil (*Lotus corniculatus*). This habitat lacks the variety of topography and diversity of ecological habitats to meet the criteria of the UK Priority habitat type “open mosaic habitat on previously disturbed land”.

Species-poor defunct hedgerow

- 2.3.20 A mature unmanaged hawthorn hedgerow is present along a dry ditch that forms the northern boundary of this part of the Site (**Annex C**; TN8). Occasional bramble and dog-rose is also present. The hedgerow is overgrown and unmanaged and is considered structurally defunct.
- 2.3.21 The dry ditch wraps around the southern part of the site (on the north side of Queens Road), where there is also abundant overgrown bramble and hawthorn scrub, and tall ruderal species including common nettle, mugwort, teasel (*Dipsacus fullonum*) and rosebay willowherb (*Chamaenerion angustifolium*).

*Pipeline Corridor*

- 2.3.22 The pipeline corridor connects the East Site – Storage site, East Site – Hydrogen Production area, Queens Road Temporary Construction Area and the West Site. The habitats within the Pipeline Corridor are described in respect of the above sites, with the exception of a small area that crosses land north of Queens Road; however, this is entirely within the sealed surfaced parking area of the new Border Control post building and therefore does not support any semi-natural habitats. This part of the Site Boundary is therefore not considered in isolation since any potential ecological constraints will be identified through their inclusion within the aforementioned parts of the Site Boundary.

**Constraints and Recommendations**

- 2.3.23 The woodland (Long Strip) within the Site Boundary will be directly impacted by the construction of the Pipe Rack and Jetty Access Road. The woodland has been assessed against the LWS selection criteria and is not considered to meet any of the criteria for woodland (see **Annex E**). This is concurrent with the results of a previous survey undertaken by Lincolnshire Wildlife Trust (“LWT”) in 2008, in which the woodland habitat was reviewed against LWS site selection criteria at that time, and consequently it is not covered by a LWS designation.
- 2.3.24 The woodland is not listed on Natural England’s Ancient Woodland Inventory, and supports a low diversity of ground flora species that are not indicative that the woodland is ancient in origin. Historic Ordnance Survey (“OS”) maps indicate that the woodland has been in place since at least the first edition OS map (in 1893), and in accordance with Forestry Commission guidance this is considered sufficient evidence to conclude that it represents ‘Long Established Woodland’, the land having been wooded for at least 130 years. The loss of mature deciduous woodland, which is a UK Priority Habitat, is assessed in more detail within the ES, and will require bespoke compensation as it is understood there are limited opportunities for replacement planting within the operational Site Boundary.
- 2.3.25 No other habitats of principal importance were recorded within the Site Boundary. The Project will result in the removal of scrub, hedgerows, ephemeral/short perennial habitat and ditches that support common reed within the West Site, East Site – Ammonia Storage area and Queens Road Temporary Construction Area. Mitigation for the loss of hedgerows and other biodiversity will be incorporated within a Landscape and Ecology Management Plan (“LEMP”) where



possible, to meet local and national planning policy requirements for impacts on biodiversity.

## 2.4 Badger

### **Desk Study**

- 2.4.1 There is one recent record of badger within the Study Area, approximately 1.5km south of the Site. Badger surveys conducted of the West Site in 2011 and 2013 for planning application DM/1027/13/OUT did not record any evidence of badger within the Study Area.
- 2.4.2 No badger evidence was recorded in surveys undertaken for the construction of the Border Control post in 2020 (Planning Ref: DM/1057/20/SCR), which included land within the Queens Road Temporary Construction Area.
- 2.4.3 No badger evidence was recorded in surveys of the landfill site in 2017 (which is immediately south of the West Site) for the condition variation for changes to the final landform (Planning Ref: DM/0968/19/FUL).

### **Field Survey**

- 2.4.4 Whilst it is possible that badgers may transiently use the West Site, as the grassland and scrub provide suitable foraging habitat, no setts were recorded within this part of the Site. This is consistent with the results of desk study data obtained from previous surveys undertaken for the planning application DM/1027/13/OUT on this part of the Site Boundary.
- 2.4.5 No evidence of badgers was found within the woodland band associated with Long Strip within the Pipe Rack and Jetty Access Road Corridor. The dense areas of scrub within the East Site – Storage site were inaccessible during the extended Phase 1 habitat survey; however, vegetation clearance for Ground Investigation (“GI”) works on this part of the Site Boundary in January/February 2023 were undertaken under the supervision of an Ecological Clerk of Works (“ECoW”) as a precaution to address the low risk to badgers (and reptiles), and no evidence of badger setts or badger usage was found in the areas cleared. It is therefore concluded that badger is likely absent from the Site Boundary.
- 2.4.6 No other habitat potentially suitable for badger was identified within the Site Boundary.

### **Constraints and Recommendations**

- 2.4.7 The Site Boundary is surrounded by roads and badgers are vulnerable to road traffic injury or fatality, therefore reducing the likelihood of badger being present. Given the lack of badger field signs on other parts of the Site Boundary that were potentially suitable for badger and which were accessible for the purposes of a badger survey, and the lack of known records of badger in the wider local area, it is reasonable to conclude that the species is likely absent from habitats within the Site Boundary. In summary, badger is not considered to be a constraint to the Project.

## 2.5 Bats

### Desk Study

- 2.5.1 There are a few recent records of bats within the Study Area; one of an unknown species of bat grounded at Grimsby in 2014 (TA 190 152) and one of an unknown species of bat grounded at in a residential area at Immingham (TA 179 151).
- 2.5.2 No bat activity surveys were undertaken for the consented 2013 planning application on the West Site (Planning Reference: DM/1027/13/OUT) because the habitats were concluded to be sub-optimal for foraging bats, mainly as a result of the lack of connectivity between the habitats on Site and suitable bat foraging/ commuting habitat in the wider local area.
- 2.5.3 Similarly, no bat activity surveys were undertaken in 2020 for the consented Border Control post planning application (Planning Ref: DM/1057/20/SCR), which included land within the Queens Road Temporary Construction Area, because the habitats were concluded to be unsuitable.
- 2.5.4 A series of walked bat activity transects was undertaken in the landfill site in 2017 for the condition variation application (Planning Ref: DM/0968/19/FUL); this is immediately south of the West Site. These recorded very low numbers of common pipistrelle (*Pipistrellus pipistrellus*) and noctule (*Nyctalus noctula*) bats foraging and commuting over the site. Static detectors deployed during this period recorded greater numbers of bat passes, but records were similarly limited to a small suite of common species, with passes dominated by common pipistrelle bats.

### Field Survey

- 2.5.5 It is possible that bats may forage/commute over the West Site; however, any such usage by foraging bats would be by low numbers of common bat species, given the low quality of the habitats present. The grassland within West Site is not particularly diverse to provide opportunities for a large invertebrate faunal assemblage to attract feeding bats, and the site is relatively open and exposed. There is limited habitat connectivity via the surrounding hedgerow network to any other habitats of high quality for foraging/commuting bats, and this further reduces the likelihood that the habitats within the Site would be well-used by bats.
- 2.5.6 Bat foraging activity may also occur in associated scrub/grassland and hedgerow habitats e.g. East Site – Ammonia Storage area and Queens Road and Laporte Road Temporary Construction Areas, and within the mature plantation screening belt around the East Site – Hydrogen Production area although given the lack of good habitat connectivity to suitable bat foraging/commuting habitat elsewhere in the wider local area would not be expected to support anything other than low numbers of common bat species.

- 2.5.7 The woodland within Long Strip (within the Pipe Rack and Jetty Access Road Corridor) offers potentially suitable roosting and foraging/commuting habitat for bats, although is rather isolated from higher value habitats in the wider local area. There are no buildings or other structures within the Site Boundary that could provide potential bat roosting habitat.

#### **Constraints and Recommendations**

- 2.5.8 It is recommended that the Project is designed, where possible, to avoid light spillage on to any sections of retained hedgerows and ditches surrounding the Site Boundary to avoid displacement over habitat that could be used for foraging by bats.
- 2.5.9 Bat foraging surveys have been undertaken in spring/summer 2022 within the Site Boundary. These bat activity surveys confirmed there is only occasional and transient use of habitats in the Site by small numbers of common species of bats. The results of the surveys are presented in **Appendix 8.C [TR030008/APP/6.4]**. The surveys included all habitats and mature trees within the East Site – Ammonia Storage area and the Pipe Rack and Jetty Access Road Corridor.
- 2.5.10 A Preliminary Roost Features (“PRF”) survey has been undertaken of all mature trees within Long Strip Woodland (see results presented in **Appendix 8.C [TR030008/APP/6.4]**) and a number were identified as having bat roost potential. However, given the low numbers of bats recorded during the activity surveys, it is reasonable to conclude that any roosting activity within the trees would be low numbers of common species of bats, should any roosts be subsequently identified.
- 2.5.11 Bat emergence surveys of mature trees within the woodland that have moderate and high bat roost potential, and which will be impacted by the Project are ongoing in summer 2023. Where bat roosts are recorded and will be impacted by the Project, appropriate mitigation either through a EPSM or Class Licence approach will be followed, whichever is appropriate for the species/type of roost(s) present.

## 2.6 Otter

### **Desk Study**

- 2.6.1 There is one recent record of otter within the Study Area (specific location is withheld from LERC data). Otter surveys of the West Site in 2011 and 2013 (excluding the newer ditches around the new road infrastructure, which had not been created at that time) for planning application DM/1027/13/OUT did not record any evidence of this species within the West Site.
- 2.6.2 Surveys of the waterbodies and ditches in the landfill site to the south of West Site for planning application DM/0968/19/FUL did not record any evidence of otter.

## Field Survey

- 2.6.3 It is possible that otters visit the West Site as a place for transient rest or shelter given that they are likely present in the nearby Humber Estuary, but no sign of their presence or suitable breeding features were identified. The ditches within the West Site are shallow and likely to be predominantly dry most of the time (due to being heavily overgrown with common reed) and therefore would not be expected to support sufficient fish to provide prey for foraging otter such that they would be expected to regularly visit the West Site.
- 2.6.4 The ditch that runs along the north-western boundary of Long Strip woodland (within the Pipe Rack and Jetty Access Road Corridor) is dry along the majority of its length and therefore likely to be unsuitable for otter.
- 2.6.5 The ditch at the landward toe of the flood embankment is adjacent to the estuary (within the Pipe Rack and Jetty Access Road Corridor) and is therefore potentially the most suitable for this species as it provides some cover in the form of bulrush marginal cover (although the banks are kept mown short by the Environment Agency as they are on the flood embankment). North Beck Drain (runs along south-eastern boundary of the Temporary Compound Area) is also potentially suitable for this species, being a large main watercourse with good connectivity to the wider drainage network, and out-falling to the estuary via a tidal sluice.
- 2.6.6 There are several other minor drainage ditches within the wider Site Boundary that may be suitable for otter, although none are sufficiently large to support a resident otter population.

## Constraints and Recommendations

- 2.6.7 The Site Boundary is surrounded by roads and otters are vulnerable to road traffic injury or fatality, therefore reducing the likelihood of otter being present. There are several ditches within the Site Boundary that may be suitable for this species, and therefore specific surveys for this species on all suitable ditches within the Site Boundary were undertaken in 2022 and 2023. Although no evidence of otter was recorded, transient presence of this species cannot be ruled out and therefore precautionary mitigation will be required. The results of the surveys are presented in **Appendix 8.D [TR030008/APP/6.4]**.

## 2.7 Water Vole

### Desk Study

- 2.7.1 The LERC data returned two recent records of water vole within the Study Area. The closest/most relevant of these records is associated with a ditch on the north side of Kings Road, which is approximately 55m from the West Site (on the opposite side of the road from the West Site). There are also old (pre-2013) records of this species on watercourses on the south side of Queens Road, which are outside the Site Boundary but close to the landfill site.

- 2.7.2 Water vole surveys of the ditches on the West Site in 2011 and 2013 (excluding the newer ditches around the new road infrastructure, which had not been created at that time) conducted to support planning application DM/1027/13/OUT did not record any evidence of this species within the West Site.
- 2.7.3 Water vole surveys of the ditches and the waterbodies within the landfill site south of West Site in 2017, 2018 and 2019 for planning application DM/0968/19/FUL recorded abundant field signs including burrows, droppings and feeding remains, indicating that the species was widespread in suitable habitat within the landfill site (towards the southern end of the landfill site).
- 2.7.4 The citation for Laporte Road Brownfield Site LWS indicates the presence of a water vole population on the ditch to the north (North Beck Drain), which runs adjacent to the south-eastern boundary of the Laporte Road Temporary Construction Area. There are also several old (pre-2013) records of water vole from this ditch in the desk study data returned by LERC.

### Field Survey

- 2.7.5 No signs of water vole presence were recorded during the initial inspections of the ditches within the West Site. The ditches at the West Site are subject to great fluctuation in water level and flow. Some ditch sections support dense stands of common reed and the remainder support sparse or no emergent vegetation due to shading from overhanging hedgerow vegetation.
- 2.7.6 The ditch that runs along the north-western boundary of Long Strip woodland (within the Pipe Rack and Jetty Access Road Corridor) was dry along the majority of its length and supported no marginal or aquatic vegetation to indicate it held water regularly. This ditch is concluded to be unsuitable for water vole. There were also several dry ditches within other parts of the Site Boundary within the Pipeline Corridor, Queens Road Temporary Construction Area, East Site – Ammonia Storage area and East Site – Hydrogen Production area. These habitats were therefore considered unsuitable for water vole.
- 2.7.7 The ditch at the landward base of the flood embankment provides potentially suitable habitat for water vole, and is connected to North Beck Drain, on which the species has been previously recorded.

### Constraints and Recommendations

- 2.7.8 Due to the potential suitability of the habitats and proximity to previous records of water vole, a water vole survey was undertaken of all suitable habitats within the Site Boundary in 2022 and 2023. Water vole was recorded within the Site Boundary and therefore appropriate mitigation for this species is required. The results of the surveys are presented in **Appendix 8.D [TR030008/APP/6.4]**.

## 2.8 Great Crested Newt

### Desk Study

- 2.8.1 There are no recent records of great crested newt (“GCN”) within the Study Area.



2.8.2 On a review of present of potential waterbodies which may provide breeding sites for this species, Ordnance Survey mapping indicates that there are several waterbodies in a wetland complex to the south of the West Site within the adjacent landfill site (approximately 100m south of the Site Boundary). Although the status of these waterbodies cannot be confirmed as they were not accessible, it is likely that they would still be present, as they are likely to be required to facilitate the drainage of the landfill site drainage, however, may be subject to continual change and disturbance and are unlikely to be optimal to support this species. Surveys of these wetland areas conducted in 2011 and 2013 for planning application DM/1027/13/OUT did not identify great crested newt. eDNA surveys of these same ponds in 2017 for the landfill permission condition variation (Planning Ref: DM/0968/19/FUL) did not return any positive GCN eDNA records and the species was considered likely absent.

### **Field Survey**

2.8.3 There are no ponds present within the Site Boundary.

2.8.4 The ditches within the West Site are subject to seasonal fluctuations in water levels and have been observed during the course of other surveys on the West Site to regularly dry out in the spring/early summer. They are therefore unsuitable for breeding great crested newt because they do not regularly hold sufficient water or aquatic vegetation to enable successful breeding activity (the larvae of this species are entirely aquatic until late summer).

2.8.5 A further three waterbodies were identified within 250m of the Project on the 1:25,000 OS map; all are within the Associated Petroleum Terminals complex to the west of Long Strip woodland; these ponds are within 250m of East Site – Hydrogen Production area and Pipe Rack and Jetty Access Road Corridor. These ponds were not accessible at the time of the Phase 1 Habitat survey.

### **Constraints and Recommendations**

2.8.6 The wetland complex to the south of West Site within the landfill site was evaluated to be sub-optimal for great crested newt during previous surveys undertaken for planning applications on the landfill site, due to the presence of fish, waterfowl, poor water quality and a lack of egg laying material. As great crested newt was not recorded in surveys undertaken in the landfill site waterbodies in 2017, and there are major barriers<sup>12</sup> to great crested newt dispersal onto the landfill site and no known populations within 500m that could act as a donor site, it is reasonable to conclude that it is unlikely that the species will have colonised this habitat in the intervening period.

2.8.7 Due to the lack of records in the local area, including from nearest pond(s) to the West Site, and the lack of suitable breeding habitat within the West Site, it is reasonable to conclude that great crested newt is likely absent from within the West Site.

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<sup>12</sup> The following constitute major barriers to dispersal and are unlikely to be traversed by great crested newts: rivers and larger streams; main roads such as A-roads, motorways or any other road with high traffic volume (i.e. high traffic volume during the night when great crested newt are more likely to be dispersing/commuting); and major urban infrastructure including extensive areas of hardstanding and buildings and dense networks of minor roads with little green space.

2.8.8 The three ponds within the Associated Petroleum Terminals site were subject to further investigation in spring 2023 to address the risk of great crested newt presence. GCN was not recorded in any of the surveyed waterbodies, and the species is concluded absent from the Site Boundary. The results of the survey are presented in **Appendix 8.E [TR030008/APP/6.4]**.

## 2.9 Reptiles

### Desk Study

2.9.1 There are no records of common lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder and grass snake (*Natrix helvetica*) within the Study Area. An appraisal of the West Site for the 2013 planning application DM/1027/13/OUT concluded that the West Site was unsuitable for reptiles, and no reptile surveys were undertaken.

2.9.2 Reptile surveys were undertaken in 2017 within the landfill site to the south of West Site for planning application DM/0968/19/FUL and did not record any species of reptiles.

2.9.3 The Project is located outside the geographical range of known populations of smooth snake (*Coronella austriaca*), which are confined to heathlands in the south of England, and sand lizard (*Lacerta agilis*), which are restricted to sandy heathlands in Surrey, Dorset and Hampshire and coastal sand dunes in Merseyside. These species are therefore not considered further.

### Field Survey

2.9.4 The West Site is appraised to be sub-optimal for reptiles as it is dominated by tall rank grassland/ scattered scrub and lacks the mosaic of bare ground, variations in topography and areas of refuge favoured by reptiles. Furthermore, the historic land use of the West Site and relatively isolated nature of the West Site in the wider landscape also reduce its suitability to support reptiles. The ditches within the Site Boundary are heavily overgrown and appear to regularly dry out, and therefore they are appraised as being of low suitability to support aquatic prey species (e.g., frogs or fish) for grass snake.

2.9.5 Habitats within the East Site – Storage site may also be suitable for reptiles as they provide a mosaic of open bare ground areas for foraging, and dense scrub for refuge/hibernation. However, as discussed above in respect of the West Site, the site was also previously under arable cultivation (and thus unsuitable for reptiles until relatively recently). The area is also very isolated from any other potentially suitable reptile habitats within the wider landscape.

2.9.6 No other habitats within the Site Boundary were identified as having the potential to support species of reptiles.

### Constraints and Recommendations

2.9.7 Whilst the habitats within the West Site have changed since the 2013 Site appraisal due to the further development of rank grassland and scrub since the abandonment of agricultural management, they remain sub-optimal for reptiles. There are also no known populations of reptiles in the wider local area that have habitat connectivity to any habitats within any part of the Site Boundary and that

could potentially have colonised the Site in the intervening period. No further surveys for reptiles are considered warranted, as based upon these factors combined it is reasonable to conclude that reptiles are likely absent from the Site and are not therefore considered to be an ecological constraint to the Project.

## 2.10 Breeding Birds

### Desk Study

- 2.10.1 There are recent records for 32 notable<sup>13</sup> bird species within the Study Area. These include five species listed on Annex I of the EC Birds Directive, 13 species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), 15 Species of Principal Importance (“SPI”), and respectively 16 Red List and seven Amber List species included in the Birds of Conservation Concern 5 (“BoCC5”). The records also include 14 species of bird that are priority species in Lincolnshire listed on the Lincolnshire Biodiversity Action Plan (“BAP”).
- 2.10.2 Previous breeding bird surveys of the West Site conducted in 2013 to support the planning application DM/1027/113/OUT recorded the following breeding species on the Site:
- Grassland habitat: ground nesting skylark (*Alauda arvensis*) and meadow pipit (*Anthus pratensis*);
  - Ditches: reed warbler (*Acrocephalus scirpaceus*), sedge warbler (*Acrocephalus schoenobaenus*) and reed bunting (*Emberiza schoeniclus*); and
  - Boundary hedgerows: blackcap (*Sylvia atricapilla*), chiffchaff (*Phylloscopus collybita*), willow warbler (*Phylloscopus trochilus*), whitethroat (*Sylvia communis*), lesser whitethroat (*Sylvia curruca*), tree sparrow (*Passer montanus*), yellowhammer (*Emberiza citrinella*), linnet (*Carduelis cannabina*) and song thrush (*Turdus philomelos*).

### Field Survey

- 2.10.3 The West Site supports grassland, scrub, hedgerows and ditches which will provide opportunities for nesting for a range of general bird species, including some of those that were recorded on the West Site over the winter months (see **Section 2.11**), and those that were previously recorded on the West Site in the 2013 survey.
- 2.10.4 Removal of suitable nesting bird habitat within the nesting bird season (March to September inclusive) should be avoided where possible. If site clearance cannot be avoided in the nesting season, an ecological pre-clearance survey/nest check would be required to assess whether there are any nesting birds within areas to

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<sup>13</sup> Notable bird species are taken as those listed: on Annex I of the EC Birds Directive (2009/147/EC) (Ref 1-10); on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1-11); as Species of Principal Importance (SPI) for the Conservation of Biodiversity in England listed in Section 41 of the Natural Environment and Rural Communities Act 2006 (Ref 1-12); as Red or Amber in the Birds of Conservation Concern (BoCC) 4 (Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) (Ref 1-13). Birds of Conservation Concern 5: The population status of our birds populations. *British Birds* 114, 723-747) (Ref 1-14); bird species or groups listed under the Lincolnshire BAP (Ref 1-5).



be cleared and the mitigation required to prevent harm. However, this approach would not be feasible for habitat clearance within Long Strip Wood given the extensive nature of the nesting habitats present and thus the difficulties in successfully identifying and pinpointing the locations of occupied nests to be avoided.

#### 2.10.5 Wintering Birds

2.10.6 The areas of dense scrub within the East Site – Ammonia Storage area, and the band of mature broad-leaved woodland within Long Strip woodland (in the Pipe Rack and Jetty Access Road Corridor) provide suitable nesting habitat for a range of breeding bird species.

#### Constraints and Recommendations

2.10.7 As discussed in respect of the Humber Estuary SPA/Ramsar designated site, it is not considered that there is any suitable nesting habitat within any part of the Site for the qualifying breeding species, namely, bittern, marsh harrier or avocet, although marsh harrier may use the habitats for foraging at times.

2.10.8 Breeding bird surveys were undertaken on West Site between March and June 2022 and on the mature woodland and scrub within the East Site – Ammonia Storage area and the Pipe Rack and Jetty Access Road Corridor between March and June 2023. The results of the surveys are presented in **Appendix 10.A [TR030008/APP/6.4]**.

2.10.9 The loss of nesting bird habitat within Long Strip woodland will form part of the mitigation/compensation strategy to be agreed with the relevant planning authority for the permanent loss of woodland.

2.10.10 Removal of suitable nesting bird habitat within the nesting bird season (March to September inclusive) should be avoided where possible. If site clearance cannot be avoided in the nesting season, an ecological pre-clearance survey/nest check would be required to assess whether there are any nesting birds within areas to be cleared and the mitigation required to prevent harm. However, this approach would not be feasible for habitat clearance within Long Strip Wood given the extensive nature of the nesting habitats present and thus the difficulties in successfully identifying and pinpointing the locations of occupied nests to be avoided.

### 2.11 Wintering Birds

#### Desk Study

2.11.1 There are recent records for 32 notable<sup>14</sup> bird species within the Study Area. These include 5 species listed on Annex I of the EC Birds Directive, 13 species

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<sup>14</sup> Notable bird species are taken as those listed: on Annex I of the EC Birds Directive (2009/147/EC) (Ref 1-10); on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1-11); as Species of Principal Importance (SPI) for the Conservation of Biodiversity in England listed in Section 41 of the Natural Environment and Rural Communities Act 2006 (Ref 1-4); as Red or Amber in the Birds of Conservation Concern (BoCC) 4 (Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) (Ref 1-13). Birds of Conservation Concern 5: The population status of our birds populations. *British Birds* 114, 723-747) (Ref 1-14); bird species or groups listed under the Lincolnshire BAP (Ref 1-5).

listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), 15 SPI, and respectively 16 Red List and seven Amber List species included in the BoCC5. The records also include 14 species of bird that are priority species in Lincolnshire listed on the Lincolnshire BAP (Ref 1-5).

### Field Survey

- 2.11.2 The land within the West Site was identified as being potentially suitable for overwintering SPA/Ramsar waterbirds. However, the presence of tall and overgrown vegetation restricts the required scanning distances that high tide feeding, roosting and loafing waterbirds prefer in terrestrial habitats.
- 2.11.3 The land within the area proposed for the Laporte Road Temporary Construction Area comprises a large arable field fronting the Humber Estuary. The field is bound to the west by Long Strip woodland and to the East by North Beck Drain. As this land is in close proximity to intertidal feeding areas along the coastline, it is possible that wintering/passage waterbirds could use the habitat for feeding, roosting and loafing at high tide.

### Constraints and Recommendations

- 2.11.4 Further wintering bird surveys were undertaken to determine if land within the West Site and Laporte Road Temporary Construction Area supported qualifying overwintering SPA/Ramsar waterbirds and could be considered to be functionally linked to the Humber Estuary SPA/Ramsar. Surveys of the West Site were undertaken in early 2022; surveys of the Laporte Road Temporary Construction Area were undertaken monthly over winter 2022/23. As stated above in respect of the Humber Estuary SPA/Ramsar, the surveys concluded that no land within the Site Boundary is functionally linked to the Humber Estuary. The results of the surveys are presented in **Appendix 10.A [TR030008/APP/6.4]**.
- 2.11.5 No other land within the Site Boundary has the potential to provide feeding, roosting or loafing habitat for qualifying species of SPA/Ramsar wintering/passage waterbirds.
- 2.11.6 The Project will require the removal of scrub, hedgerow and poor semi-improved grassland habitats. This will result in the displacement of common wintering birds including a low number of notable species that frequent the Site to similar adjacent habitats. The displacement of low number of birds including notable species that frequent the Site to similar adjacent habitats is not considered a constraint to the Project.

## 2.12 Terrestrial Invertebrates

### Desk Study

- 2.12.1 There are ten recent records of notable<sup>15</sup> terrestrial invertebrates within the Study Area. The closest of these records is associated with white-letter hairstreak butterfly (*Satyrrium w-album*) which was recorded within Long Strip Woodland.

### Field Survey

- 2.12.2 A walkover of the habitats within the Site Boundary was undertaken by a terrestrial invertebrate specialist in July 2022 to appraise the suitability of the habitats for rare or notable invertebrate species. The appraisal was undertaken in accordance with protocols outlined in NERR005 (Ref 1-15); whilst this document has been withdrawn as guidance as of 2021, the sampling protocols remain useful and recognised as an acceptable approach to an appraisal of habitats for terrestrial invertebrates.
- 2.12.3 A small amount of elm (*Ulmus* spp.), the larval foodplant of white-letter hairstreak, was recorded within Long Strip woodland (within the Pipe Rack and Jetty Access Road Corridor), but was not recorded anywhere else within the Site Boundary.

### Constraints and Recommendations

- 2.12.4 None of the habitats were appraised to be of particular importance for terrestrial invertebrates of conservation interest, given the low floristic diversity of the rank grassland and scrub which would reduce food and larvae resources. The presence of lesser hairstreak butterfly within Long Strip Woodland is assumed given the desk study records, and the presence of elm within the woodland.
- 2.12.5 The loss of terrestrial invertebrate habitat within Long Strip woodland will be considered in the mitigation/compensation strategy to be agreed with the relevant planning authority for the permanent loss of woodland habitat.

## 2.13 Other Species

- 2.13.1 The ditches within the Site Boundary are not suitable for white-clawed crayfish (*Austropotamobius pallipes*) due to seasonal drying and lack of refuges and therefore this species is not considered further.
- 2.13.2 No protected or notable species of plant, or evidence of non-native invasive plant species was recorded during the Phase 1 Habitat Survey.
- 2.13.3 Given the overgrown nature of the grassland habitat, and its relative isolation due to the presence of the surrounding road network and the landfill site to the immediate south, it is considered unlikely that brown hare (*Lepus europeaus*) would be present and breeding on the West Site.

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<sup>15</sup> Notable terrestrial invertebrates are taken as principal species for the conservation of biodiversity listed under Section 41 of the Natural Environment and Rural Communities Act 2006 (Ref 1-4); any invertebrate listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Ref 1-11); any invertebrate listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended) (Ref 1-16); any invertebrate listed in the IUCN Invertebrate Red Data Book (1991) (Ref 1-17); and any invertebrate listed under a Lincolnshire BAP.

- 2.13.4 The habitats within the Site Boundary are potentially suitable for hedgehog (*Erinaceus europaeus*), although given the relatively isolated nature of the Site within the industrial area of the Port of Immingham and the barriers posed by the surrounding road network, any such usage would be likely on a transient and occasional basis only. This species is not considered to represent a constraint to the Project, and any potential risk of killing/ injury of hedgehog during clearance works for construction can be adequately mitigated through a precautionary working method statement.

## 3 Opportunities for Biodiversity Enhancements

### 3.1 General Recommendations

3.1.1 There are likely to be only limited opportunities for biodiversity enhancements within the Site Boundary, given the industrial nature of the Project and the various safety requirements that will be embedded within the design of the infrastructure/ buildings. However, biodiversity enhancements to meet the planning policy requirements (see **Annex B**) have been incorporated into an **Outline Landscape and Ecology Management Plan (“OLEMP”)** [TR030008/APP/6.9], where feasible to deliver within the Site Boundary.

### 3.2 Biodiversity Net Gain

3.2.1 It is government policy that planning decisions should minimise impacts on and provide net gain for biodiversity (National Planning Policy Framework 2019). In addition, the Environment Act 2021 includes provisions to make biodiversity net gain (“BNG”) a mandatory requirement within the planning system in England requiring all relevant developments to achieve a minimum 10% net gain in biodiversity units relative to the Site’s baseline biodiversity value. It is anticipated the secondary legislation mandating the need for 10% net gain will be in place by November 2023 for development within the Town & Country Planning Act, and November 2025 for Nationally Significant Infrastructure Projects (“NSIPs”). Current guidance indicates that NSIPs accepted for examination before the specified commencement date would not be required to deliver mandatory biodiversity net gain (though they could deliver it in response to policy or voluntary commitments). As the Project is an NSIP, it is therefore assumed that no formal BNG calculation is required, although a qualitative approach to biodiversity enhancements will be taken to address existing local and national planning policies. Woodland losses will be compensated for, and habitat enhancement/ creation commitments set out in a LEMP for the Project.

## 4 Conclusions

- 4.1.1 No habitats of high ecological value were identified within the West Site, East Site – Ammonia Storage area, East Site – Hydrogen Production area, Queens Road and Laporte Road Temporary Construction Areas. The West Site comprises three distinct fields separated by ditches/hedgerows that were formerly under arable cultivation, and which have developed into rank, species-poor grassland and scrub through natural succession following the abandonment of arable cultivation around ten years ago. The young scattered and dense scrub within the East Site – Ammonia Storage area has also developed naturally since the abandonment of arable cultivation approximately six years ago.
- 4.1.2 The mature woodland within Long Strip woodland (within the Pipe Rack and Jetty Access Road Corridor) is of high ecological value, particularly given the lack of other woodland within the wider local area due to the industrial nature of the operational port. It is recommended that this woodland is retained and enhanced where possible. Where losses of woodland cannot be reasonably avoided through Project design, an appropriate mitigation/compensation strategy will need to be agreed with the relevant planning authority which will be secured by a Requirement in the draft Development Consent Order (“DCO”).
- 4.1.3 Where the status of species or the potential value of the Site for species/species groups could not be fully determined without additional survey, a summary of the further surveys undertaken is provided in **Table 3**. Further surveys were undertaken throughout 2022 and 2023 to seek to collate sufficiently robust ecological baseline information to inform the ecological impact assessment for the Project.

**Table 3: Summary of Further Surveys Undertaken for the Project**

Feature	Recommendation	Timing	Where the Survey Data is Presented in the ES
Bats (roosting)	PRF appraisal of mature trees within Long Strip woodland.	Spring 2023	<b>Appendix 8.C: Bat Survey Report [TR030008/APP/6.4]</b>
Bats (roosting)	Bat emergence and re-entry surveys of mature trees with identified PRFs in Long Strip Woodland	Summer 2023 [ongoing]	
Bats (foraging)	Bat activity surveys of Long Strip woodland and scrub in Queens Road site.  Combination of monthly walked transects and periods of remote static detector deployment.	Spring/Summer 2022	

Feature	Recommendation	Timing	Where the Survey Data is Presented in the ES
Otter	Presence/ absence survey of ditches on Site	Spring and Autumn 2022	<b>Appendix 8.D: Otter and Water Vole Survey Report [TR030008/APP/6.4]</b>
Water vole	Presence/absence survey of ditches on Site. Methodology involves one initial survey in spring (or autumn) period, where no evidence is recorded or the ditched could not be scoped out as a result of the initial survey, a further survey in autumn (or following spring) period would be required. Where presence is recorded during initial survey the second survey would not be required.	Spring and Autumn 2022	<b>Appendix 8.D: Otter and Water Vole Survey Report [TR030008/APP/6.4]</b>
Great crested newt	Habitat Suitability Index (“HIS”) survey of three ponds within Associated Petroleum Terminals site.  eDNA survey of any ponds with potential to support great crested newt.	Spring 2023	<b>Appendix 8.E: Great Crested Newt Survey Report [TR030008/APP/6.4]</b>
Breeding birds	Five survey visits to map breeding bird territories in accordance with Common Bird Census methodology (Ref 1-19).	Spring/Summer 2022 (West Site)  Spring/Summer 2023 (East Site – Ammonia Storage area and Pipe Rack and Jetty Access Road Corridor)	<b>Appendix 10.A [TR030008/APP/6.4]</b>
Wintering birds	Monthly surveys of land for Laporte Road Temporary Construction Area.	Late winter 2022 (West Site)  Winter 2022/ 2023 (Laporte Road Temporary Compound Area)	<b>Appendix 10.A [TR030008/APP/6.4]</b>



## 5 References

- Ref 1-1 CIEEM (2017). Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Ref 1-2 British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development
- Ref 1-3 North East Lincolnshire Council (adopted 2018) North East Lincolnshire Local Plan 2013 to 2032.
- Ref 1-4 UK Government (2006) Natural Environment and Rural Communities Act 2006
- Ref 1-5 Lincolnshire Biodiversity Partnership, Lincolnshire Biodiversity Action Plan 2011 – 2020 (3rd Edition) October 2011
- Ref 1-6 UK Government (1997) Hedgerow Regulations 1997
- Ref 1-7 ECUS (2013) Kings Road Industrial Development, Immingham. Environmental Impact Assessment: Environmental Statement Volume One. ECUS, Sheffield.
- Ref 1-8 Greater Lincolnshire Nature Partnership (GLNP) Local Wildlife Site Guidelines for Greater Lincolnshire 3rd edition. April 2013.
- Ref 1-9 Ministry of Housing, Communities and Local Government (2021). National Planning Policy Framework.
- Ref 1-10 EC Birds Directive (2009/147/EC)
- Ref 1-11 UK Government (1981) Wildlife and Countryside Act 1981 (as amended)
- Ref 1-12 UK Government (2006) Natural Environment and Rural Communities Act 2006
- Ref 1-13 Birds of Conservation Concern (BoCC) 4 (Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015).
- Ref 1-14 Birds of Conservation Concern 5: The population status of our birds populations. British Birds (114, 723-747)
- Ref 1-15 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, Sheffield.
- Ref 1-16 Conservation of Habitats and Species Regulations 2017 (as amended).
- Ref 1-17 IUCN Invertebrate Red Data Book (1991).
- Ref 1-18 Natural England (2021) Biodiversity Net Gain Defra Metric 3.1.



- Ref 1-19 Marchant, J.H. (1983). BTO Common Bird Census Instructions. British Trust for Ornithology, Thetford.
- Ref 1-20 Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
- Ref 1-21 Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (the Ramsar Convention)
- Ref 1-22 English Nature (2004) Reptiles: guidelines for developers.
- Ref 1-23 Collop, C. (ed.), (2011). Lincolnshire Biodiversity Action Plan. 2011-2020 (3rd edition). Lincolnshire Biodiversity Partnership, October 2011.
- Ref 1-24 UK Government (2006) Natural Environment & Rural Communities Act 2006
- Ref 1-25 Natural England (2010) England Biodiversity List.
- Ref 1-26 English Nature (2001). Great Crested Newt Mitigation Guidelines.
- Ref 1-27 Natural England (2004). An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (ENRR576)
- Ref 1-28 Joint Nature Conservation Committee (2010) Handbook for Phase 1 habitat survey - a technique for environmental audit.
- Ref 1-29 Stace, C E (2019) New Flora of the British Isles, 4th Edition. Cambridge University Press.
- Ref 1-30 Scottish Badgers (2018). Surveying for Badgers: Good Practice Guidelines. Version 1.
- Ref 1-31 Harris, S. Cresswell, P. and Jefferies, D. (1989). Surveying Badgers.
- Ref 1-32 Collins, J.(ed) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conversation Trust. London.
- Ref 1-33 Ward, D. Holmes, N. Jose, P. (1994). The New Rivers and Wildlife Handbook. Royal Society for the Protection of Birds. Bedfordshire.
- Ref 1-34 Chanin, P (2003). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No 10. English Nature, Peterborough.
- Ref 1-35 Dean, M. Strachan, R. Gow, D. Andrews, R. (2016). The Water Vole Mitigation Handbook (The Mammal Society Guidance Series). Eds Fiona Mathews and Paul Chanin. The Mammal Society. London.
- Ref 1-36 English Nature (2001). The Great Crested Newt Mitigation Guidelines.
- Ref 1-37 Froglife (2001). The Great Crested Newt Conservation Handbook.

- Ref 1-38 Froglife (1999). Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.
- Ref 1-39 Joint Nature Conservation Committee (2003). Herpetofauna Workers Manual.
- Ref 1-40 Department for Transport (2012) National Policy Statement for Ports.

## Annex A: Relevant Legislation and Planning Policy

### 1.1 Legislation

- 1.1.1 The UK is no longer a member of the European Union (“EU”). EU legislation as it applied to the UK on 31 December 2020 is now a part of UK domestic legislation. EU legislation which applied directly or indirectly to the UK before 23:00 on 31 December 2020 has been retained in UK law to date as a form of domestic legislation known as ‘retained EU legislation’.
- 1.1.2 The Secretary of State for the Environment, Food and Rural Affairs and Welsh Ministers have made changes to parts of the *Conservation of Habitats and Species Regulations 2017* (referred to as the 2017 Regulations) (Ref 1-16) so that they operate effectively. Most of these changes involve transferring functions from the European Commission to the appropriate authorities in England. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

### 1.2 Designated Sites

#### **Special Protection Areas (“SPA”) / Special Areas for Conservation (“SAC”)**

- 1.2.1 These sites in the UK no longer form part of the EU’s Natura 2000 ecological network. The *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019* (referred to as the 2019 Regulations) (Ref 1-20) have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes:
- a. Existing SACs and SPAs; and
  - b. New SACs and SPAs designated under these Regulations.
- 1.2.2 Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network.
- 1.2.3 Formal Appropriate Assessment is required to be undertaken by the competent authority before undertaking, or giving consent, permission or other authorisation for any work which are likely to have a significant effect on such a site.

#### **Wetland of International Importance (Ramsar site)**

- 1.2.4 Designated under the *Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971* (the Ramsar Convention) (Ref 1-21), in the UK, these sites are treated as having the same level of protection as SPA’s and SAC’s.

#### **Sites of Special Scientific Interest (“SSSI”)**

- 1.2.5 Under the *Wildlife and Countryside Act 1981* (as amended) (Ref 1-11), it is an offence to carry out or permit to be carried out any operations likely to damage the SSSI. These operations are listed in the SSSI notification.

- 1.2.6 Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 of the *Wildlife and Countryside Act 1981* (as amended) (Ref 1-11), before undertaking operations likely to damage a SSSI.

### **Locally Designated Sites**

- 1.2.7 Local Wildlife Sites are sites with ‘substantive nature conservation value’. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species with a region. They are recognised as important in local planning policy but do not have the statutory protection given to SSSI.
- 1.2.8 They are usually selected by the relevant Wildlife Trust, along with representatives of the local authority and other local wildlife conservation groups.
- 1.2.9 The Local Wildlife Sites selection panel, selects all identified sites that meet the locally assigned criteria and are important at District or County geographic scales. However, some Local Wildlife Sites may be of greater importance for nature conservation, equivalent to SSSI. This is because for some types of habitat, the designated SSSI are a representative sample of sites that meet the national criteria for SSSI rather than all potentially qualifying sites in an area. Depending on their management, Local Wildlife Sites may also change over time and may no longer meet the original criteria for their designation, but they may have potential for recovery under suitable management.

## **1.3 Protected Species**

### **Bats/Otter/Great Crested Newt**

- 1.3.1 These species, known as European Protected Species, are protected under Regulation 43 of the 2017 Regulations as amended by the 2019 Regulations. This makes it an offence to deliberately capture, injure or kill an animal; deliberately disturb an animal; or damage or destroy a breeding site or resting place used by an animal.
- 1.3.1 Deliberate capture or killing is taken to include “accepting the possibility” of such capture or killing. Deliberate disturbance of animals includes in particular any disturbance which is likely a) to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of hibernating or migratory species, to hibernate or migrate; or b) to affect significantly the local distribution or abundance of the species to which they belong.
- 1.3.2 Where development works are at risk of causing one or more of the offences listed above, a mitigation licence from Natural England can be obtained to facilitate the works that would otherwise be illegal.
- 1.3.3 These species are also protected under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) (Ref 1-11). This makes it an offence to intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb an animal in such a place.

- 1.3.4 Lower levels of disturbance not covered by the *Conservation of Habitats and Species Regulations 2017* remain an offence under the *Wildlife and Countryside Act 1981* although a defence is available where such actions are the incidental result of a lawful activity that could not reasonably be avoided.

#### **Water Vole**

- 1.3.5 Water voles are protected under the *Wildlife and Countryside Act 1981* (as amended). There are no licensing purposes that explicitly cover development or other construction activities which could have an impact on water voles.
- 1.3.6 When development work is proposed in or near an area which is either known to or likely to contain water voles, then the developer will need to implement suitable mitigation to prevent impacts to water voles. The preferred mitigation option is to leave water voles *in situ*, with the development works adopting avoidance measures through redesign of the proposals.
- 1.3.7 Where impacts cannot be avoided, operations aimed at displacing water voles from a development site are now no longer covered by the “*incidental result of an otherwise lawful action*” defence in the *Wildlife and Countryside Act 1981* (as amended). Displacement of water voles now needs to be undertaken under a licence.
- 1.3.8 In England, small scale (limited to continuous lengths of bank not exceeding 50m) displacement of water voles can be carried out at certain times of the year (February to April) for the purposes of conservation under a Class Licence by a registered person. For larger scale displacements or displacements outside of this period, displacement can be undertaken under a site-specific conservation licence.
- 1.3.9 Where it is considered that the best outcome for water voles is capture and translocation to a different location then this action is considered by Natural England to be outside the scope of the defence as the intentional capture of water voles is unlikely to be considered ‘incidental’. In these circumstances there may be genuine grounds for issuing a conservation licence for the purpose of translocating the water vole population to suitable alternative habitat.

#### **Nesting Birds**

- 1.3.10 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended), with some species afforded greater protection under Schedule 1 of the *Wildlife and Countryside Act 1981* (as amended). In addition to the protection from killing or taking that all birds receive, Schedule 1 birds and their young must not be disturbed at the nest.
- 1.3.11 There are no licensing purposes that explicitly cover development activities affecting wild birds.

### **Common Species of Reptile (common lizard, slow worm, grass snake and adder)**

- 1.3.12 Common species of reptile are protected against intentional killing and injury under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended). There is no requirement for a licence where development works affect common species of reptiles. Instead, Natural England advise<sup>16</sup> that where reptiles are present, they should be protected from any harm that might arise during the development works through appropriate mitigation.

### **Badger**

- 1.3.13 Badgers and their setts are protected under the *Protection of Badgers Act 1992* (as amended). This makes it an offence to wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett.
- 1.3.14 It is not illegal to carry out disturbance activities near setts that are not occupied, i.e. those that do not show signs of current use.
- 1.3.15 Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England. Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process.
- 1.3.16 When assessing the requirement for a licence in respect of development, Natural England<sup>17</sup> state that badgers are relatively tolerant of moderate levels of noise and activity around their setts, and that a low or moderate level of apparent disturbing activity at or near to badger setts does not necessarily disturb the badgers occupying those setts.
- 1.3.17 Licences are normally not granted from December to June inclusive (the badger breeding season) because dependent cubs may be present within setts.

### **Species and Habitats of Principal Importance for the Conservation of Biodiversity**

- 1.3.18 Section 40 of the *Natural Environment & Rural Communities Act* (“NERC”) 2006 sets out the duty for public authorities to conserve biodiversity in England.
- 1.3.19 Habitats and species of principal importance for the conservation of biodiversity are identified by the Secretary of State for England, in consultation with Natural England, are referred to in Section 41 of the NERC Act for England. The list, known as the ‘England Biodiversity List’, of habitats and species can be found on the Natural England web site.
- 1.3.20 The ‘England Biodiversity List’ is used as a guide for decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 to have regard to the conservation of biodiversity in England when carrying out their normal functions.

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<sup>16</sup>Reptiles: guidelines for developers (Ref 1-22)

<sup>17</sup> Interpretation of ‘Disturbance’ in relation to badgers occupying a sett.



## Hedgerows

- 1.3.21 Under The Hedgerows Regulations 1997, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. In general, permission will be required before removing hedges that are at least 20m in length, over 30 years old and contain certain species of plant. The local planning authority will assess the importance of the hedgerow using criteria set out in the regulations.

## 1.4 Planning Policy

### National Policy Statement for Ports, 2012

- 1.4.1 This Statement (Ref 1-40) is part of the consenting system established under the 2008 Act to deal with nationally significant infrastructure proposals. It provides the framework for decisions on proposals for new nationally significant port development. It is also a relevant consideration for the Marine Management Organisation, established in the Marine and Coastal Access Act 2009, which decides other port development proposals, and for local planning authorities where they have a role to play.
- 1.4.2 Section 5.1 identifies the pathways through which the construction and operation of port infrastructure can have an adverse impact on biodiversity (and geodiversity) and sets out the requirements for applicants and decision makers.
- 1.4.3 Paragraph 5.1.4 states that “*Where the development is subject to EIA, the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity. The applicant should provide environmental information proportionate to the infrastructure where EIA is not required to help the decision-maker consider thoroughly the potential effects of a proposed project.*”
- 1.4.4 Paragraph 5.1.5 states that “*The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.*”

### National Planning Policy Framework (“NPPF”), 2021

- 1.4.5 Although not the primary governing policy document for the purposes of a harbour facility NSIP, the NPPF is nevertheless still an important policy document in respect of ecology and has been taken into account when preparing this PEAR. The NPPF was first published in March 2012 and has been updated in July 2018, February 2019 and most recently in July 2021 (Ref 1-9).
- 1.4.6 The NPPF states the commitment of the UK Government to minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity. It specifies the obligations that the Local Authorities and the UK Government have regarding statutory designated sites and protected species under UK and international legislation and how this it to be delivered in the planning system. Protected or notable habitats and species can be a material consideration in

planning decisions and may therefore make some sites unsuitable for particular types of development, or if development is permitted, mitigation measures may be required to avoid or minimise impacts on certain habitats and species, or where impact is unavoidable, compensation may be required.

- 1.4.7 Chapter 15 of the NPPF ‘Conserving and enhancing the natural environment’ sets out the requirements to consider biodiversity in planning decisions. A summary of the paragraphs of the NPPF relevant to terrestrial ecology and nature conservation, and to the IERRT project, is provided below.

Paragraph 174 states that “*Planning policies and decisions should contribute to and enhance the natural and local environment by*

*a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*

*b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*

*c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*

*d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*

*e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*

*f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate”.*

- 1.4.8 Paragraph 175 states that “*Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.*”

- 1.4.9 Paragraph 179 states that “*To protect and enhance biodiversity and geodiversity, plans should:*

*a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*

*b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity”.*

1.4.10 Paragraph 180 states that “*When determining planning applications, local planning authorities should apply the following principles:*

*a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

*b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*

*c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*

*d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.”*

### **Local Planning Policy**

1.4.11 The local planning policies are detailed in the North East Lincolnshire Local Plan document, adopted in 2018. Policies potentially relevant to the Scheme are outlined in the table below.

<b>Policy Document</b>	<b>Policy Number</b>	<b>Policy Detail</b>
North East Lincolnshire Local Plan 2018	Policy 9 - Habitat Mitigation - South Humber Bank	<p>1. Within the Mitigation Zone identified on the Policies Map (covering an area of agricultural land on the South Humber Bank between Pyewipe and Immingham), proposals which adversely affect the Humber Estuary SPA/Ramsar site due to the loss of functionally linked land will normally be required to provide their own mitigation in order to comply with the requirements of the Habitats Regulations.</p> <p>2. The Strategic Mitigation sites, circa 120ha, identified on the Policies Map, represent those sites which have been identified to deliver appropriate mitigation which will address the adverse impacts of development within the Mitigation Zone at a strategic level. The identified Mitigation Sites will be safeguarded against development, and appropriate habitat will be delivered and managed on these sites in accordance with</p>

Policy Document	Policy Number	Policy Detail
		<p>the North East Lincolnshire South Humber Gateway Ecological Mitigation Delivery Plan.</p> <p>3. Development proposals on greenfield land<sup>18</sup> within the Mitigation Zone will be required to make contributions towards the provision and management of the mitigation sites identified on the Policies Map. Where landowners have contributed to the implementation strategy through the donation of land, the required contribution will be reduced by an equivalent value.</p> <p>4. The Council will secure such contributions, based on a proportional approach relating to the site area. The formula for the calculation of the relevant contribution is as follows:</p> <p>Contribution (£) = SA x (£MC/ha)</p> <p>The Mitigation Contribution (£MC/ha) will be £11,580/ha. This contribution is not index linked.</p> <p>The Contribution shall be paid when development commences on site, or through agreement with the Council where a phase approach to delivery is accepted by the Council.</p> <p>5. All other planning requirement will also be expected to be met.</p> <p>6. On an exceptional basis independent alternative mitigation proposals will be considered on sites within the identified Mitigation Zone. Proposals should be supported by evidence that demonstrates that the alternative mitigation contributes to the overall mitigation strategy and ensures that the development avoids adverse effects on the integrity of the SPA/Ramsar site, alone or in combination. It will be a requirement of any planning consent that mitigation is implemented prior to the commencement of development.</p>
	Policy 41 - Biodiversity and Geodiversity	<p>1. The Council will have regard to biodiversity and geodiversity when considering development proposals, seeking specifically to:</p> <p>establish and secure appropriate management of, long-term mitigation areas within the Estuary Employment Zone, managed specifically to protect the integrity of the internationally important biodiversity sites (see Policy 9'Habitat Mitigation - South Humber Bank');</p> <p>designate Local Wildlife Sites (LWSs) and Local Geological Sites (LGSs) in recognition of particular wildlife and geological value;</p> <p>protect manage and enhance international, national and local sites of biological and geological conservation importance, having regard to the hierarchy of designated sites, and the need for appropriate buffer zones;</p> <p>minimise the loss of biodiversity features, or where loss is unavoidable and justified ensure appropriate mitigation and compensation measures are provided;</p>

<sup>18</sup> Exceptionally brownfield sites may be required to contribute if evidence identifies that SPA/Ramsar birds have been using the site in significant numbers.

Policy Document	Policy Number	Policy Detail
		<p>create opportunities to retain, protect, restore and enhance features of biodiversity value, including priority habitats and species; and,</p> <p>take opportunities to retain, protect and restore the connectivity between components of the Borough's ecological network.</p> <p>2. Any development which would, either individually or cumulatively, result in significant harm to biodiversity which cannot be avoided, adequately mitigated or as a last resort compensated for, will be refused.</p>

### Local Biodiversity Action Plans

- 1.4.12 The Lincolnshire Biodiversity Action Plan (Ref 1-23) was drafted by the Lincolnshire Biodiversity Partnership in 2011, and outlines biodiversity conservation objectives within the region and identifies priorities for action for priority habitats, species, locally important wildlife, and sites.

## Annex B: Methodology

### 1.1 Desk Study

#### **Background Records Search**

- 1.1.1 The preliminary ecological assessment includes a desk study to obtain background records relevant to a Site and the Project. The data obtained provides contextual information for the scope of field surveys, to aid the evaluation of field survey results, and to provide supplementary information where complete field survey coverage is not possible.
- 1.1.2 The Study Area is dependent upon the nature, timing and scale of the Project, as well as the location of the Site and the surrounding landscape. These variables all contribute to what is referred to as the Zone of Influence (“Zoi”) of the Project, which is the area over which ecological features may be affected by biophysical changes because of the works and associated activities. The Study Area is considered to be sufficient to include all of the potential Zone of Influence of the Project and to provide any records which would help to characterise the local area and species which may use the Site and its environs.
- 1.1.3 In March 2022 the LERC was contacted to obtain the following ecological data; the data search was updated in May 2023 to ensure that the data was up-to-date for planning purposes:
- a. Records of non-statutory designated sites (LWS’s) within 2km of the Site Boundary.
  - b. Records of legally protected and notable species (fauna and flora) within 2km of the Site Boundary, including Species of Principal Importance for the Conservation of Biodiversity listed under Section 41 of the Natural Environment & Rural Communities Act 2006 in the England Biodiversity List<sup>19</sup>.
- 1.1.4 The Multi-Agency Geographic Information for the Countryside (“MAGIC”) website ([www.magic.gov.uk](http://www.magic.gov.uk)) was reviewed for the following information:
- a. Designated sites of nature conservation importance (statutory sites only) within 2km of the Site.
  - b. Notable habitats within 2km of the Site, these being areas of ancient woodland and ‘Habitats of Principal Importance for the Conservation of Biodiversity’ included in the England Biodiversity List.
- 1.1.5 Planning applications on the North East Lincolnshire Council Planning Portal were reviewed for relevant ecological information relating to habitats within the Site Boundary or its immediate surrounds.

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<sup>19</sup> Section 40 of the Natural Environment & Rural Communities Act 2006 (Ref 1-24) requires that very public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. The Secretary of State has drawn up, in accordance with Section 41 of the Act and in consultation with Natural England, a list of habitats and species of principal importance for the conservation of biodiversity in England that is known as the *England Biodiversity List* (Ref 1-25)



## Great Crested Newt Pond Search

- 1.1.6 Ordnance Survey maps have been used to identify the presence of water bodies within 250m of the Site Boundary, in order to help establish if the land within and immediately surrounding the Site could be used by Great Crested Newts. This species can use suitable terrestrial habitat up to 500m from a breeding pond (Ref 1-26), though there is a notable decrease in Great Crested Newt abundance beyond 250m from a breeding pond (Ref 1-27).

## Field Survey

### *Extended Phase 1 Habitat Survey*

- 1.1.7 The preliminary ecological assessment includes a walkover survey of the Site, broadly following the Phase 1 habitat survey methodology as set out in Joint Nature Conservation Committee guidance (Ref 1-28). This survey method records information on habitat types and is 'extended' to record any evidence of and potential for protected or notable species to be present. Plant names recorded during the survey follow Stace (2019) (Ref 1-29).
- 1.1.8 During the walkover survey, the following protected or notable species are considered:
- a. **Badger:** the survey involves searching for signs of badger activity including setts, tracks, snuffle holes and latrines, following the methodology detailed in Scottish Badgers (2018) (Ref 1-30) and Harris et al (1989) (Ref 1-31).
  - b. **Bats:** the survey involves searching for potential roosting sites for bats within trees and structures (such as buildings, bridges or underground features such as mines) and categorising the potential of those trees or structures to support roosting bats (negligible to high, or confirmed roost), in accordance with Bat Conservation Trust ("BCT") guidance (2016) (Ref 1-32).
  - c. **Otter:** the survey involves assessing the potential of watercourses and water bodies, and adjacent terrestrial habitat within the Survey Area to support otter, following RSPB (1994) (Ref 1-33) and Chanin, P. (2003) (Ref 1-34) guidance.
  - d. **Water vole:** the survey involves assessing the potential of watercourses and water bodies within the Survey Area to support water vole, following The Mammal Society (2016) (Ref 1-35) guidance.
  - e. **Birds:** the survey involves assessing the potential of habitats within the Survey Area to support breeding, wintering or migrating birds, either individually notable species or assemblages of both common and rarer species.
  - f. **Great Crested Newt:** the survey involves assessing the potential of habitats within the Survey Area to support Great Crested Newt, following English Nature (2001) (Ref 1-36) and Froglife (2001) (Ref 1-38) guidance.
  - g. **Reptiles:** the survey involves assessing the potential of habitats within the Survey Area to support reptiles (typically adder, grass snake, common lizard and slow worm only, though in some locations and habitat types (most




notably heathland) may also include smooth snake and sand lizard), following Froglife (1999) (Ref 1-38) and JNCC (2003) (Ref 1-39) guidance.

- h. **Notable species of invertebrate:** the survey involves assessing the potential of habitats within the Survey Area to support notable species of invertebrates, both terrestrial and aquatic (including white-clawed crayfish).
- i. **Protected or Notable species of plants:** the survey involves identifying the potential for habitats to include protected or notable species of plants and recording them where seen.
- j. **Other notable species:** the survey involves assessing the potential of habitat within the Survey Area to support other Notable Species, such as hedgehog, brown hare, polecat or common toad.
- k. **Non-native invasive plant species:** the survey involves recording evidence of the presence of invasive plants listed on Schedule 9 of the *Wildlife and Countryside Act 1981* (as amended) and subject to strict legal control.

#### Limitations and Assumptions


- 1.1.9 The aim of a desk study is to help characterise the baseline context of a Project and provide valuable background information that would not be captured by a single site survey alone. Information obtained through desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular habitat or species does not necessarily mean that it does not occur in the Study Area. Likewise, the presence of records for particular habitats and species does not automatically mean that these still occur within the area of interest or are relevant in the context of the Project.
- 1.1.20 Where habitat boundaries coincide with physical boundaries recorded on OS maps the resolution is as determined by the scale of mapping. Elsewhere, habitat mapping is as estimated in the field and/or recorded by hand-held Global Positioning System (“GPS”). Where areas of habitat are given these are approximate and should be verified by measurement on site where required for design or construction. While indicative locations of trees are recorded this does not replace requirements for detailed specialist arboricultural survey to British Standard 5837:2012 Trees in Relation to Design, Demolition and Construction.


## Annex C: Target Notes and Photographs

Target Note	Description	Photograph(s)
TN1	Grassland which has established on the formerly cultivated fields that has established.	
TN2	Example of scattered scrub which has established throughout the Site within the grassland.	
TN3	Ditch supporting dense common reed.	





Immingham Green Energy Terminal  
Environmental Statement Appendix 8.B: Preliminary Ecological Appraisal Report


Target Note	Description	Photograph(s)
TN4	Ephemeral/ short perennial habitat within central portion of East Site – Storage Site, with surrounding dense scrub comprising silver birch, goat willow and butterfly-bush.	

Target Note	Description	Photograph(s)
<p>TN5</p>	<p>Mature broad-leaved woodland "Long Strip" on the north side of Laporte Road.</p> <p>Canopy dominated by mature ash and pedunculate oak.</p> <p>Bridleway running along eastern boundary.</p>	



Target Note	Description	Photograph(s)
TN6	<p>Drainage ditch along landward toe of flood embankment.</p> <p>Ditch is heavily overgrown with common reed, with areas of standing water adjacent to the Associated Petroleum Terminal site.</p>	
TN7	<p>Ephemeral/ short perennial vegetation colonizing area of crushed aggregate used for storage.</p>	



Target Note	Description	Photograph(s)
TN8	<p>Unmanaged overgrown hawthorn hedgerow along boundary to Queens Road. There is also a defunct dry ditch within the base of the hedgerow.</p> <p>Hawthorn (d), bramble (o), dog rose (o).</p>	

## Annex D: Lincolnshire Desk Study Record Report


# LERC Search Summary Report

**Grid Reference: TA 198 146**  
**Buffer: 2km**

**Date of publication: 30/05/2023**  
**Expires: 30/05/2024**

*Achieving more for nature*

## Report Details

Produced for	Jo Atkinson, AECOM
Search area	

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This report summarises a search of statutory sites, non-statutory sites, other sites, habitats and species within the specified area; where no information is returned for a section, it is excluded from this summary report.

## About the Lincolnshire Environmental Records Centre

The Lincolnshire Environmental Records Centre (LERC) collates wildlife and geological information for Greater Lincolnshire from various sources and makes it available for various uses. This data is crucial to aid conservation management of sites, to help organisations prioritise action, and to understand the distribution of species and trends over time. For more information on LERC or to request a data search, visit the website at <https://glnp.org.uk/partnership/lerc/>



*Lincolnshire Environmental Records Centre is an ALERC accredited LRC, meeting the standard level criteria.  
For more information on accreditation, see the ALERC website at <http://www.alerc.org.uk/alerc-accreditation.html>*

## Statutory Sites

Statutory sites are those afforded legal protection aimed at preventing activities that may damage features of interest. Further information on these sites is available from [Natural England](#) (SSSIs, NNRs, LNRs, SPAs, SACs, Ramsars) and [The National Association for Areas of Outstanding Natural Beauty](#) (AONBs).







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Code	Designation	Status	Name
1	SSSI	Notified	Humber Estuary
2	SPA	Classified	Humber Estuary
3	SAC	Designated	Humber Estuary
4	Ramsar	Listed	Humber Estuary

## Statutory Sites within the search area



*Space restrictions on the map may result in some sites not being labelled.*

- |   |                                     |  |               |
|---|-------------------------------------|--|---------------|
|  | Site of Special Scientific Interest |  | Ramsar Site   |
|  | Special Protection Area             |  | Search area   |
|  | Special Area of Conservation        |  | LERC boundary |



## Non-statutory sites

The GLNP works directly with local authorities to coordinate the Local Sites system in Greater Lincolnshire. Sites are selected by the Nature Partnership, based on recommendations made by its expert working groups known as the LWS Panel and LGS Panel. The Register of Local Sites is then submitted for inclusion within local authority planning policy.

These sites are recognition of wildlife or geological value and are a testament to the land management that is already being undertaken on them. Identifying these sites helps local authorities meet their obligations under legislation and government guidance, including reporting on the number of sites in positive management for Single Data List Indicator 160-00.

Code	Designation	Status	Name
1	LWS	Selected	Homestead Park Pond
2	LWS	Selected	Laporte Road Brownfield Site

## Non-statutory sites within the search area



*Space restrictions on the map may result in some sites not being labelled. Please refer to the site citations for details.*

 Local Wildlife Site

 LERC boundary

 Search area

## Habitats

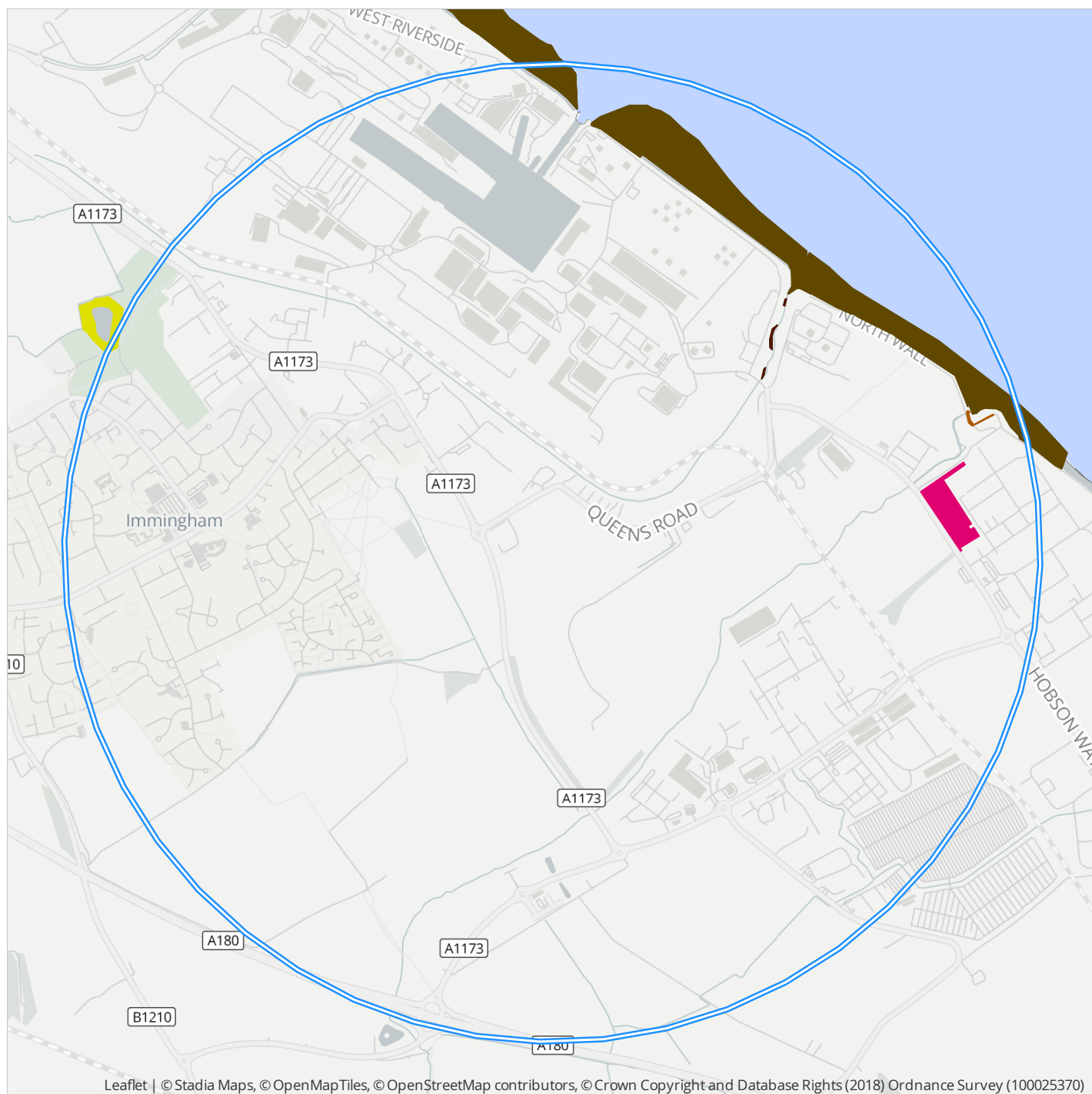
Priority habitats are those identified as being the most threatened and requiring conservation action in the UK. The most-recent list of UK priority species and habitats was published in August 2007 following a 2-year review of the process and priorities, representing the most comprehensive analysis of such information ever undertaken in the UK.

The data presented is the most up-to-date of the data collated by the GLNP and mostly comes from surveys of Local Sites; further historic data and non-Priority habitat data may also be available. Absence of information doesn't mean that the Priority habitat isn't present merely that no information is held.

A number of different datasets have been consulted to produce this report - a summary of attribution statements is available at <https://glnp.org.uk/images/uploads/services/lincolnshire-environmental-records-centre/habitat%20attribution.pdf>.

Type	Habitat	Survey Date	Area (ha)
Priority Habitat	Coastal saltmarsh	2001	0.07
Priority Habitat	Intertidal mudflats	0 - 2009	44.83
Priority Habitat	Lowland meadows	2008	1.78
Priority Habitat	Open mosaic habitats on previously developed land	2015	2.93
Priority Habitat	Reedbeds	2015	0.1
Priority Habitat	Rivers	2000 - 2010	8322.34

## Habitats within the search area



Leaflet | © Stadia Maps, © OpenMapTiles, © OpenStreetMap contributors, © Crown Copyright and Database Rights (2018) Ordnance Survey (100025370)

*Space restrictions on the map may result in some sites not being labelled.*

- |   |   |
|---|---|
|  Coastal saltmarsh                                 |  Reedbeds      |
|  Intertidal mudflats                               |  Rivers        |
|  Lowland meadows                                   |  Search area   |
|  Open mosaic habitats on previously developed land |  LERC boundary |

## Species

Lincolnshire Environmental Records Centre holds records on the following species within or overlapping the search area. Data shown is as held by LERC; past records of presence of a species does not guarantee continued occurrence and absence of records does not imply absence of a species, merely that no records are held. Confidential data, zero abundance records, data at poorly defined geographic resolutions and data pending validation and/or verification are also excluded from this report. A number of different datasets have been consulted to produce this report - a summary of attribution statements is available at <https://glnp.org.uk/images/uploads/services/lincolnshire-environmental-records-centre/species%20attribution.pdf>

### Amphibian (4 taxa)

Common Frog, <i>Rana temporaria</i>	4	1977 - 2004	Protected
Common Toad, <i>Bufo bufo</i>	5	1976 - 2021	Protected, Priority
Great Crested Newt, <i>Triturus cristatus</i>	2	1976 - 1976	Protected, Priority, Local Priority
Smooth Newt, <i>Lissotriton vulgaris</i>	2	2004 - 2004	Protected, Local Priority

### Bird (75 taxa)

Avocet, <i>Recurvirostra avosetta</i>	4	2003 - 2019	Protected
Barn Owl, <i>Tyto alba</i>	11	1999 - 2020	Protected, Local Priority
Barnacle Goose, <i>Branta leucopsis</i>	15	2021 - 2021	Non-native
Bearded Tit, <i>Panurus biarmicus</i>	2	2016 - 2016	Protected
Bee-eater, <i>Merops apiaster</i>	1	2020 - 2020	Protected
Black-tailed Godwit, <i>Limosa limosa</i>	82	1995 - 2021	Protected
Brambling, <i>Fringilla montifringilla</i>	4	2010 - 2011	Protected
Bullfinch, <i>Pyrrhula pyrrhula</i>	60	1979 - 2020	Local Priority
Canada Goose, <i>Branta canadensis</i>	110	2007 - 2021	Non-native
Cattle Egret, <i>Bubulcus ibis</i>	1	2016 - 2016	Non-native
Cetti's Warbler, <i>Cettia cetti</i>	2	2020 - 2020	Protected
Collared Dove, <i>Streptopelia decaocto</i>	160	2004 - 2021	Non-native
Common Scoter, <i>Melanitta nigra</i>	2	1958 - 2021	Protected, Priority
Corn Bunting, <i>Emberiza calandra</i>	2	1977 - 2018	Local Priority
Cuckoo, <i>Cuculus canorus</i>	15	1975 - 2020	Priority
Curlew, <i>Numenius arquata</i>	275	1989 - 2021	Priority, Local Priority
Egyptian Goose, <i>Alopochen aegyptiaca</i>	1	2021 - 2021	Non-native
Fieldfare, <i>Turdus pilaris</i>	81	1978 - 2021	Protected
Gadwall, <i>Mareca strepera</i>	445	2019 - 2021	Non-native
Golden Pheasant, <i>Chrysolophus pictus</i>	2	2021 - 2021	Non-native
Goldeneye, <i>Bucephala clangula</i>	13	1998 - 2021	Protected
Grasshopper Warbler, <i>Locustella naevia</i>	5	2004 - 2011	Priority
Green Sandpiper, <i>Tringa ochropus</i>	168	2004 - 2021	Protected



## Bird (75 taxa)

Greenshank, <i>Tringa nebularia</i>	78	2001 - 2021	Protected
Grey Partridge, <i>Perdix perdix</i>	7	2005 - 2020	Priority, Local Priority, Non-native
Greylag Goose, <i>Anser anser</i>	446	2010 - 2021	Protected
Hen Harrier, <i>Circus cyaneus</i>	1	2009 - 2009	Protected
Hobby, <i>Falco subbuteo</i>	6	2001 - 2021	Protected
House Sparrow, <i>Passer domesticus</i>	175	1977 - 2020	Priority, Local Priority
Kingfisher, <i>Alcedo atthis</i>	10	1999 - 2021	Protected
Lapwing, <i>Vanellus vanellus</i>	644	1979 - 2021	Priority, Local Priority
Light-bellied Brent Goose, <i>Branta bernicla hrota</i>	1	2020 - 2020	Non-native
Linnet, <i>Linaria cannabina</i>	337	1977 - 2021	Local Priority
Little Egret, <i>Egretta garzetta</i>	371	2008 - 2021	Protected
Little Gull, <i>Hydrocoloeus minutus</i>	2	2013 - 2020	Protected
Little Ringed Plover, <i>Charadrius dubius</i>	20	2002 - 2021	Protected
Marsh Harrier, <i>Circus aeruginosus</i>	3	2012 - 2021	Protected
Mediterranean Gull, <i>Ichthyaetus melanocephalus</i>	8	1998 - 2021	Protected
Merlin, <i>Falco columbarius</i>	3	1998 - 2021	Protected
Mute Swan, <i>Cygnus olor</i>	580	2007 - 2021	Non-native
Osprey, <i>Pandion haliaetus</i>	3	1961 - 2020	Protected
Peregrine, <i>Falco peregrinus</i>	66	2002 - 2021	Protected
Pheasant, <i>Phasianus colchicus</i>	284	2005 - 2021	Non-native
Pink-footed Goose, <i>Anser brachyrhynchus</i>	45	1999 - 2021	Non-native
Pochard, <i>Aythya ferina</i>	84	2007 - 2021	Non-native
Purple Sandpiper, <i>Calidris maritima</i>	1	2016 - 2016	Protected
Red Kite, <i>Milvus milvus</i>	2	2009 - 2015	Protected
Red-backed Shrike, <i>Lanius collurio</i>	1	2020 - 2020	Protected, Priority
Red-legged Partridge, <i>Alectoris rufa</i>	2	2011 - 2017	Non-native
Red-throated Diver, <i>Gavia stellata</i>	1	1958 - 1958	Protected
Redshank, <i>Tringa totanus</i>	489	1978 - 2021	Local Priority
Redwing, <i>Turdus iliacus</i>	69	1974 - 2021	Protected
Reed Bunting, <i>Emberiza schoeniclus</i>	370	1975 - 2021	Priority, Local Priority
Ring Ouzel, <i>Turdus torquatus</i>	3	2011 - 2017	Priority
Rock Dove, <i>Columba livia</i>	36	1999 - 2020	Non-native
Rose-coloured Starling, <i>Pastor roseus</i>	1	2015 - 2015	Non-native
Ruff, <i>Calidris pugnax</i>	4	1995 - 2021	Protected
Scaup, <i>Aythya marila</i>	9	1958 - 2020	Protected, Priority
Skylark, <i>Alauda arvensis</i>	348	1979 - 2021	Local Priority
Snipe, <i>Gallinago gallinago</i>	47	1998 - 2021	Local Priority
Snow Bunting, <i>Plectrophenax nivalis</i>	4	1989 - 2019	Protected

### Bird (75 taxa)

Song Thrush, <i>Turdus philomelos</i>	89	2004 - 2021	Local Priority
Spoonbill, <i>Platalea leucorodia</i>	17	2019 - 2021	Protected
Spotted Flycatcher, <i>Muscicapa striata</i>	2	2011 - 2019	Priority
Starling, <i>Sturnus vulgaris</i>	451	1978 - 2021	Local Priority
Swift, <i>Apus apus</i>	54	2005 - 2021	Local Priority
Tree Sparrow, <i>Passer montanus</i>	40	1977 - 2017	Priority, Local Priority
Turtle Dove, <i>Streptopelia turtur</i>	10	2003 - 2011	Priority, Local Priority
Whimbrel, <i>Numenius phaeopus</i>	9	2015 - 2021	Protected
White-fronted Goose, <i>Anser albifrons</i>	2	2020 - 2020	Non-native
Whooper Swan, <i>Cygnus cygnus</i>	6	2020 - 2021	Protected, Non-native
Wigeon, <i>Mareca penelope</i>	216	2004 - 2021	Non-native
Wood Sandpiper, <i>Tringa glareola</i>	11	2002 - 2021	Protected
Yellow Wagtail, <i>Motacilla flava</i>	112	2004 - 2021	Local Priority
Yellowhammer, <i>Emberiza citrinella</i>	311	1977 - 2021	Priority, Local Priority

### Bony Fish (Actinopterygii) (2 taxa)

Common Carp, <i>Cyprinus carpio</i>	19	1988 - 1995	Non-native
Crucian Carp, <i>Carassius carassius</i>	11	1988 - 1995	Non-native

### Conifer (5 taxa)

Austrian Pine, <i>Pinus nigra</i>	3	2005 - 2019	Non-native
European Larch, <i>Larix decidua</i>	1	2015 - 2015	Non-native
Leyland Cypress, <i>Cupressus macrocarpa</i> x <i>Xanthocyparis nootkatensis</i> = <i>X Cuprocyparis leylandi</i>	3	2015 - 2019	Non-native
Monkey-puzzle, <i>Araucaria araucana</i>	1	2009 - 2009	Non-native
Norway Spruce, <i>Picea abies</i>	1	2015 - 2015	Non-native

### Crustacean (1 taxa)

Chinese Mitten Crab, <i>Eriocheir sinensis</i>	1	2022 - 2022	Non-native
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### Flowering Plant (145 taxa)

Alsike Clover, <i>Trifolium hybridum</i>	2	2009 - 2019	Non-native
American Willowherb, <i>Epilobium ciliatum</i>	5	2009 - 2019	Non-native
Apple, <i>Malus pumila</i>	10	2005 - 2019	Non-native
Balm-of-Gilead, <i>Populus balsamifera</i> x <i>deltoides</i> = <i>P. x jackii</i>	1	2019 - 2019	Non-native
Barren Brome, <i>Bromus sterilis</i>	19	1993 - 2019	Non-native
Beaked Hawk's-beard, <i>Crepis vesicaria</i>	13	1993 - 2015	Non-native
Black Horehound, <i>Ballota nigra</i>	2	2015 - 2019	Non-native

## Flowering Plant (145 taxa)

Black-bindweed, <i>Fallopia convolvulus</i>	7	1993 - 2019	Non-native
Black-grass, <i>Alopecurus myosuroides</i>	8	1993 - 2019	Non-native
Bluebell, <i>Hyacinthoides non-scripta</i> x <i>hispanica</i> = <i>H. x massartiana</i>	1	2019 - 2019	Non-native
Bread Wheat, <i>Triticum aestivum</i>	3	2009 - 2019	Non-native
Bristly Oxtongue, <i>Picris echioides</i>	51	1988 - 2019	Non-native
Broad Bean, <i>Vicia faba</i>	1	2014 - 2014	Non-native
Broad-leaved Cockspurthorn, <i>Crataegus persimilis</i>	1	2019 - 2019	Non-native
Bugloss, <i>Anchusa arvensis</i>	1	2014 - 2014	Non-native
Bullwort, <i>Ammi majus</i>	1	2011 - 2011	Non-native
Butterfly-bush, <i>Buddleja davidii</i>	16	1997 - 2019	Non-native
Canadian Fleabane, <i>Conyza canadensis</i>	10	2008 - 2019	Non-native
Canary-grass, <i>Phalaris canariensis</i>	1	2009 - 2009	Non-native
Charlock, <i>Sinapis arvensis</i>	12	1993 - 2019	Non-native
Cherry Laurel, <i>Prunus laurocerasus</i>	1	2015 - 2015	Non-native
Cherry Plum, <i>Prunus cerasifera</i>	4	2009 - 2009	Non-native
Common Field-speedwell, <i>Veronica persica</i>	18	1993 - 2019	Non-native
Common Fumitory, <i>Fumaria officinalis</i>	4	1993 - 2019	Non-native
Common Mallow, <i>Malva sylvestris</i>	9	1993 - 2019	Non-native
Common Poppy, <i>Papaver rhoeas</i>	10	1993 - 2019	Non-native
Common Vetch, <i>Vicia sativa</i> subsp. <i>segetalis</i>	3	1997 - 2015	Non-native
Cornflower, <i>Centaurea cyanus</i>	1	2014 - 2014	Priority, Non-native
Cornus sanguinea subsp. <i>australis</i> , <i>Cornus sanguinea</i> subsp. <i>australis</i>	1	2015 - 2015	Non-native
Cotton Thistle, <i>Onopordum acanthium</i>	2	1996 - 1996	Non-native
Crown Vetch, <i>Securigera varia</i>	4	2010 - 2015	Non-native
Cut-leaved Crane's-bill, <i>Geranium dissectum</i>	29	1993 - 2019	Non-native
Cut-leaved Dead-nettle, <i>Lamium hybridum</i>	2	1997 - 2014	Non-native
Dotted Loosestrife, <i>Lysimachia punctata</i>	1	2015 - 2015	Non-native
Dwarf Mallow, <i>Malva neglecta</i>	1	2009 - 2009	Non-native
Dwarf Spurge, <i>Euphorbia exigua</i>	1	1993 - 1993	Non-native
Eastern Rocket, <i>Sisymbrium orientale</i>	2	2007 - 2007	Non-native
Equal-leaved Knotgrass, <i>Polygonum arenastrum</i>	1	2009 - 2009	Non-native
Feverfew, <i>Tanacetum parthenium</i>	2	2009 - 2019	Non-native
Field Forget-me-not, <i>Myosotis arvensis</i>	22	1993 - 2019	Non-native
Field Pansy, <i>Viola arvensis</i>	3	1997 - 2007	Non-native
Field Penny-cress, <i>Thlaspi arvense</i>	3	1997 - 2009	Non-native
Flowering Currant, <i>Ribes sanguineum</i>	1	2019 - 2019	Non-native
Foxtail Barley, <i>Hordeum jubatum</i>	2	2015 - 2019	Non-native

## Flowering Plant (145 taxa)

Franchet's Cotoneaster, <i>Cotoneaster franchetii</i>	1	2015 - 2015	Non-native
Fringecups, <i>Tellima grandiflora</i>	1	2011 - 2011	Non-native
Fumaria officinalis subsp. officinalis, <i>Fumaria officinalis subsp. officinalis</i>	2	2007 - 2007	Non-native
Garden Asparagus, <i>Asparagus officinalis</i>	1	2009 - 2009	Non-native
Garden Candytuft, <i>Iberis umbellata</i>	1	2014 - 2014	Non-native
Garden Lobelia, <i>Lobelia erinus</i>	1	2015 - 2015	Non-native
Garden Privet, <i>Ligustrum ovalifolium</i>	2	2009 - 2019	Non-native
Gooseberry, <i>Ribes uva-crispa</i>	1	1997 - 1997	Non-native
Greater Burdock, <i>Arctium lappa</i>	2	2014 - 2015	Non-native
Greater Celandine, <i>Chelidonium majus</i>	1	2011 - 2011	Non-native
Greater Periwinkle, <i>Vinca major</i>	2	2009 - 2019	Non-native
Green Alkanet, <i>Pentaglottis sempervirens</i>	1	2019 - 2019	Non-native
Green Field-speedwell, <i>Veronica agrestis</i>	2	1997 - 1997	Non-native
Grey Alder, <i>Alnus incana</i>	3	1997 - 2019	Non-native
Guernsey Fleabane, <i>Conyza sumatrensis</i>	1	2009 - 2009	Non-native
Hare's-tail, <i>Lagurus ovatus</i>	1	2013 - 2013	Non-native
Hedge Mustard, <i>Sisymbrium officinale</i>	22	1993 - 2019	Non-native
Hedgerow Crane's-bill, <i>Geranium pyrenaicum</i>	1	2019 - 2019	Non-native
Hemlock, <i>Conium maculatum</i>	50	1993 - 2019	Non-native
Henbit Dead-nettle, <i>Lamium amplexicaule</i>	1	2011 - 2011	Non-native
Hoary Cress, <i>Lepidium draba</i>	6	1993 - 2019	Non-native
Horse-chestnut, <i>Aesculus hippocastanum</i>	3	2005 - 2015	Non-native
Horse-radish, <i>Armoracia rusticana</i>	4	1997 - 2019	Non-native
Hybrid Black-poplar, <i>Populus nigra x deltoides = P. x canadensis</i>	10	1997 - 2019	Non-native
Hybrid Coralberry, <i>Symphoricarpos microphyllus x orbiculatus = S. x chenaultii</i>	1	2019 - 2019	Non-native
Hybrid Crack-willow, <i>Salix euxina x alba = S. x fragilis</i>	1	2008 - 2008	Non-native
Italian Rye-grass, <i>Lolium multiflorum</i>	6	1993 - 2019	Non-native
Japanese Honeysuckle, <i>Lonicera japonica</i>	1	2019 - 2019	Non-native
Japanese Knotweed, <i>Fallopia japonica</i>	1	2009 - 2009	Non-native
Japanese Rose, <i>Rosa rugosa</i>	2	2014 - 2019	Non-native
Lamiastrum galeobdolon subsp. argentatum, <i>Lamiastrum galeobdolon subsp. argentatum</i>	1	2019 - 2019	Non-native
Large Bindweed, <i>Calystegia silvatica</i>	8	2005 - 2019	Non-native
Least Duckweed, <i>Lemna minuta</i>	1	2013 - 2013	Non-native
Lepidium draba subsp. draba, <i>Lepidium draba subsp. draba</i>	2	2015 - 2019	Non-native
Lesser Swine-cress, <i>Lepidium didymum</i>	3	2014 - 2015	Non-native

## Flowering Plant (145 taxa)

Lilac, <i>Syringa vulgaris</i>	3	1999 - 2019	Non-native
London Plane, <i>Platanus occidentalis x orientalis = P. x hispanica</i>	2	2015 - 2015	Non-native
Long Smooth-headed Poppy, <i>Papaver dubium</i>	3	1997 - 2019	Non-native
Lucerne, <i>Medicago sativa subsp. sativa</i>	1	2015 - 2015	Non-native
Moth Mullein, <i>Verbascum blattaria</i>	1	2019 - 2019	Non-native
Mugwort, <i>Artemisia vulgaris</i>	38	1993 - 2019	Non-native
Musk Stork's-bill, <i>Erodium moschatum</i>	3	2011 - 2011	Non-native
Narrow-leaved Pepperwort, <i>Lepidium ruderale</i>	4	1993 - 2019	Non-native
Narrow-leaved Ragwort, <i>Senecio inaequidens</i>	12	2010 - 2019	Non-native
Norway Maple, <i>Acer platanoides</i>	2	2009 - 2015	Non-native
Nuttall's Waterweed, <i>Elodea nuttallii</i>	6	1997 - 1997	Non-native
Oil-seed Rape, <i>Brassica napus subsp. oleifera</i>	9	1997 - 2019	Non-native
Opium Poppy, <i>Papaver somniferum</i>	5	1997 - 2015	Non-native
Osier, <i>Salix viminalis</i>	9	1997 - 2019	Non-native
Oxford Ragwort, <i>Senecio squalidus</i>	31	1993 - 2019	Non-native
Perennial Cornflower, <i>Centaurea montana</i>	1	2020 - 2020	Non-native
Petty Spurge, <i>Euphorbia peplus</i>	6	2008 - 2019	Non-native
Pheasant's-eye, <i>Adonis annua</i>	2	2011 - 2011	Priority, Non-native
Pineappleweed, <i>Matricaria discoidea</i>	9	1993 - 2019	Non-native
Pot Marigold, <i>Calendula officinalis</i>	1	2011 - 2011	Non-native
Prickly Lettuce, <i>Lactuca serriola</i>	12	1997 - 2019	Non-native
Purple Toadflax, <i>Linaria purpurea</i>	8	1997 - 2019	Non-native
Rat's-tail Fescue, <i>Vulpia myuros</i>	17	1993 - 2019	Non-native
Red Dead-nettle, <i>Lamium purpureum</i>	7	1997 - 2019	Non-native
Red Horse-chestnut, <i>Aesculus carnea</i>	1	2019 - 2019	Non-native
Red Valerian, <i>Centranthus ruber</i>	1	2014 - 2014	Non-native
Reflexed Stonecrop, <i>Sedum rupestre</i>	2	1988 - 2009	Non-native
Ribbed Melilot, <i>Melilotus officinalis</i>	3	1993 - 2013	Non-native
Russian Comfrey, <i>Symphytum officinale x asperum = S. x uplandicum</i>	2	2015 - 2019	Non-native
Russian-vine, <i>Fallopia baldschuanica</i>	2	2014 - 2014	Non-native
Salsify, <i>Tragopogon porrifolius</i>	1	2011 - 2011	Non-native
Scented Mayweed, <i>Matricaria chamomilla</i>	10	1993 - 2015	Non-native
Scentless Mayweed, <i>Tripleurospermum inodorum</i>	37	1993 - 2019	Non-native
Shaggy Soldier, <i>Galinsoga quadriradiata</i>	1	2009 - 2009	Non-native
Shepherd's-purse, <i>Capsella bursa-pastoris</i>	18	1993 - 2019	Non-native
Six-rowed Barley, <i>Hordeum vulgare</i>	1	2014 - 2014	Non-native
Slender Speedwell, <i>Veronica filiformis</i>	1	2011 - 2011	Non-native



## Flowering Plant (145 taxa)

Small Nettle, <i>Urtica urens</i>	2	1997 - 1997	Non-native
Small Toadflax, <i>Chaenorhinum minus</i>	1	1997 - 1997	Non-native
Snow-in-summer, <i>Cerastium tomentosum</i>	1	1997 - 1997	Non-native
Snowdrop, <i>Galanthus nivalis</i>	5	1999 - 2020	Non-native
Soapwort, <i>Saponaria officinalis</i>	1	2009 - 2009	Non-native
Spreading Cotoneaster, <i>Cotoneaster divaricatus</i>	1	2019 - 2019	Non-native
Stag's-horn Sumach, <i>Rhus typhina</i>	1	2009 - 2009	Non-native
Sticky Groundsel, <i>Senecio viscosus</i>	11	1993 - 2013	Non-native
Sun Spurge, <i>Euphorbia helioscopia</i>	3	1997 - 2014	Non-native
Swedish Whitebeam, <i>Sorbus intermedia</i>	6	1997 - 2019	Non-native
Swine-cress, <i>Lepidium coronopus</i>	1	1997 - 1997	Non-native
Sycamore, <i>Acer pseudoplatanus</i>	20	1993 - 2019	Non-native
Tall Melilot, <i>Melilotus altissimus</i>	12	1994 - 2019	Non-native
Tall Rocket, <i>Sisymbrium altissimum</i>	1	1997 - 1997	Non-native
Veronica hederifolia subsp. hederifolia, <i>Veronica hederifolia</i> subsp. hederifolia	1	2014 - 2014	Non-native
Wall Barley, <i>Hordeum murinum</i>	10	1993 - 2019	Non-native
Wall Cotoneaster, <i>Cotoneaster horizontalis</i>	1	2019 - 2019	Non-native
Weeping Willow, <i>Salix alba x babylonica = S. x sepulcralis</i>	2	2015 - 2019	Non-native
Weld, <i>Reseda luteola</i>	22	1993 - 2019	Non-native
White Champion, <i>Silene latifolia</i>	14	1993 - 2019	Non-native
White Dead-nettle, <i>Lamium album</i>	23	1993 - 2019	Non-native
White Dogwood, <i>Cornus alba</i>	1	2009 - 2009	Non-native
White Melilot, <i>Melilotus albus</i>	1	2019 - 2019	Non-native
White Poplar, <i>Populus alba</i>	2	2019 - 2019	Non-native
White Stonecrop, <i>Sedum album</i>	4	1988 - 2019	Non-native
White Willow, <i>Salix alba</i>	4	2009 - 2015	Non-native
Wild Plum, <i>Prunus domestica</i>	4	2009 - 2019	Non-native
Wild Radish, <i>Raphanus raphanistrum</i> subsp. raphanistrum	2	1929 - 2005	Non-native
Wild-oat, <i>Avena fatua</i>	7	1993 - 2019	Non-native

## Insect - Beetle (Coleoptera) (1 taxa)

Colorado Beetle, <i>Leptinotarsa decemlineata</i>	2	1947 - 1947	Non-native
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### Insect - Butterfly (4 taxa)

Small Heath, <i>Coenonympha pamphilus</i>	17	1998 - 2021	Priority
Wall, <i>Lasiommata megera</i>	16	1999 - 2014	Priority
White Admiral, <i>Limenitis camilla</i>	2	2014 - 2014	Priority
White-letter Hairstreak, <i>Satyrrium w-album</i>	34	2003 - 2020	Protected, Priority

### Insect - Moth (1 taxa)

Cinnabar, <i>Tyria jacobaeae</i>	2	2015 - 2021	Priority
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### Insect - True Bug (Hemiptera) (1 taxa)

Western Conifer Seed Bug, <i>Leptoglossus occidentalis</i>	3	2010 - 2018	Non-native
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### Marine Mammal (1 taxa)

Common Porpoise, <i>Phocoena phocoena</i>	3	2010 - 2012	Protected, Priority
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### Mollusc (2 taxa)

Bladder snails, <i>Physa</i>	2	2006 - 2006	Non-native
Jenkins' Spire Snail, <i>Potamopyrgus antipodarum</i>	9	2006 - 2017	Non-native

### Reptile (1 taxa)

Slow-worm, <i>Anguis fragilis</i>	1	1976 - 1976	Protected, Priority
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### Terrestrial Mammal (10 taxa)

Brown Hare, <i>Lepus europaeus</i>	9	1976 - 2018	Priority
Brown Rat, <i>Rattus norvegicus</i>	3	1977 - 2002	Non-native
Eastern Grey Squirrel, <i>Sciurus carolinensis</i>	8	1976 - 2018	Non-native
Eurasian Badger, <i>Meles meles</i>	2	2009 - 2016	Protected
Eurasian Otter, <i>Lutra lutra</i>	1	2020 - 2020	Protected, Priority
European Rabbit, <i>Oryctolagus cuniculus</i>	19	1976 - 2015	Non-native
European Water Vole, <i>Arvicola amphibius</i>	7	2007 - 2018	Protected, Priority, Local Priority
Harvest Mouse, <i>Micromys minutus</i>	1	2009 - 2009	Priority
House Mouse, <i>Mus musculus</i>	1	1977 - 1977	Non-native
West European Hedgehog, <i>Erinaceus europaeus</i>	14	1976 - 2021	Priority

## Terrestrial Mammal (bat) (6 taxa)

Bat, <i>Chiroptera</i>	17	1962 - 2014	Protected, Priority, Local Priority
Brown Long-eared Bat, <i>Plecotus auritus</i>	1	2008 - 2008	Protected, Priority, Local Priority
Common Pipistrelle, <i>Pipistrellus pipistrellus sensu stricto</i>	4	2003 - 2011	Protected, Local Priority
Noctule Bat, <i>Nyctalus noctula</i>	2	2003 - 2011	Protected, Priority, Local Priority
Pipistrelle, <i>Pipistrellus pipistrellus sensu lato</i>	1	1992 - 1992	Protected, Local Priority
Pipistrelle Bat species, <i>Pipistrellus</i>	6	1992 - 2020	Protected, Priority, Local Priority

Greater Lincolnshire Nature Partnership  
Banovallum House  
Manor House Street  
Horncastle  
Lincolnshire  
LN9 5HF

Tel: 01507 528398  
Email: [info@glnp.org.uk](mailto:info@glnp.org.uk)  
Web: [www.glnp.org.uk](http://www.glnp.org.uk)

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## Annex E: Woodland Survey Review of Long Strip Woodland against Lincolnshire Local Wildlife Site Selection Criteria

1.1.1 A review of the woodland habitat within Long Strip Woodland has been undertaken to determine whether it meets the most recent Local Wildlife Site (“LWS”) selection criteria third edition published in 2013, noting from the Lincolnshire Wildlife Trust (“LWT”) consultation response that the woodland had been previously surveyed as a potential LWS in 2008 but did not meet the selection criteria at that time (using the first/second edition of the LWS guidelines). A summary of the review is provided below.

**Table E-1: Review Against LWS Selection Criteria for Woodlands**

LWS Selection Criterion	Rationale	Does the Woodland on Site meet the LWS Selection Criterion?	Comments
WD1 – All ancient semi natural woodland (ASNW) listed in Natural England’s Ancient Woodland Inventory	Not only is this a scarce and declining habitat, but it is impossible to re-create once lost. It is crucial to the biological diversity of Greater Lincolnshire that remaining areas of ancient semi-natural woodland are conserved.	No	The woodland is not listed in Natural England’s Ancient Woodland Inventory
WD1a – All plantations on ancient woodland sites (PAWS) listed in Natural England’s Ancient Woodland Inventory	PAWS are woodlands planted on sites identified as previously being ancient semi-natural woodland, and are good candidates for woodland restoration	No	The woodland is not listed as PAWS in Natural England’s Ancient Woodland Inventory
WD2a – Woodland that does not appear in the Ancient Woodland Inventory, but has characteristics of ancient semi-natural woodland and a minimum species index score of eight using Table 3.	Ancient Woodland Inventories are not considered to be comprehensive because they only include sites of 2 ha or larger, and it was not possible to ground-truth all of the sites identified. Therefore, this criterion can be used for sites smaller than 2 ha and any other suspected semi-natural ancient	No	Minimum species index score (Table 3) = 0.



LWS Selection Criterion	Rationale	Does the Woodland on Site meet the LWS Selection Criterion?	Comments
	woodland missing from the relevant inventory.		
WD3a - Woodland with a combined minimum species index score of 15 using Tables 3 and 4	This criterion can be used for all other woodland and plantations	No	Combined species index score (Table 3 + Table 4) = 2
WD3b – Woodland with a minimum woodland features index score of six using Table 6	This criterion can be used for all other woodland and plantations, where WD3a is not satisfied.	No	Minimum woodland features index score (Table 6) = 3
WD4a – Wet woodland with a combined minimum species index score of 15 using Tables 3, 4 and 5	These woodlands are found of poorly drained and/ or seasonally wet soils where the woodland canopy and shrub layer often comprises much alder, willow and birch. Alder carr in particular is uncommon yet important in Greater Lincolnshire. This criterion (and Table 5) cannot be used in a Mos1 combination with the Wetland criteria (and Table 12) due to a high level of duplication between the two scoring species lists.	No	Woodland has no features indicative of wet woodland habitat, and therefore this criterion is not relevant.
WD5 – Parkland or wood-pasture at least 1 ha in extent that supports at least one veteran tree	This criterion can be used for sites with veteran trees amongst managed grassland. Thus improved, semi-improved or unimproved grassland are considered, but never arable land. The primary importance of both parkland and wood-pasture is the potential for supporting veteran trees. These trees provided habitat	No	Woodland is not parkland or wood-pasture, and therefore this criterion is not relevant.

LWS Selection Criterion	Rationale	Does the Woodland on Site meet the LWS Selection Criterion?	Comments
	for distinctive and important assemblages of fungi, epiphytic ferns, bryophytes, lichens, invertebrates, bats and birds. Further features of value include younger trees for potential long term habitat continuity, as well as plants providing nectar sources for dead wood invertebrate specialists.		

**Table E-2: LWS Selection Criteria for Woodland (Table 3: ancient woodland indicator species)**

Latin name	Common name	Recorded in Woodland?
<i>Allium ursinum</i> *	Ramsons	x
<i>Anemone nemorosa</i> *	Wood anemone	x
<i>Calamagrostis canescens</i>	Purple small-reed	x
<i>Campanula trachelium</i>	Nettle-leaved bellflower	x
<i>Carex pallescens</i>	Pale sedge	x
<i>Carex pendula</i>	Pendulous sedge	x
<i>Carex remota</i>	Remote sedge	x
<i>Conopodium majus</i>	Pignut	x
<i>Convallaria majalis</i> *	Lily-of-the-valley	x
<i>Cornus sanguinea</i>	Dogwood	x
<i>Dipsacus pilosus</i>	Small teasel	x
<i>Elymus caninus</i>	Bearded couch	x
<i>Epipactis helleborine</i>	Broad-leaved helleborine	x
<i>Euonymus europaeus</i>	Spindle	x

Latin name	Common name	Recorded in Woodland?
<i>Euphorbia amgdaloides</i>	Wood spurge	x
<i>Fragaria vesca</i>	Wild strawberry	x
<i>Gallium odoratum</i> *	Woodruff	x
<i>Hyacinthoides non-scripta</i> *	Bluebell	x
<i>Lamiastrum galeobdolon ssp. Montanum</i> *	Yellow archangel	x
<i>Luzula Pilosa</i>	Hairy woodrush	x
<i>Luzula sylvatica</i>	Great woodrush	x
<i>Lysimachia nemorum</i>	Yellow pimpernel	x
<i>Melica uniflora</i> *	Wood melick	x
<i>Milium effusum</i>	Wood millet	x
<i>Orchis mascula</i> *	Early-purple orchid	x
<i>Oxalis acetosella</i> *	Wood sorrel	x
<i>Paris quadrifolia</i> *	Herb-paris	x
<i>Platanthera chlorantha</i>	Greater butterfly-orchid	x
<i>Poa nemoralis</i>	Wood meadow-grass	x
<i>Populus tremula</i>	Aspen	x
<i>Potentilla sterilis</i>	Barren strawberry	x
<i>Primula vulgaris</i> *	Primrose	x
<i>Quercus petraea</i>	Sessile oak	x
<i>Ranunculus auricomus</i>	Goldilocks buttercup	x
<i>Scrophularia nodosa</i>	Common figwort	x
<i>Sorbus terminalis</i>	Wild service-tree	x
<i>Stellaria holostea</i> *	Greater stitchwort	x
<i>Tilia cordata</i>	Small-leaved lime	x
<i>Valeriana officinalis</i>	Common valerian	x
<i>Viburnum opulus</i>	Guelder-rose	x

Latin name	Common name	Recorded in Woodland?
<i>Viola rechenbachiana</i> *	Early dog-violet	x
<b>TOTAL POINTS</b>		<b>0</b>
Each species scores one point. Species with a * relate to a feature in Table 6.		

**Table E-3: LWS Selection Criteria (Table 4: woodland species)**

Latin name	Common name	Recorded in Woodland?
<i>Adoxa moschatellina</i> *	Moschatel	x
<i>Arum maculatum</i>	Lords-and-ladies	x
<i>Athyrium filix-femina</i>	Lady-fern	x
<i>Betula pendula</i>	Silver birch	x
<i>Blechnum spicant</i>	Hard fern	x
<i>Brachypodium sylvaticum</i>	False brome	✓
<i>Bromopsis ramosa</i>	Hairy brome	x
<i>Campanula latifolia</i>	Giant bellflower	x
<i>Carex sylvatica</i>	Wood sedge	x
<i>Ceratocarpus claviculata</i>	Climbing corydalis	x
<i>Circaea lutetiana</i>	Enchanter's nightshade	x
<i>Clematis vitalba</i>	Traveller's joy	x
<i>Corylus avellana</i>	Hazel	x
<i>Crataegus laevigata</i>	Midland hawthorn	x
<i>Daphne laureola</i>	Spurge laurel	x
<i>Dryopteris affinis</i>	Golden scaled male fern	x
<i>Dryopteris dilatata</i>	Broad-buckler fern	x
<i>Dryopteris filix-mas</i>	Male fern	x
<i>Frangula alnus</i>	Alder buckthorn	x
<i>Humulus lupulus</i>	Hop	x

Latin name	Common name	Recorded in Woodland?
<i>Hypericum hirsutum</i>	Hairy St-John's wort	x
<i>Ilex aquifolium</i>	Holly	x
<i>Iris foetidissima</i>	Stinking iris	x
<i>Ligustrum vulgare</i>	Wild privet	✓
<i>Lonicera periclymenum</i>	Honeysuckle	x
<i>Mercurialis perennis</i> *	Dog's mercury	x
<i>Moehringia trinervia</i>	Three-nerved sandwort	x
<i>Myosotis sylvatica</i> *	Wood forget-me-not	x
<i>Neottia ovata</i> *	Common twayblade	x
<i>Oreopteris limbosperma</i>	Lemon-scented fern	x
<i>Polypodium spp</i>	Polypody ferns (one point maximum)	x
<i>Polystichum aculeatum</i>	Hard shield-fern	x
<i>Polystichum setiferum</i>	Soft shield-fern	x
<i>Rhamnus cathartica</i>	Buckthorn	x
<i>Ribes nigrum</i>	Black currant	x
<i>Ribes rubrum</i>	Red currant	x
<i>Ribes uva-crispa</i>	Gooseberry	x
<i>Rubus idaeus</i>	Raspberry	x
<i>Sanicula europaea</i> *	Sanicle	x
<i>Schedonorus giganteus</i>	Giant fescue	x
<i>Tamus communis</i>	Black bryony	x
<i>Viola odorata</i> *	Sweet violet	x
<i>Viola riviniana</i> *	Common dog-violet	x
<b>TOTAL POINTS</b>		<b>2</b>
<p>Each species scores one point, unless otherwise indicated.            Species with a * relate to a feature in Table 6.</p>		



**Table E-4: LWS Selection Criteria (Table 6: woodland features)**

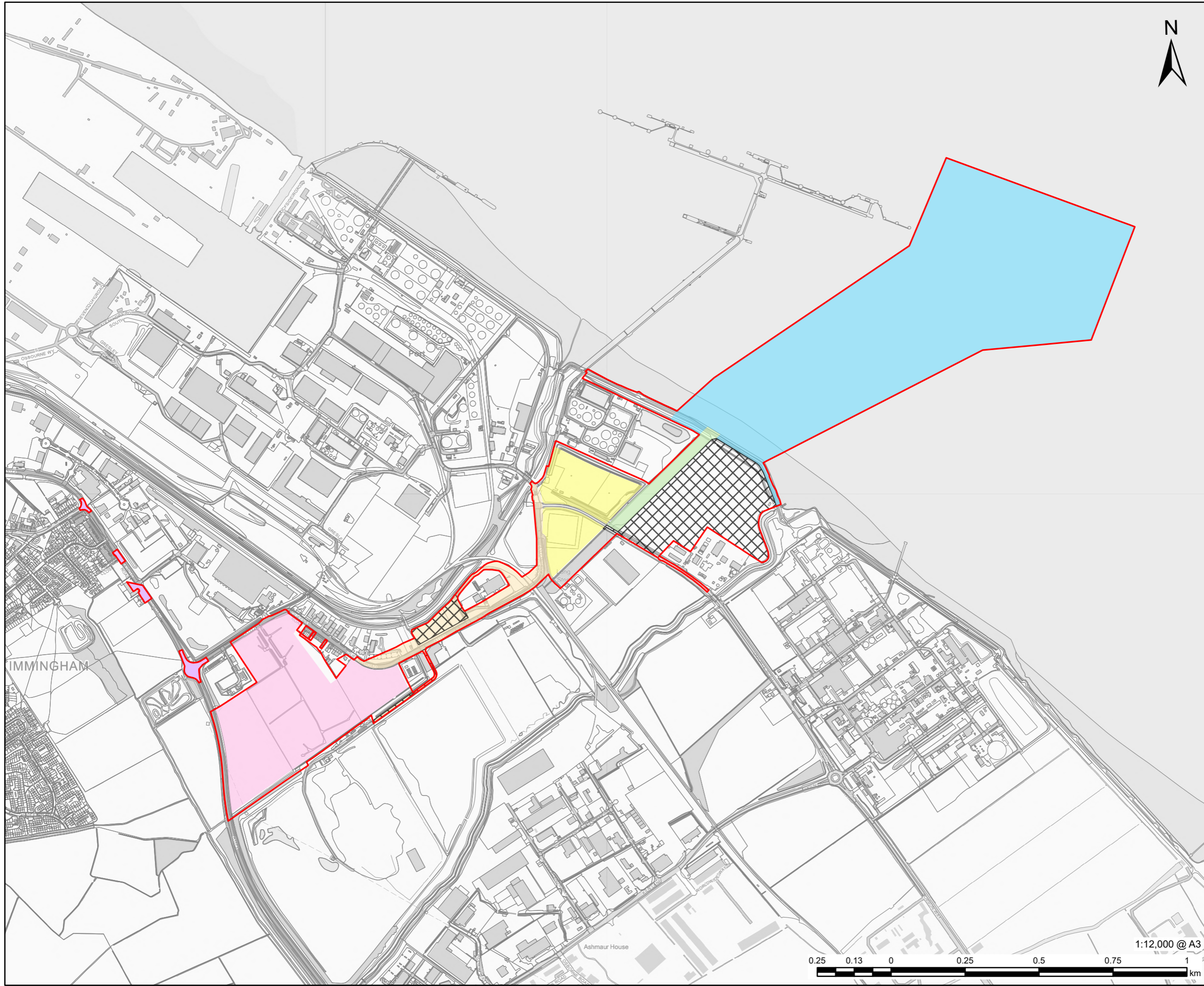
Feature	Notes	Present in Woodland?	Comments
Undisturbed, mature, shady, broad-leaved habitat	Includes area away from glades and rides, but not dense coniferous woodland habitat.	Yes	Some areas of the woodland are relatively undisturbed, although it does suffer with fly-tipping due to proximity to Laporte Road and easy pedestrian access via the public footpath.
Veteran trees		Yes	No veteran trees recorded during Phase 1 Habitat survey; however arboricultural survey identified one mature veteran ash in the northern section of the woodland.
Pollarded trees	Trees cut well above the ground to allow for animal grazing; this can be recent or historic.	No	No pollarded trees recorded. Habitats undergo minimal ongoing management.
Coppiced trees	Trees cut down to near ground level usually on a regular rotation; this can be recent or historic.	No	No coppiced trees recorded. Habitats undergo minimal ongoing management.
Diverse and/ or abundance lichen community	Usually trees	No	A specialist lichen survey was not undertaken; however visual observations during the habitat survey did not record a diverse or abundant lichen community.
Diverse and/or abundant bryophyte community	On the ground, e.g. liverworts on stream banks, and/or on trees.	No	A specialist bryophyte survey was not undertaken; however, the habitat lacks the variety of habitats that would be expected to support a diverse and abundant bryophyte community.

Feature	Notes	Present in Woodland?	Comments
Diverse and/or abundant fungi community	On the ground and/or on trees	No	A specialist fungi survey was not undertaken; however, the habitat lacks the variety of habitats that would be expected to support a diverse and abundant fungi community.
Large populations of any of the species in Tables 3 and 4 marked with an ‘**’	Includes carpets of species such as lily-of-the-valley or bluebell.	No	No large populations of any of the key species recorded.
No more than small amounts of non-native plant species, whether planted or naturally colonised	In canopy, shrub layer and ground flora, including seedlings. Examples include conifers, sycamore, rhododendron, laurel, snowberry, game cover species, exotic species and garden varieties.	Yes	No significant populations of non-native species recorded.
No more than moderate amounts of native invasive/undesirable plant species	Includes bramble, bracken, common nettle, ivy as ground cover, rosebay willowherb.	No	Large amounts of bramble and common nettle throughout the understory.  No non-native invasive plant species recorded.
Full age range within native tree species	Includes seedlings and saplings, as well as mature and ancient trees. These provide valuable structural diversity	No	Woodland lacks structural diversity.
Frequent standing/fallen dead wood	Standing or fallen tree stems/trunks/large boughs that are dead or significantly decaying	No	Standing/ fallen dead wood is infrequent.
Good habitat diversity: Glades/grassy areas	If three or more of these complementary habitats are present, the site scores one	No	Some glade areas but ground flora is mostly shaded by canopy. No running water (only

Feature	Notes	Present in Woodland?	Comments
Wide/sunny rides Narrow/shady rides Running water/watercourses Standing water/wetland/wet flushes	point. Provides edge habitat and valuable structural diversity		stagnant ditch), no standing open water/ wetland/ wet flush habitats.
Significant size	One point is awarded for every five hectares, to a maximum of two points	No	Woodland is <5ha (approximately 1.7ha)
<b>TOTAL POINTS</b>		<b>3</b>	
Each feature scores one point			

## Annex F: Figures





**PROJECT**  
 Immingham Green Energy Terminal

**CLIENT**  
 Associated British Ports  
 Air Products (BR) Limited

**CONSULTANT**  
 AECOM Limited  
 5th Floor  
 2 City Walk  
 Leeds, LS11 9AR  
 www.aecom.com

- LEGEND**
- Site Boundary
  - Kings Road
  - East Site
  - West Site
  - Pipeline Corridor
  - Pipe-rack and Jetty Access Road
  - Terminal (Including Jetty)
  - Temporary Construction Area

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**ISSUE PURPOSE**  
 Environmental Statement

**PROJECT NUMBER**  
 60673509

**DEVELOPMENT CONSENT ORDER NO**  
 TR030008

**FIGURE TITLE**  
 Site Location Plan

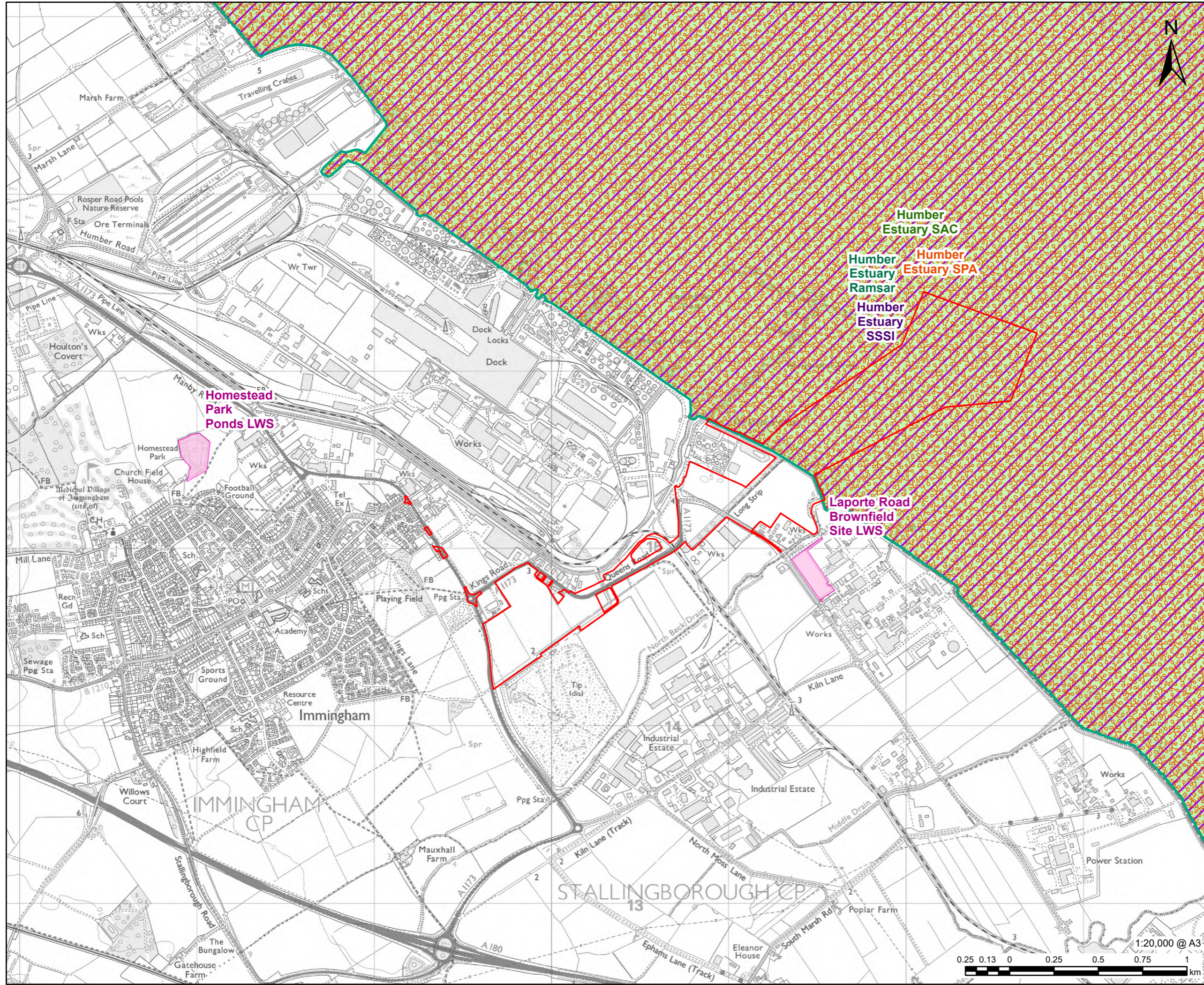
**FIGURE NUMBER**  
 Figure 1

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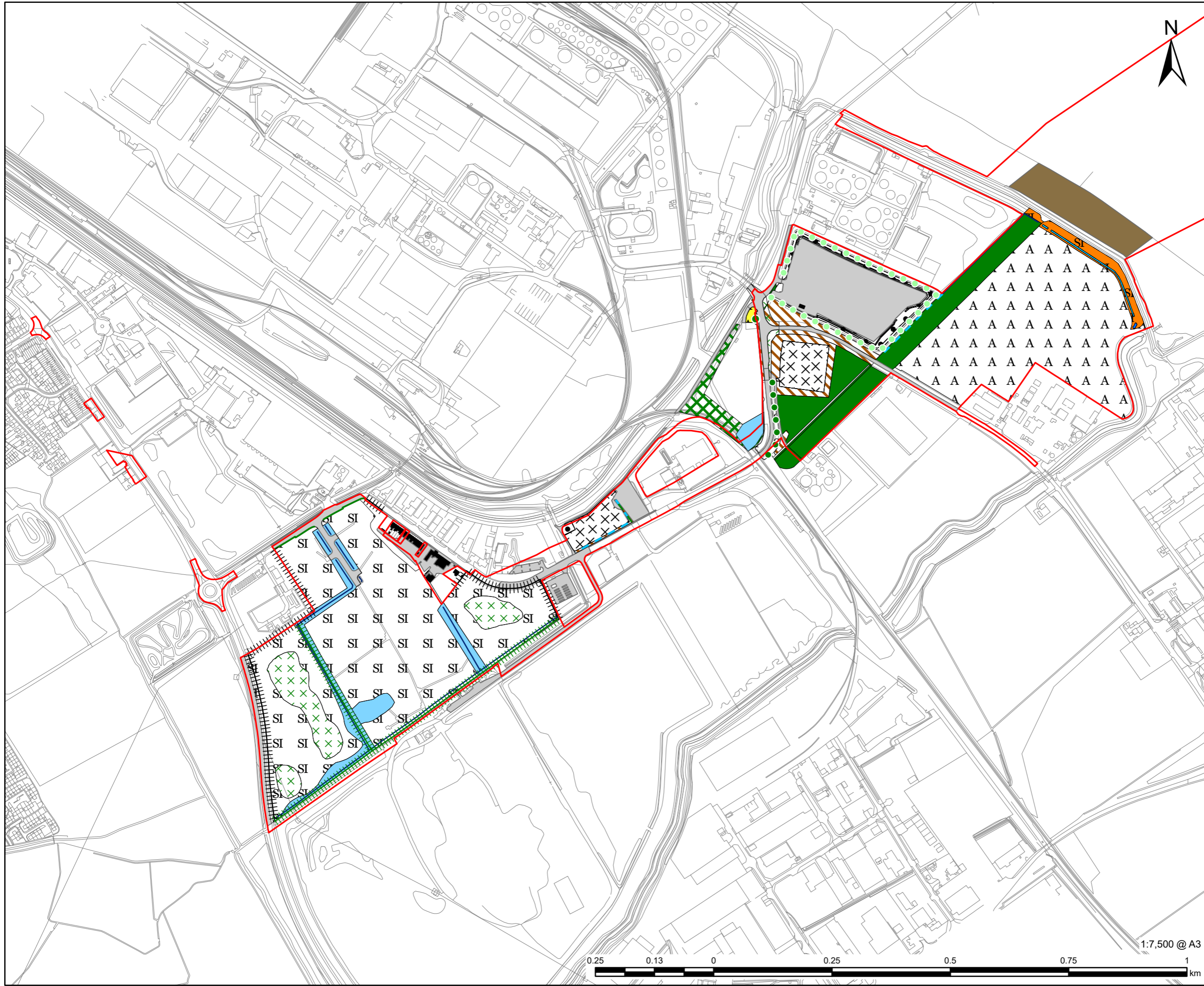






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# AECOM

**PROJECT**  
Immingham Green Energy Terminal

**CLIENT**  
Associated British Ports  
Air Products (BR) Limited

**CONSULTANT**  
AECOM Limited  
5th Floor  
2 City Walk  
Leeds, LS11 9AR  
www.aecom.com

- LEGEND**
- Site Boundary
  - Broadleaved Parkland/scattered trees (individual)
  - Broadleaved Parkland/scattered trees (line)
  - Coniferous Parkland/scattered trees
  - Intact hedge - species-poor
  - Defunct hedge - species-poor
  - | | | Hedge with trees - species-poor
  - | | | Fence
  - Dry ditch
  - Ditch
  - Broadleaved woodland - semi-natural
  - x x x Scrub - dense/continuous
  - x x Scrub - Scattered
  - S Neutral grassland - semi-improved
  - Poor semi-improved grassland
  - / / / Other tall herb and fern - ruderal
  - Swamp
  - Standing water
  - Running water
  - A Cultivated/disturbed land - arable
  - A Cultivated/disturbed land - amenity grassland
  - x x Cultivated/disturbed land - ephemeral/short perennial
  - Buildings
  - Bare ground
  - Intertidal - Mud/Cobbles
  - Hardstanding

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**ISSUE PURPOSE**  
Environmental Statement

**PROJECT NUMBER**  
60673509

**DEVELOPMENT CONSENT ORDER NO**  
TR030008

**FIGURE TITLE**  
Phase 1 Habitat Map

**FIGURE NUMBER**  
Figure 3

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