

Section 18





Habitats Management Plan

SAR Metals Ltd

3 Manby Road

South Killingholme

Immingham

DN40 3DX

Revision	Date	Originator	Description of changes
V1	February 2026	Olive Compliance Ltd	New for Permit Application



Basis of Report

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1.0 Introduction

Olive Compliance Ltd (OCL) has been instructed by SAR Metals Ltd (SAR) to prepare a Habitats Management Plan (HMP) in support their new Bespoke Permit Application.

The Habitat Management Plan is required as part of the permit application for consent of the Environmental Permit. It is overseen and is implemented by the operator.

The key aims set out in the Habitat Management Plan are implemented through various aims and prescriptions:

- Safeguarding species diversity by ensuring minimal impacts from works taking place on site.
- Mitigating for any negative effects to the identified sensitive receptors arising as a result of the change in site operations

The Environmental Risk Assessment identified any significant risks and was used to demonstrate that the risk of pollution or harm will be acceptable by taking the appropriate measures to manage these risks.

Where the risks identified could be considered that they have the potential to impact on habitats then mitigation will be provided to remove or reduce any adverse effects. The above guidance requires all receptors that are near the site and could reasonably be affected by the proposed activities to be identified, therefore:

- a 10km radius has been adopted in reviewing potentially sensitive receptors of ecological importance; and
- a radius of 1km from the proposed permit boundary has been adopted for all other potentially sensitive receptors (for example, residential, cultural heritage, commercial, industrial, agricultural and surface water receptors).

2.0 Site Setting and Receptors

2.1 Site Setting

The site is located at SAR Metals Ltd, 3 Manby Road, South Killingholme, Immingham, DN40 3DX.

The site has previously been used as a manufacturing and engineering facility, with SAR rebuilding and updating buildings to ensure integrity, installing critical infrastructure such as concrete storage bays, CCTV, fire detection improving to ensure environmental protection.

A summary of the immediate environmental site setting is provided in Table 1 below.

Table 1 - Surrounding Land Uses

Boundary	Description
North	Road Link
East	Industrial



South	Road Link
West	Rural (Woodland)

Image 1 - Site Setting



2.2 Environmental Designations

In the UK, nature sites and areas of countryside can be designated as protected areas due to their natural and cultural importance. These designated areas are protected to prevent activities and developments that might harm them.

Types of protected sites include:

An internationally or European protected site:

- special area of conservation (SAC)
- special protection area (SPA)
- Ramsar wetland
- potential SPA, possible SAC or proposed Ramsar wetland

A nationally protected site:

- site of special scientific interest (SSSI)
- marine conservation zone (MCZ)

A locally protected site:

- local nature reserve
- local wildlife site



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- local geological site

A protected area:

- national park or the Norfolk and Suffolk Broads
- area of outstanding natural beauty
- heritage coast

The type and location of Environmental Designations within 2000m (2km) are detailed below.

2.3 Sites of Special Scientific Interest (SSSI)

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

There is 1 record of a SSSI within 2000m of the site, a Site of Special Scientific Interest (SSSI) is located 1450m from the site (Humber Estuary)

Table 2 - Sites of Special Scientific Interest (SSSI)

ID	Location	Name	Data Source
A	1476m NE	Humber Estuary	Natural England

Humber Estuary. 28/07/94; England; 37,988 ha; 53°33'N 000°03'E. Special Protection Area, SSSI. An estuary with a max.7.4 m. tidal range exposing vast mud and sand flats at low tide. Vegetation includes extensive reedbeds, areas of mature and developing saltmarsh, backed by grazing marsh or low sand dunes with marshy slacks and brackish pools. The area regularly supports internationally important numbers of various species of breeding and wintering waterbirds. Many passage birds, notably internationally important populations of ringed plover, *Charadrius hiaticula*, and sanderling *Caldris alba* stage in the area. The site supports Britain's most southeasterly breeding colony of gray seal *Halichoerus grypus*. Human activities include tourism, recreation, commercial and recreational fishing, livestock grazing, and hunting. Renamed and area significantly increased in 2007. Ramsar site no. 663. Most recent RIS information: 2007.

2.4 Conserved Wetland Sites (RAMSAR Sites)

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.



There are records of 2 RAMSAR sites within 2000m of the site, located 1450m from the site (Humber Estuary).

- RAMSAR site is located 1450m from the site (Humber Estuary)

Table 3 - Conserved Wetland sites (RAMSAR)

ID	Location	Site	Details
1	1476m NE	Name: Humber Estuary Site status: Listed Data source: Natural England	Overview: The Humber Estuary is the largest macro-tidal estuary on the British North Sea coast. It drains a catchment of some 24,240 square kilometres and is the site of the largest single input of freshwater from Britain into the North Sea. It has the second-highest tidal range in Britain (max 7.4 m) and approximately one-third of the estuary is exposed as mud or sand flats at low tide. The inner estuary supports extensive areas of reedbed with areas of mature and developing saltmarsh backed in places by limited areas of grazing marsh in the middle and outer estuary. On the north Lincolnshire coast the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. The Estuary regularly supports internationally important numbers of waterfowl in winter and nationally important breeding populations in summer. Ramsar criteria: Ramsar criterion 1 The 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. It is a large macro-tidal coastal plain estuary with high suspended sediment loads, which feed a dynamic and rapidly changing system of accreting and eroding intertidal and subtidal mudflats, sandflats, saltmarsh and reedbeds. Examples of both strandline, foredune, mobile, semi-fixed dunes, fixed dunes and dune grassland occur on both banks of the estuary and



			along the coast. The estuary supports a full range of saline conditions from the open coast to the limit of saline intrusion on the tidal rivers of the Ose and Trent. Wave exposed sandy shores are found in the outer/open coast areas of the estuary. These change to the more moderately exposed sandy shores and then to sheltered muddy shores within the main body of the estuary and up into the tidal rivers. The lower saltmarsh of the Humber is dominated by common cordgrass <i>Spartina anglica</i> and annual glasswort <i>Salicornia</i> communities. Low to mid marsh communities are mostly represented by sea aster <i>Aster tripolium</i>, common saltmarsh grass <i>Puccinellia maritima</i> and sea purslane <i>Atriplex portulacoides</i> communities. The upper portion of the saltmarsh community is atypical, dominated by sea couch <i>Elytrigia atherica</i> (<i>Elymus pycnanthus</i>) saltmarsh community. In the upper reaches of the estuary, the tidal marsh community is dominated by the common reed <i>Phragmites australis</i> fen and sea club rush <i>Bolboschoenus maritimus</i> swamp with the couch grass <i>Elytrigia repens</i> (<i>Elymus repens</i>) saltmarsh community. Within the Humber Estuary Ramsar site there are good examples of four of the five physiographic types of saline lagoon. Ramsar criterion 3 The Humber Estuary Ramsar site supports a breeding colony of grey seals <i>Halichoerus grypus</i> at Donna Nook. It is the second largest grey seal colony in England and the furthest south regular breeding site on the east coast. The dune slacks at Saltfleetby-Theddlethorpe on the southern extremity of the Ramsar site are the most north-easterly breeding site in Great Britain of the natterjack toad <i>Bufo calamita</i>. Ramsar criterion 5 Assemblages of international importance: 153,934 waterfowl, non-breeding season (5 year peak mean
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			1996/97-2000/2001) Ramsar criterion 6
1	1476m NE	Name: Humber Estuary	Overview: The Humber Estuary is the largest macro-tidal estuary on the British North Sea coast. It drains a catchment of some 24,240 square kilometres and is the site of the largest single input of freshwater from Britain into the North Sea. It has the second-highest tidal range in Britain (max 7.4 m) and approximately one-third of the estuary is exposed as mud or sand flats at low tide. The inner estuary supports extensive areas of reedbed with areas of mature and developing saltmarsh backed in places by limited areas of grazing marsh in the middle and outer estuary. On the north Lincolnshire coast the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. The Estuary regularly supports internationally important numbers of waterfowl in winter and nationally important breeding populations in summer. Ramsar criteria: Ramsar criterion 1 The 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. It is a large macro-tidal coastal plain estuary with high suspended sediment loads, which feed a dynamic and rapidly changing system of accreting and eroding intertidal and subtidal mudflats, sandflats, saltmarsh and reedbeds. Examples of both strandline, foredune, mobile, semi-fixed dunes, fixed dunes and dune grassland occur on both banks of the estuary and along the coast. The estuary supports a full range of saline conditions from the open coast to the limit of saline intrusion on the tidal rivers of the Ouse and Trent. Wave exposed sandy



			shores are found in the outer/open coast areas of the estuary. These change to the more moderately exposed sandy shores and then to sheltered muddy shores within the main body of the estuary and up into the tidal rivers. The lower saltmarsh of the Humber is dominated by common cordgrass <i>Spartina anglica</i> and annual glasswort <i>Salicornia</i> communities. Low to mid marsh communities are mostly represented by sea aster <i>Aster tripolium</i>, common saltmarsh grass <i>Puccinellia maritima</i> and sea purslane <i>Atriplex portulacoides</i> communities. The upper portion of the saltmarsh community is atypical, dominated by sea couch <i>Elytrigia atherica</i> (<i>Elymus pycnanthus</i>) saltmarsh community. In the upper reaches of the estuary, the tidal marsh community is dominated by the common reed <i>Phragmites australis</i> fen and sea club rush <i>Bolboschoenus maritimus</i> swamp with the couch grass <i>Elytrigia repens</i> (<i>Elymus repens</i>) saltmarsh community. Within the Humber Estuary Ramsar site there are good examples of four of the five physiographic types of saline lagoon. Ramsar criterion 3 The Humber Estuary Ramsar site supports a breeding colony of grey seals <i>Halichoerus grypus</i> at Donna Nook. It is the second largest grey seal colony in England and the furthest south regular breeding site on the east coast. The dune slacks at Saltfleetby-Theddlethorpe on the southern extremity of the Ramsar site are the most north-easterly breeding site in Great Britain of the natterjack toad <i>Bufo calamita</i>. Ramsar criterion 5 Assemblages of international importance: 153,934 waterfowl, non-breeding season (5 year peak mean 1996/97-2000/2001) Ramsar criterion 6
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This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage

The Data sheet for the RAMAR is available in Appendix 1 of this report.



2.5 Special Areas of Conservation (SAC)

Special Areas of Conservation (SAC) are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

There is one record of a SACs within 2000m of the site.

Table 4 - Special Areas of Conservation (SAC)

ID	Location	Name	Species of Interest	Habitat Description	Data Source
A	1476m NE	Humber Estuary	Subtidal sandbanks; Estuaries; Intertidal mudflats and sandflats; Lagoons; Annual vegetation of drift lines; Glasswort and other annuals colonising mud and sand; Cord-grass swards; Atlantic salt meadows; Shifting dunes; Shifting dunes with marram; Dune grassland; Dunes with sea-buckthorn; Sea lamprey; River lamprey; Allis shad; Twaite shad; Grey seal; Common seal.	Bogs, Marshes, Water fringed vegetation, Fens; Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

The Data Sheet for the SAC is available in Appendix 2 of this report.

2.6 Special Protection Area (SPA)

Special Protection Area (SPA) sites are classified by the UK Government under the EC Birds Directive; SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

There is 1 record of a SPA within 2000m Special protection areas (SPA) is located 1450m from the site (Humber Estuary).



Table 5 - Special Protection Area (SPA)

ID	Location	Name	Species of Interest	Habitat Description	Data Source
A	1476m NE	Humber Estuary	Subtidal sandbanks; Estuaries; Intertidal mudflats and sandflats; Lagoons; Annual vegetation of drift lines; Glasswort and other annuals colonising mud and sand; Cord-grass swards; Atlantic salt meadows; Shifting dunes; Shifting dunes with marram; Dune grassland; Dunes with sea-buckthorn; Sea lamprey; River lamprey; Allis shad; Twaite shad; Grey seal; Common seal.	Bogs, Marshes, Water fringed vegetation, Fens; Salt marshes, Salt pastures, Salt steppes; Coastal sand dunes, Sand beaches, Machair; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage

Site description: The Humber Estuary is located on the east coast of England, and comprises extensive wetland and coastal habitats. The inner estuary supports extensive areas of reedbed, with areas of mature and developing saltmarsh backed by grazing marsh in the middle and outer estuary. On the north Lincolnshire coast, the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. Parts of the estuary are owned and managed by conservation organisations. The estuary supports important numbers of waterbirds (especially geese, ducks and waders) during the migration periods and in winter. In summer, it supports important breeding populations of bittern *Botaurus stellaris*, marsh harrier *Circus aeruginosus*, avocet *Recurvirostra avosetta* and little tern *Sterna albifrons*.

Qualifying Features:

A021 *Botaurus stellaris*; Great bittern (Non-breeding) A021 *Botaurus stellaris*; Great bittern (Breeding) A048 *Tadorna tadorna*; Common shelduck (Non-breeding) A081 *Circus aeruginosus*; Eurasian marsh harrier (Breeding) A082 *Circus cyaneus*; Hen harrier (Non-breeding) A132 *Recurvirostra avosetta*; Pied avocet (Non-breeding) A132 *Recurvirostra avosetta*; Pied avocet (Breeding) A140 *Pluvialis apricaria*; European golden plover (Non-breeding) A143 *Calidris canutus*; Red knot (Non-breeding) A149 *Calidris alpina alpina*; Dunlin (Non-breeding) A151 *Philomachus pugnax*; Ruff (Non-breeding) A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding) A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding) A162 *Tringa totanus*; Common redshank (Non-breeding) A195 *Sterna albifrons*; Little tern (Breeding) Waterbird assemblage

The Data Sheet for the SPA is available in Appendix 3 of this report.



2.7 National Nature Reserve (NNR)

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

There are **NO** records of NNRs within 2000m of the Site.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage

2.8 Local Nature Reserve (LNR)

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. These are sites managed for nature conservation, and to provide opportunities for research and education, or to provide public recreation compatible with natural heritage interests, by simply enjoying and having contact with nature. They are declared by Local Authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

There are **NO** records of LNRs within 2000m of the Site.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage

2.9 Additional Sites of Protection or Designation

2.9.1 Designated Ancient Woodland

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

There are **NO** Designated Ancient Woodlands within 2000m (2km) of the site.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage

2.9.2 Biosphere Reserves

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

There are **NO** Biosphere Reserves within 2000m (2km) of the site.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage



2.9.3 Forest Parks

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

There is **NO** Forest Parks within 2000m (2km) of the site.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage

2.9.4 Marine Conservation Zones

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

There are **NO** Marine Conservation Zones within 2000m (2km) of the site.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage

2.9.5 Green Belt

Areas designated to prevent urban sprawl by keeping land permanently open.

There are no designated Green Belts within 2000m (2km) of the site.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage

2.10 Visual and Cultural Designation

There are no records of World Heritage sites, Area of Outstanding Natural Beauty, National Parks, Listed Buildings, Conservation Areas, Scheduled Ancient Monuments and Registered Parks and Gardens within 2000m of the Site.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage

2.11 Habitat Designations

Habitat designations are crucial for the conservation and management of biodiversity. In the UK, several designations are used to protect and manage habitats, including:

- **Phase 1 Habitat Classification:** A standardized system to record semi-natural vegetation and other wildlife habitats, covering large areas of countryside. It provides a basic assessment of habitat type and potential importance for nature conservation.
- **Special Areas of Conservation (SAC) and Special Protection Areas (SPA):** Strictly protected sites designated under the EU Habitats Directive, covering habitats and species considered most in need of conservation at a European level.
- **RAMSAR Sites:** Wetlands designated as protected sites under the Ramsar Convention, recognized for their international significance.



- **Sites of Special Scientific Interest (SSSIs):** Important habitats that support plants and animals that find it difficult to survive elsewhere in the countryside, representing the country’s best wildlife and geological sites.

2.12 Priority Habitat Inventory

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

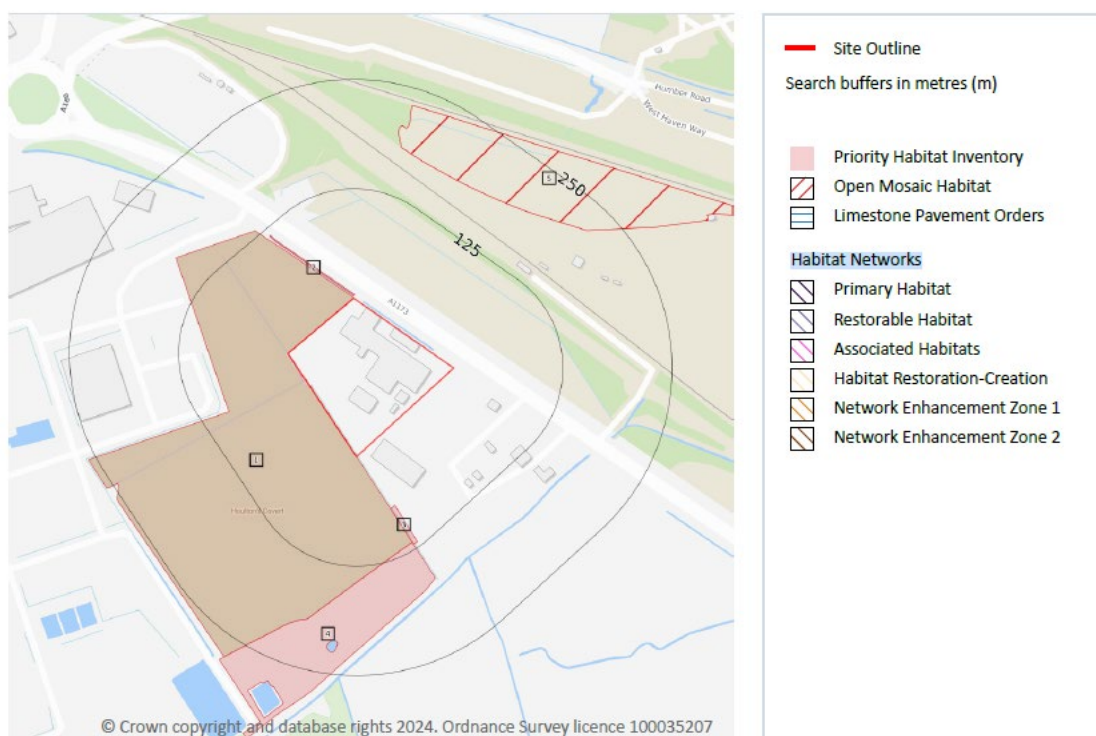
Records show that there is 4 Priority Habitats have been identified, that fall within 117m of the Site.

Table 6 - Priority Habitats

ID	Location	Main Habitat	Other Habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	3m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	71m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	117m S	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)

This data is sourced from Natural England.

Image 2 – Priority Habitat Inventory



2.13 Habitat Networks

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

There are no Habitat Networks within 2000m (2km) of the site.

This data is sourced from Natural England.

2.14 Open Mosaic Habitat

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

There is 1 recorded Open Mosaic habitats located within 250m of the site.

Table 7 - Open Mosaic Habitat

ID	Location	Site Reference	Identification Confidence	Primary Source	Secondary Source	Tertiary Source
1	175m N	HLD_refs:	175m N	HLD_refs:	Environment Agency Historic Landfill Sites	N/A

This data is sourced from Natural England.

2.15 Limestone Pavement Order

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

There are **no** Limestone Pavements recorded within 250m of the Site.

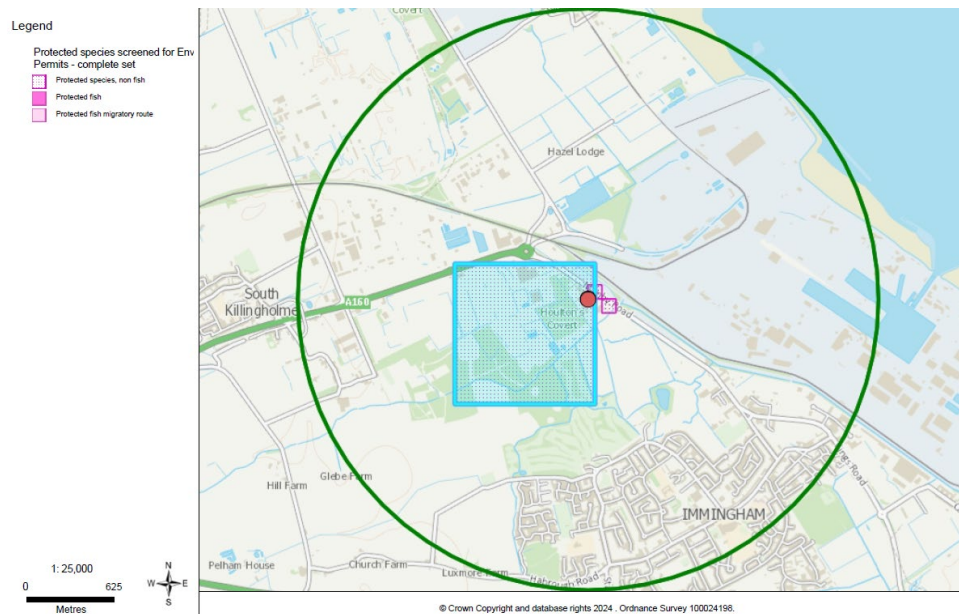
This data is sourced from Natural England.



2.16 Protected Species

The EA screening at pre-application stage in 2024 identified the below sensitive protected species.

Image 3 – EA Screening



Water voles are protected under the Wildlife and Countryside Act 1981. It is an offence to intentionally:

- kill, injure or take them
- possess or control them (alive or dead)
- It is also an offence to intentionally or recklessly:
 - damage or destroy a structure or place used for shelter or protection
 - disturb them in a place used for shelter or protection
 - obstruct access to a place used for shelter or protection

Water voles are also listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006).

In relation site development, construction and ongoing management, the Operator will maintain.

- vegetation management to maintain shelter and foraging resources
- managing the potential risks from increased human presence and pollution through monitoring and appropriate measures.
- water quality management to make sure it's maintained with no release to surface waters.

Records held by the LERC-finder - ALERC - Association of Local Environmental Records Centres¹. The LERC Search Access Request: Kathrine Dowling 20260311091530 provided the below information in relation to the National Grid references within 250m where the water vole has been recorded.

¹ LERC-finder - ALERC - Association of Local Environmental Records Centres



Image 4 – LREC Records – Water Vole Locations

The below data provided records show the grid references and date of the last recorded of species identification. In relation to the site it has been 16 years (2010) when the last recorded identification of the species was recorded.

Taxon_Group	Common_Name	Taxon_Name	Location	Grid Reference	Year	Date
terrestrial mammal	Water Vole	Arvicola amphibius	Immingham	TA172166	2009	2009
terrestrial mammal	Water Vole	Arvicola amphibius		TA173167	2009	2009
terrestrial mammal	Water Vole	Arvicola amphibius		TA173167	2009	2009
terrestrial mammal	Water Vole	Arvicola amphibius	Drain near Immingham	TA174162	2010	September 2010
terrestrial mammal	Water Vole	Arvicola amphibius		TA174166	2009	2009
terrestrial mammal	Water Vole	Arvicola amphibius	Immingham	TA174167	2009	2009
terrestrial mammal	Water Vole	Arvicola amphibius	Drain near Immingham	TA174167	2010	September 2010
terrestrial mammal	Water Vole	Arvicola amphibius	Drain near Immingham	TA175161	2010	September 2010
terrestrial mammal	Water Vole	Arvicola amphibius	Drain near Immingham	TA175166	2010	September 2010
terrestrial mammal	Water Vole	Arvicola amphibius	Immingham	TA176166	2009	2009



Conservation Objectives

The site's conservation objectives apply to the site and the individual species and/or assemblage of species for which the sites have been classified with either SSI, SPA, RAMSAR or LNR status.

The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the Favourable Conservation Status of its qualifying features, by maintaining or restoring:

- the extent and distribution of qualifying natural habitats and habitats of the qualifying species
- the structure and function (including typical species) of qualifying natural habitats
- the structure and function of the habitats of the qualifying species
- the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- the populations of each of the qualifying species
- the distribution of qualifying species within the site.

3.0 Managing Risks in Relation to Sensitive Receptors and Habitats

3.1 Sensitivity of receptors

Sensitive receptors can include, but are not limited to environmental habitat and sites, hospitals, schools, protected species sites, childcare facilities, elderly housing and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to high levels of dust and particulates.

3.2 Control procedures

The site has an ISO accredited management system and standalone procedures that relate to protection of the sensitive receptors that are detailed in within this report.

Standalone Dust and Emissions Management Plan specific controls that allows the site to operate with adequate controls in place to minimise the risk of emissions leaving site, preventing affecting flora, local visitors and tourism in the surrounding area.

SAR will ensure that the integrity of the site is maintained and restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and
- The distribution of the qualifying features within the site



3.3 Habitat Management

As there are specific considerations in relation to the designated SPA, RAMSAR and SSI sites, relevant survey works should be undertaken prior to any major site changes or redevelopments.

The key aims set out in the Habitat Management Plan are implemented through various aims and prescriptions:

- Mitigating any negative effects on the Designated Sites as a result of the site activities

4.0 Local Habitats and Description

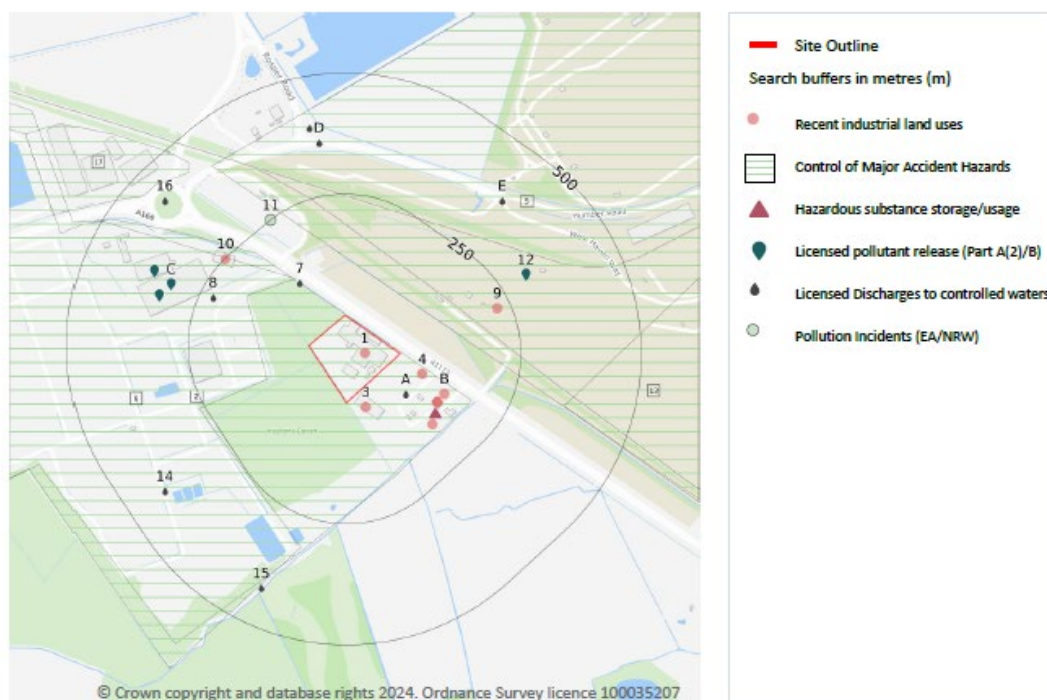
Image 5 below displays the location of the site in relation to current land industrial use.

The site is made up of one large industrial factory buildings to be split into separate waste activities by activity sector with one additional external building located within the footprint of the site.

The site has limited external drainage, with drainage systems in place for clean and uncontaminated rainwater from building roofs and car parking areas. This water enters the surface water drainage system and discharges externally. Foul water from welfare systems is also in place.

The site has previously been used as a manufacturing and engineering facility, with SAR rebuilding and updating buildings to ensure integrity, installing critical infrastructure such as concrete storage bays, CCTV, fire detection improving to ensure environmental protection.

Image 5 - Current land industrial use



5.0 Habitats Environmental Risk Assessment

5.1 Overview and Approach

This section outlines the procedure that has been followed in the undertaking of the Environmental Risk Assessment (ERA) for the site. The results are presented, in accordance with the EA Guidance, in the tables presented below.

5.1.1 Identification of Hazards

The first step of an ERA is to consider and identify the risks posed to local habitats and species within 1km by the activities proposed for the site.

The EA Guidance states that an operator must:

“...identify whether any of the following risks could occur and what the environmental impact could be:

- *any discharge, for example sewage or trade effluent to surface or groundwater*
- *accidents*
- *odour (not for standalone water discharge and groundwater activities)*
- *noise and vibration (not for standalone water discharge and groundwater activities)*
- *uncontrolled or unintended (fugitive) emissions, for which risks include dust, litter, pests and pollutants that shouldn't be in the discharge*
- *visible emissions, e.g. smoke or visible plumes”*

5.1.2 Identification of Receptors

This document and the ERA describe the site setting and the land uses in the vicinity of the proposed site. This information has been used in order to focus on the main receptors that could be potentially at risk from the activities of the site.

Using the information gathered from the stated sources, the receptors considered for assessment within the ERA are defined in tables below.

In accordance with the EA Guidance, Drawing 004_ Site Receptor Plan presents a map showing the location of the site and the receptors considered within the ERA.

5.1.3 Identification of Potential Pathways

For each of the identified hazards for operation of the site, the ERA has considered that pathways through which each hazard may impact on a sensitive receptor. Where such pathways exist, the risks of potentially significant impacts have been assessed and are included in the tables below.

5.1.4 Assessment of Risks

The EA Guidance states that the nature of the ERA will be influenced by the type of activity (or activities) that are proposed for a site. For installations/waste operations, the ERA is required to consider, “...one or more of the following, depending on the substances you discharge and where they're discharged to:



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- *assess the risks of your air emissions*
- *calculate the global warming impact of your air emissions*
- *assess risks to groundwater*
- *assess risk to groundwater from landfill leachate*
- *assess risks to surface water from hazardous pollutants*
- *assess risks to surface water from sanitary and other pollutants”*

For installations and waste operations, an operator is also required to decide how to treat, recycle or dispose of waste. The ERA has therefore included consideration of the environmental impact of the ultimate fate of the materials that will be processed by the proposed activities of the site.

5.1.5 Controlling Risks

The EA Guidance states:

“You’ll need to show how you’re managing any risks appropriately by controlling and monitoring your emissions and through your management system.”

Where an ERA identifies risks that are potentially significant, the ERA is required to demonstrate how the risk of pollution or harm can be mitigated by measures to manage these risks. The approach undertaken to the implementation of management/mitigation measures, for this ERA, is (in order of preference):

- Avoidance/prevention
- Minimisation/management
- Mitigation; and
- Offset/compensation

The following tables present the assessment in terms of hazards posed, receptors and pathways, along with management and residual risks for the following hazards:

- Odour
- Noise and Vibration
- Fugitive Emissions (including dust, mud, litter and pests); and
- Accidents

Noise and vibration will be kept to a minimum by methods of work that conform to the ‘*Code of Practice Noise and Vibration Control on Construction and Open Sites*’. Noise levels arising from the construction operations, outside the nearest window of the occupied room closest to the site boundary should not exceed 75dbs. Where appropriate, the quietest plant and machinery will be employed and fitted with appropriate noise limiting measures.

Noise levels will be controlled through a number of actions including:

- The site will be totally surrounded by fencing and hoarding, where feasible
- Any vehicles and mechanical plant fitted with exhaust silencers will be maintained in good and efficient working order and operated effectively



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- Machines and equipment in intermittent use will be shut down or throttled down to a minimum when not in use
- Care will be taken when loading or unloading vehicles and moving materials
- All vehicles, plant and equipment should be maintained and operated in a manner so that extraneous noise from mechanical vibration, creaking and screeching is kept to a minimum



Table 8
HABITATS - Odour Risk Assessment and Management Plan

Table 8 Odour Risk Assessment						
Hazard	Receptor	Pathway	Risk Management Techniques	Probability of Exposure	Consequence	Overall Risk (following Mitigation)
Odour	Local residents nearest residential receptors and sensitive habitats (SSSI,SPA,SCA,SPA Protected species / habitats	Airborne	- Stringent pre-acceptance, acceptance and rejection procedures will prevent any malodorous materials from entering site. - Metals, WEEE, Catalytic Convertors and Batteries are not malodorous by nature. - All vehicles delivering and collecting materials from the site are covered or secure. - All waste processing operations take place within enclosed processing buildings to manage the risk of any potential odour impact off site. - There is no external storage of odorous waste onsite. - Odour is monitored on a daily basis during the daily site inspection. - In the unlikely event of any complaints, these will be dealt with in accordance with the sites complaints procedures. - An OMP is not required.	Low: due to nature of the facility	Nuisance Environ damage, including loss of priority habitats and breeding and population	Very Low – due to the proposed management techniques, waste types and location of site

Table 9
HABITATS - Noise Risk Assessment and Management Plan

Table 9 Noise Risk Assessment						
Hazard	Receptor	Pathway	Risk Management Techniques	Probability of Exposure	Consequence	Overall Risk (following Mitigation)
Noise emanating from waste processing equipment and handling	Local Residents & Workers Local environ SSSI,SPA,SC R,SPA Habitats and protected Species	Airborne	- The site is located within a predominantly industrial/rural setting and as such is not considered unduly sensitive in regard to noise. - All waste acceptance and treatment takes place in enclosed buildings with exception of bulk metals (no treatment) and storage of bulk batteries (1 container) are conducted externally. - All treatment of WEEE/CATS, handling of Batteries takes place inside the appropriate buildings which all benefit from roller shutter doors to minimise any noise from vehicle/plant movements, waste handling etc. - No treatment is proposed to bulk metals if received. They will be stored awaiting onward recycling. These wastes are not a primary business model and is not expected to form part of daily operations. Noise may occur when unloading and loading metals, mitigation controls such as site operatives are trained to handle wastes carefully ensuring they do not drop waste materials from height and drag containers across site surfaces. - Care is taken when loading metal wastes into vehicles directly not dropping from height. - The proposed shredding of WEEE waste is conducted in a building (5) which is fully enclosed located away from sensitive receptors, with a low treatment throughput of 4-5 per day. The proposed shredder is electric powered, and plant	Low: due to proximity of closest receptors	Nuisance Environ damage, including loss of priority habitats and breeding and population	Low – due to the proposed management techniques

			is chosen to consider low noise and low vibration to reduce the risk of any environmental pollution. • SAR have a buying policy which considers noise emissions of all new plant due for renewal / replacement. • All potentially noisy plant will be acoustically enclosed and / or fitted with attenuation. • Appropriate preventative maintenance will be provided for the various elements of the installation. This will ensure no deterioration of plant or equipment that would give rise to increases in noise. • There are no generators on site which can produce significant noise levels. • All equipment has been designed in accordance with best practice and to ensure that any noise does not present an issue to the employees at the site under the Control of Noise at Work Regulations, and also to ensure that noise breakout does not lead to noise nuisance at the identified sensitive receptors. • The facility will not give rise to reasonable cause for annoyance. In the unlikely event of any complaints, these will be dealt with in accordance with the sites complaints procedures. • The site has a Noise Management Procedure in place.			
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Noise associated with HGV movements (deliveries of metal/WEEE/ELV wastes)	Local Residents & Workers/Habitats	Airborne	• Deliveries and collections take place only during operational hours. • All vehicles would be fitted with white noise reversing signals rather than the traditional 'beeper' warnings. • No Noise Impact Assessment was required or Noise Management Plan from the initial EA screening conducted and Pre Application advice given. • The requirement for a NIA and NMP has been screened through the EA NIA Tool (<u>Noise and vibration: environmental permit application guidance - GOV.UK</u>) • Risk assessments with regard to machinery noise levels to be carried out annually or if site activities change.	Low: due to proximity of closest receptors and controls	Nuisance Environ damage, including loss of priority habitats and breeding and population	Low – due to the proposed management techniques
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Table 10
HABITATS - Fugitive Emissions Risk Assessment and Management Plan

Table 10 Fugitive Emissions Risk Assessment						
Hazard	Receptor	Pathway	Risk Management Techniques	Probability of Exposure	Consequence	Overall Risk (following Mitigation)
Leaks / spillages	Land, Groundwater & Surface Water Escape of pollutants to sensitive receptors	Waterborne/Land	• There is a single self-bunded 5,000 litre diesel tank onsite. • The main source of any spillages may be due to fuel leaks from vehicles or mobile plant. • Battery acceptance is undertaken internally with batteries checked for damage upon receipt with no treatment undertaken. These are bulked by type and stored awaiting removal. • The site buildings are all surfaced in impermeable concrete surfacing. • All treatment and processing activities are located internally. • Batteries stored externally in a shipping container (and loaded in secure acid proof containers) are stored on impermeable concrete surfacing. • Only clean and uncontaminated metals are stored externally on hardstanding/tarmac areas. • Spill kits will be strategically located on site. • Minor spills to be cleaned up immediately, using spill kits. Resultant materials to be placed in container for off-site disposal to appropriate facility, if necessary. • Immediate action to be taken in the event of any major spills. Spillage to be cleared immediately and placed in containers for offsite disposal. EA to be informed.	Low	Contamination Environ damage, including loss of priority habitats and breeding and population	Very Low: – due to the proposed management techniques

Dust	Local residents Habitats/Sensitive receptors which will impact water quality, flora and fauna, and groundwater	Airborne	- No processing activities take place externally. All processing/treatment takes place within the enclosed building. - Only bulk clean metals are stored externally in designated stockpiles. No treatment of this waste is carried out externally. Operations will cease when winds are deemed to cause excessive movement of wastes and any potential emissions from the handling of these wastes. Cleaning any loose waste from vehicles after covering and securing will also be conducted. - Bulk batteries are stored in a shipping container secure and fully enclosed. - Treatment of Catalytic Converters are undertaken in a fully enclosed building with an LEV system to extract dust and fumes. - WEEE treatment is undertaken internally (other than shredding) is undertaken by hand tools reducing any suspension or release of emissions to air. - Proposed shredding of residual WEEE such as metal/plastic parts/casings once all recyclable components are removed is undertaken in a separate building (fully enclosed) which will have an LEV system installed to mitigate against any suspension of particles, fumes and dust that could impact human and the environmental receptors. - A Dust Management Plan (DEMP) has been prepared to support activities on site. - There are strict pre-acceptance, acceptance and rejection procedures in place to ensure that no material exhibiting dusty properties is accepted onto site. - Vehicle speeds will be reduced to 5mph on site which is a recognised method of controlling dust. - All plant will be regularly maintained, inspected and kept clean to avoid a build-up of material, which may lead to dust emissions. - Site drainage and containment systems and associated infrastructure will also be regularly	Low: due to proximity of closest receptors	Nuisance Environmental damage, including loss of priority habitats and breeding and population	Low – due to the proposed management techniques
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			cleared and maintained as required to ensure they are working correctly. • All incoming / departing loads will be appropriately sheeted or tipped in designated areas. • The facility will not give rise to reasonable cause for annoyance. In the unlikely event of any complaints, these will be dealt with in accordance with the sites complaints procedures.			
Litter	Local residents Sensitive receptors	Windblown to air	• The site access and concrete / hard standing surfacing shall be swept/cleaned as necessary. • All storage takes place internally with the exception of bulk clean metals in stockpiles (this waste stream does not give rise to litter), bulk battery storage (enclosed shipping container), ferrous metals in a secure container/s from the treatment process of CATS and WEEE. These wastes do not give rise to litter.	Low: Little potential for waste to be generated	Nuisance , Enviro damage, including loss of priority habitats and breeding and	Very Low: – due to the proposed management techniques

			- Waste created on site (eg:packaging/wood) which are stored in a covered container. - Vehicles delivering waste to the site / collecting products are covered and secure. - The site has robust housekeeping measures in place. - Any waste generated by the facility will be disposed of at the appropriate onsite location and subject to the general site waste management plan. - The site is inspected daily by the site manager and any litter or accumulated debris shall be dealt with immediately.		population	
Pests	Local Residents	Airborne & via land migration	- The site can employ commercially available products and services to control pest who visit site six weekly. - Waste types are not attractive to pests.	Low: the occurrence of pests on site is unlikely.	Nuisance	VERY LOW due to the proposed risk management techniques

Table 11
HABITATS - Accidents Risk Assessment and Management Plan

Table 11 Accident Risk Assessment						
Hazard	Receptor	Pathway	Risk Management Techniques	Probability of Exposure	Consequence	Overall Risk (following Mitigation)
Fire	Emissions to atmosphere Air quality Receptors – deciduous woodland Flora / Forna SSSI,SPA,SCA,RA MSAR Tourism / Public	Airborne	- Arson by intruders is controlled via security. - The site is monitored by CCTV 24/7. - Visual inspection of all aspects of site are undertaken once daily in accordance with site inspection procedure. - Any fire during operational hours would be immediately identified by the sites visual inspection programme. - The sites inspection and maintenance programme will identify any electrical or mechanical machinery faults which could result in a machinery fire. - Machinery is regularly cleaned to remove any dust, etc to ensure that this does not accumulate on moving parts. - All equipment on site is equipped with dedicated fire suppression. - A number of fire extinguishers are placed at strategic locations around the plant associated with every item of mobile plant. - The potential for sparks is regularly monitored by site staff. - The risk of damaged or exposed electrical cables is controlled via the regular inspection and maintenance programme. - Staff and visitors are only permitted to smoke within the designated area, which is located offsite.	Low	Nuisance, damage, including loss of priority habitats and breeding and population	VERY LOW due to the proposed risk management techniques

			• There is no smoking permitted within the operational or storage areas. • All of the storage arrangements in line with Fire Prevention Plan Guidance maximum pile sizes and storage times. • All fire water is controlled on site reducing impact to surface water and protected species / habitats • The site has a detailed EA Approved Fire Prevention Plan. • The site will have an Emergency Plan in place • The company have an Accident and Incident Plan in place			
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6.0 Conclusion

This Habitats environmental risk assessment has been undertaken in the spirit of the withdrawn regulatory guidance EPR H1². The assessment is provided as part of the application for an environmental permit application on behalf of SAR Metals Ltd.

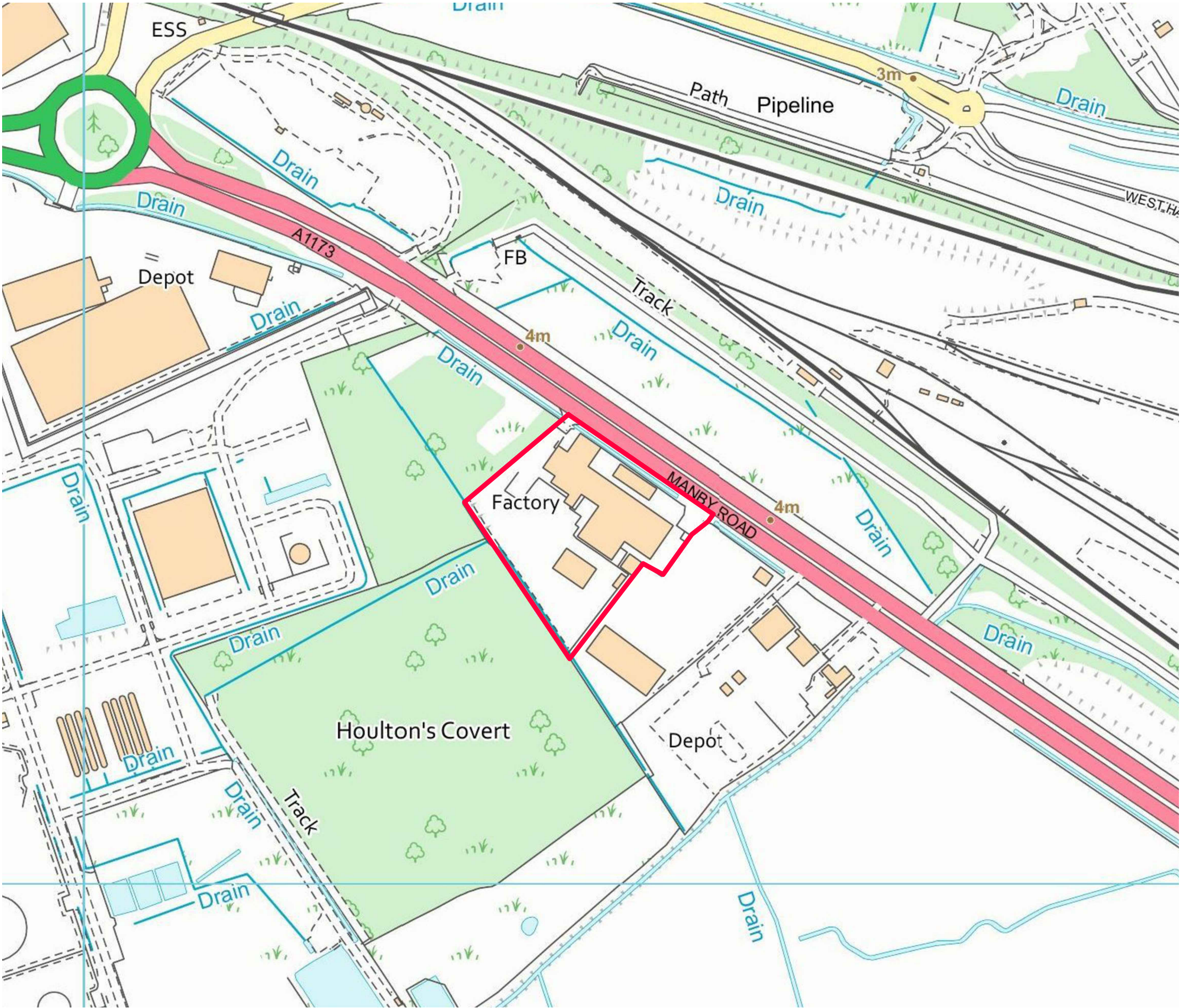
This qualitative risk assessment has considered odour, noise, fugitive emissions, dust, releases to water, litter, and potential for accidents and incidents. The assessment concludes that with the implementation of the risk management measures described above, potential hazards from the proposed activities are not likely to be significant and no further assessment is required.

The site activities may result in the generation of noise in respect of the remediation and development works; however, these impacts will be restricted to the locality of the site and there will be no significant impacts from noise, dust or odour emissions on the highlighted sensitive Habitats and Species.

In summary, it is concluded that the site, will not cause adverse effects to the integrity of the SPA and Ramsar sites, either alone or in combination with activities, plans or projects, provided that the mitigation measures specified are satisfactorily delivered. Given that the interest features of the SSSI, in terms of potential impacts from the site activities, are of the same nature and are in approximately the same locations as those of the SPA and Ramsar sites, a similar conclusion can be reached with respect to the SSSI.

² Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, (withdrawn 2016)





NOTES

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LEGEND

THE SITE

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W

E

S

SITE
SAR

UNIT 3 MANBY ROAD SOUTH KILLINGHOLME IMMINGHAM DN40 3DX

PROJECT

EA Permit Application

DRAWING TITLE

LOCATION PLAN

DRAWING NUMBER

001

REVISION

0

SCALE

1:5000 @ A3

DATE

14.11.24



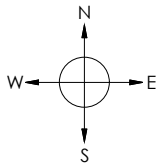
NOTES

DRAWING IS A SITE SCHEMATIC

ANY ANOMALIES ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF OLIVE COMPLIANCE

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- LEGEND
- PERMIT BOUNDARY
 - SURFACE WATER DRAINAGE
 - FOUL DRAINAGE
 - RWP RAIN WATER PIPE
 - F1 FOUL WATER MANHOLES
 - S1 SURFACE WATER MANHOLES



SITE SAR UNIT 3 MANBY ROAD SOUTH KILLINGHOLME IMMINGHAM DN40 3DX	
PROJECT EA Permit Application	
DRAWING TITLE SITE DRAINAGE PLAN	
DRAWING NUMBER 009	REVISION 1 - 16.01.26
SCALE 1:750 @ A3	DATE 07.01.26



EC Directive 79/409 on the Conservation of Wild Birds Special Protection Area (SPA)

Name: Humber Estuary

Unitary Authorities/Counties: City of Kingston-upon-Hull, East Riding of Yorkshire, Lincolnshire, North East Lincolnshire, North Lincolnshire

Component SSSIs: The SPA encompasses all or parts of the following Sites of Special Scientific Interest (SSSIs): Humber Estuary SSSI, North Killingholme Haven Pits SSSI, Saltfleetby-Theddlethorpe Dunes SSSI, and The Lagoons SSSI.

Site description: The Humber Estuary is located on the east coast of England, and comprises extensive wetland and coastal habitats. The inner estuary supports extensive areas of reedbed, with areas of mature and developing saltmarsh backed by grazing marsh in the middle and outer estuary. On the north Lincolnshire coast, the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. Parts of the estuary are owned and managed by conservation organisations. The estuary supports important numbers of waterbirds (especially geese, ducks and waders) during the migration periods and in winter. In summer, it supports important breeding populations of bittern *Botaurus stellaris*, marsh harrier *Circus aeruginosus*, avocet *Recurvirostra avosetta* and little tern *Sterna albifrons*.

Size of SPA: The SPA covers an area of 37,630.24 ha.

Qualifying species:

The site qualifies under **article 4.1** of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:

Annex I species	Count and season	Period	% of GB population
Avocet <i>Recurvirostra avosetta</i>	59 individuals – wintering	5 year peak mean 1996/97 – 2000/01	1.7%
Bittern <i>Botaurus stellaris</i>	4 individuals – wintering	5 year peak mean 1998/99 – 2002/03	4.0%
Hen harrier <i>Circus cyaneus</i>	8 individuals – wintering	5 year peak mean 1997/98 – 2001/02	1.1%
Golden plover <i>Pluvialis apricaria</i>	30,709 individuals – wintering	5 year peak mean 1996/97 – 2000/01	12.3%
Bar-tailed godwit <i>Limosa lapponica</i>	2,752 individuals – wintering	5 year peak mean 1996/97 – 2000/01	4.4%
Ruff <i>Philomachus pugnax</i>	128 individuals – passage	5 year peak mean 1996-2000	1.4%
Bittern <i>Botaurus stellaris</i>	2 booming males – breeding	3 year mean 2000-2002	10.5%
Marsh harrier <i>Circus aeruginosus</i>	10 females – breeding	5 year mean 1998-2002	6.3%
Avocet <i>Recurvirostra avosetta</i>	64 pairs – breeding	5 year mean 1998 – 2002	8.6%
Little tern <i>Sterna albifrons</i>	51 pairs – breeding	5 year mean 1998-2002	2.1%

The site qualifies under **article 4.2** of the Directive (79/409/EEC) as it is used regularly by 1% or more of the biogeographical populations of the following regularly occurring migratory species (other than those listed in Annex I) in any season:

Migratory species	Count and season	Period	% of subspecies/ population
Shelduck <i>Tadorna tadorna</i>	4,464 individuals – wintering	5 year peak mean 1996/97 – 2000/01	1.5% Northwestern Europe (breeding)
Knot <i>Calidris canutus</i>	28,165 individuals – wintering	5 year peak mean 1996/97 – 2000/01	6.3% <i>islandica</i>
Dunlin <i>Calidris alpina</i>	22,222 individuals – wintering	5 year peak mean 1996/97 – 2000/01	1.7% <i>alpina</i> , Western Europe (non-breeding)
Black-tailed godwit <i>Limosa limosa</i>	1,113 individuals – wintering	5 year peak mean 1996/97 – 2000/01	3.2% <i>islandica</i>
Redshank <i>Tringa totanus</i>	4,632 individuals – wintering	5 year peak mean 1996/97 – 2000/01	3.6% <i>britannica</i>
Knot <i>Calidris canutus</i>	18,500 individuals – passage	5 year peak mean 1996 – 2000	4.1% <i>islandica</i>
Dunlin <i>Calidris alpina</i>	20,269 individuals – passage	5 year peak mean 1996 – 2000	1.5% <i>alpina</i> , Western Europe (non-breeding)
Black-tailed godwit <i>Limosa limosa</i>	915 individuals – passage	5 year peak mean 1996 – 2000	2.6% <i>islandica</i>
Redshank <i>Tringa totanus</i>	7,462 individuals – passage	5 year peak mean 1996 – 2000	5.7% <i>britannica</i>

Bird counts from: Wetland Bird Survey (WeBS) database and *The Humber Estuary: A comprehensive review of its nature conservation interest* (Allen et al. 2003).

Assemblage qualification:

The site qualifies under **article 4.2** of the Directive (79/409/EEC) as it is used regularly by over 20,000 waterbirds (waterbirds as defined by the Ramsar Convention) in any season:

In the non-breeding season, the area regularly supports 153,934 individual waterbirds (five year peak mean 1996/97 – 2000/01), including dark-bellied brent goose *Branta bernicla bernicla*, shelduck *Tadorna tadorna*, wigeon *Anas penelope*, teal *Anas crecca*, mallard *Anas platyrhynchos*, pochard *Aythya ferina*, scaup *Aythya marila*, goldeneye *Bucephala clangula*, bittern *Botaurus stellaris*, oystercatcher *Haematopus ostralegus*, avocet *Recurvirostra avosetta*, ringed plover *Charadrius hiaticula*, golden plover *Pluvialis apricaria*, grey plover *P. squatarola*, lapwing *Vanellus vanellus*, knot *Calidris canutus*, sanderling *C. alba*, dunlin *C. alpina*, ruff *Philomachus pugnax*, black-tailed godwit *Limosa limosa*, bar-tailed godwit *L. lapponica*, whimbrel *Numenius phaeopus*, curlew *N. arquata*, redshank *Tringa totanus*, greenshank *T. nebularia* and turnstone *Arenaria interpres*.

Non-qualifying species of interest: The SPA is used by non-breeding merlin *Falco columbarius*, peregrine *F. peregrinus* and short-eared owl *Asio flammeus*, and breeding common tern *Sterna hirundo* and kingfisher *Alcedo atthis* (all species listed in Annex I to the EC Birds Directive) in numbers of less than European importance (less than 1% of the GB population).

Status of SPA:

- 1) Humber Flats, Marshes and Coast (Phase 1) SPA was classified on 28 July 1994.
- 2) The extended and renamed Humber Estuary SPA was classified on 31 August 2007.

This citation relates to a site entered in the Register of European Sites for Great Britain.
Register reference number: UK9006111
Date of registration: 31 August 2007

Signed: 
On behalf of the Secretary of State for
Environment, Food and Rural Affairs

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

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DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 31 August 2007

3. Country:

UK (England)

4. Name of the Ramsar site:

Humber Estuary

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. **For RIS updates only,** changes to the site since its designation or earlier update:

a) Site boundary and area:

The boundary has been extended

**** Important note:** If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): yes ✓ -or- no ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) Yes
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** yes ✓ -or- no ☐;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

053 32 59 N 000 00 03 E

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Kingston-upon-Hull

The Humber Estuary is located on the boundary between the East Midlands Region and the Yorkshire and the Humber Region, on the east coast of England bordering the North Sea.

Administrative region: City of Kingston upon Hull; East Riding of Yorkshire; Humberside; Lincolnshire; North East Lincolnshire; North Lincolnshire

10. Elevation (average and/or max. & min.) (metres): **11. Area** (hectares): 37987.8

Min. -13

Max. 10

Mean No information available

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The Humber Estuary is the largest macro-tidal estuary on the British North Sea coast. It drains a catchment of some 24,240 square kilometres and is the site of the largest single input of freshwater from Britain into the North Sea. It has the second-highest tidal range in Britain (max 7.4 m) and approximately one-third of the estuary is exposed as mud or sand flats at low tide. The inner estuary supports extensive areas of reedbed with areas of mature and developing saltmarsh backed in places by limited areas of grazing marsh in the middle and outer estuary. On the north Lincolnshire coast the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. The Estuary regularly supports internationally important numbers of waterfowl in winter and nationally important breeding populations in summer.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 3, 5, 6, 8

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 1

The 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.

It is a large macro-tidal coastal plain estuary with high suspended sediment loads, which feed a dynamic and rapidly changing system of accreting and eroding intertidal and subtidal mudflats, sandflats, saltmarsh and reedbeds. Examples of both strandline, foredune, mobile, semi-fixed dunes, fixed dunes and dune grassland occur on both banks of the estuary and along the coast. The estuary supports a full range of saline conditions from the open coast to the limit of saline intrusion on the tidal rivers of the Ouse and Trent. Wave exposed sandy shores are found in the outer/open coast areas of the estuary. These change to the more moderately exposed sandy shores and then to sheltered muddy shores within the main body of the estuary and up into the tidal rivers. The lower saltmarsh of the Humber is dominated by common cordgrass *Spartina anglica* and annual glasswort *Salicornia* communities. Low to mid marsh communities are mostly represented by sea aster *Aster tripolium*, common saltmarsh grass *Puccinellia maritima* and sea purslane *Atriplex portulacoides* communities. The upper portion of the saltmarsh community is atypical, dominated by sea couch *Elytrigia atherica* (*Elymus pycnanthus*) saltmarsh community. In the upper reaches of the estuary, the tidal marsh community is dominated by the common reed *Phragmites australis* fen and sea club rush *Bolboschoenus maritimus* swamp with the couch grass *Elytrigia repens* (*Elymus repens*) saltmarsh community. Within the Humber Estuary Ramsar site there are good examples of four of the five physiographic types of saline lagoon.

Ramsar criterion 3

The Humber Estuary Ramsar site supports a breeding colony of grey seals *Halichoerus grypus* at Donna Nook. It is the second largest grey seal colony in England and the furthest south regular breeding site on the east coast. The dune slacks at Saltfleetby-Theddlethorpe on the southern extremity of the Ramsar site are the most north-easterly breeding site in Great Britain of the natterjack toad *Bufo calamita*.

Ramsar criterion 5

Assemblages of international importance:

153,934 waterfowl, non-breeding season

(5 year peak mean 1996/97-2000/2001)

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Eurasian golden plover, *Pluvialis apricaria*

altifrons subspecies – NW Europe, W Continental Europe, NW Africa population

17,996 individuals, passage, representing an average of 2.2% of the population

(5 year peak mean 1996-2000)

Red knot, *Calidris canutus*

islandica subspecies

18,500 individuals, passage, representing an average of 4.1% of the population

(5 year peak mean 1996-2000)

Dunlin, *Calidris alpina*

alpina subspecies – Western Europe (non-breeding) population

20,269 individuals, passage, representing an average of 1.5% of the population
(5 year peak mean 1996-2000)

Black-tailed godwit, *Limosa limosa*

islandica subspecies

915 individuals, passage, representing an average of 2.6% of the population
(5 year peak mean 1996-2000)

Common redshank, *Tringa totanus*

britannica subspecies

7,462 individuals, passage, representing an average of 5.7% of the population
(5 year peak mean 1996-2000)

Common shelduck, *Tadorna tadorna*

Northwestern Europe (breeding) population

4,464 individuals, wintering, representing an average of 1.5% of the population
(5 year peak mean 1996/7-2000/1)

Eurasian golden plover, *Pluvialis apricaria*

altifrons subspecies – NW Europe, W Continental Europe, NW Africa population

30,709 individuals, wintering, representing an average of 3.8% of the population
(5 year peak mean 1996/7-2000/1)

Red knot, *Calidris canutus*

islandica subspecies

28,165 individuals, wintering, representing an average of 6.3% of the population
(5 year peak mean 1996/7-2000/1)

Dunlin, *Calidris alpina*

alpina subspecies – Western Europe (non-breeding) population

22,222 individuals, wintering, representing an average of 1.7% of the population
(5 year peak mean 1996/7-2000/1)

Black-tailed godwit, *Limosa limosa*

islandica subspecies

1,113 individuals, wintering, representing an average of 3.2% of the population
(5 year peak mean 1996/7-2000/1)

Bar-tailed godwit, *Limosa lapponica*

lapponica subspecies

2,752 individuals, wintering, representing an average of 2.3% of the population
(5 year peak mean 1996/7-2000/1)

Common redshank, *Tringa totanus*

britannica subspecies

4,632 individuals, wintering, representing an average of 3.6% of the population

(5 year peak mean 1996/7-2000/1)

Ramsar criterion 8

The Humber Estuary acts as an important migration route for both river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus* between coastal waters and their spawning areas.

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

153934 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in spring/autumn:

European golden plover , <i>Pluvialis apricaria</i> <i>apricaria</i> , P. a. altifrons Iceland & Faroes/E Atlantic	17996 individuals, representing an average of 2.2% of the population (1996-2000)
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Red knot , <i>Calidris canutus islandica</i> , W & Southern Africa (wintering)	18500 individuals, representing an average of 4.1% of the population (1996-2000)
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Dunlin , <i>Calidris alpina alpina</i> , W Siberia/W Europe	20269 individuals, representing an average of 1.5% of the population (1996-2000)
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Black-tailed godwit , <i>Limosa limosa islandica</i> , Iceland/W Europe	915 individuals, representing an average of 2.6% of the population (1996-2000)
---	--

Common redshank , <i>Tringa totanus totanus</i> ,	7462 individuals, representing an average of 5.7% of the population (1996-2000)
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Species with peak counts in winter:

Common shelduck , <i>Tadorna tadorna</i> , NW Europe	4464 individuals, representing an average of 1.5% of the population (1996/7 to 2000/1)
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European golden plover , <i>Pluvialis apricaria</i> <i>apricaria</i> , P. a. altifrons Iceland & Faroes/E Atlantic	30709 individuals, representing an average of 3.8% of the population (1996/7 to 2000/1)
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Red knot , <i>Calidris canutus islandica</i> , W & Southern Africa (wintering)	28165 individuals, representing an average of 6.3% of the population (1996/7 to 2000/1)
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Dunlin , <i>Calidris alpina alpina</i> , W Siberia/W Europe	22222 individuals, representing an average of 1.7% of the population (1996/7 to 2000/1)
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Black-tailed godwit , *Limosa limosa islandica*, 1113 individuals, representing an average of 3.2% of the population (1996/7 to 2000/1)
Iceland/W Europe

Bar-tailed godwit , *Limosa lapponica lapponica*, 2752 individuals, representing an average of 2.3% of the population (1996/7 to 2000/1)
W Palearctic

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

See Sections 21/22 for details of noteworthy species

Details of bird species occurring at levels of National importance are given in Section 22

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	neutral, shingle, sand, mud, clay, alluvium, sedimentary, sandstone, sandstone/mudstone, limestone/chalk, gravel, nutrient-rich
Geomorphology and landscape	lowland, coastal, floodplain, shingle bar, intertidal sediments (including sandflat/mudflat), estuary, islands, cliffs
Nutrient status	eutrophic
pH	circumneutral
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Cleethorpes, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/cleethorpes.html) Max. daily temperature: 13.1° C Min. daily temperature: 6.4° C Days of air frost: 29.0 Rainfall: 565.4 mm Hrs. of sunshine: 1521.9

General description of the Physical Features:

The Humber estuary is approximately 70 km long from the limit of saline intrusion on the River Ouse at Boothferry to the estuary mouth at Spurn Head, where it enters the North Sea. The area of the estuary is approx. 365 km², and it has a width of 6.6 km at the mouth.

The Humber is a macro-tidal estuary with a tidal range of 7.4 m, the second-largest range in the UK and comparable to other macro-tidal estuaries worldwide. It is a shallow and well mixed estuary, with an average depth of 6.5m rising to 13.2 m at the mouth.

The Humber is the second-largest coastal plain estuary in the UK, and the largest coastal plain estuary on the east coast of Britain. Suspended sediment concentrations are high, and are derived from a variety of sources, including marine sediments and eroding boulder clay along the Holderness coast. This is the northernmost of the English east coast estuaries whose structure and function is intimately linked with soft eroding shorelines.

Upstream from the Humber Bridge, the navigation channel undergoes major shifts from north to south banks. This section of the estuary is noteworthy for extensive mud and sand bars, which in places form semi-permanent islands.

The estuary covers the full salinity range from fully marine at the mouth of the estuary (Spurn Head) to the limit of saline intrusion on the Rivers Ouse and Trent). A salinity gradient from north to south bank is observed in the outer estuary, due to the incoming tide flowing along the north bank, while the fresh water keeps to the south bank as it discharges to the sea. As salinity declines upstream, reedbeds and brackish saltmarsh communities fringe the estuary..

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The Humber catchment covers an area of ca. 24,240 km², more than 20% of the land area of England. Average annual precipitation in the upland areas of the catchment is as much as 1000 mm. Average freshwater flow into the Humber estuary from the rivers is 250 m³s⁻¹, ranging from 60 m³s⁻¹ in drier periods to 450 m³s⁻¹ in wet periods. Peak flows of up to 1500 m³s⁻¹ have been recorded during floods. The rivers Trent and Ouse, which provide the main fresh water flow into the Humber, drain large industrial and urban areas to the south and west (River Trent), and less densely populated agricultural areas to the north and west (River Ouse). The Trent/Ouse confluence is known as Trent Falls.

On the north bank of the Humber estuary the principal river is the river Hull, which flows through the city of Kingston-upon-Hull, and has a tidal length of 32 km, up to the Hempholme Weir. The Hull provides only about 1% of the freshwater input to the estuary. On the south bank, the River Ancholme enters the Humber at South Ferriby, but the tide is excluded by a sluice and a tidal lock. Altogether, the total tidal length of rivers and estuary is 313 km.

There are several major urban centres within the river catchments. Nottingham, Leicester, and the West Midlands/Birmingham conurbation are drained by the Trent, the Leeds-Bradford area in West Yorkshire is drained by the Aire/Calder and the Sheffield/Rotherham/Doncaster area in South Yorkshire is drained by the Don. There are also large rural regions, whose populations are currently experiencing high population growth, while the urban areas are showing a small decline. The 1992 population for the Ouse catchment was 4.1 million, and for the Trent catchment was 7.1 million. The population of Humberside, which comprises North and North-east Lincolnshire, the East Riding of Yorkshire, and Kingston-upon-Hull (Hull), was just under 0.9 million. Land use around the estuary itself is 50-98% agricultural, within only two areas of high population/ industry – the major conurbation around Kingston-upon-Hull (Hull) on the north bank, and several large industrial areas around Grimsby/ Immingham/ Cleethorpes on the south bank.

The area around the Humber estuary is low-lying, and much land-claim of wetlands and supratidal zones, as well as parts of the intertidal zone, was carried out in the past two centuries. The mid to

outer estuary (Humber Bridge to Spurn Point) changed from a region of low water erosion in the 19th century to one of accretion in the 20th century, nonetheless a net loss of intertidal zone of some 3000 ha has taken place since the mid-19th century. Around the estuary some 894 km² of land are below the 5 m contour, protected by extensive coastal defences. Most of the sediment entering the estuary comes from the North Sea, and a large part of it is believed to come from the continuing erosion of the Holderness Cliffs, which form the coastline to the north of the estuary mouth at Spurn Head. The estuary currently has approximately 1,775 ha of saltmarsh

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Sediment trapping

19. Wetland types:

Marine/coastal wetland

Code	Name	% Area
F	Estuarine waters	66.8
G	Tidal flats	26.4
H	Salt marshes	4.7
E	Sand / shingle shores (including dune systems)	0.8
7	Gravel / brick / clay pits	0.5
Q	Saline / brackish lakes: permanent	0.3
J	Coastal brackish / saline lagoons	0.3
Other	Other	0.1
9	Canals and drainage channels	0.01
Y	Freshwater springs	0.01

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Description

Much of the intertidal area of the Humber Estuary consists of mudflats with fringing saltmarsh. There are smaller areas of intertidal sand flats, and sand dunes. The saltmarsh is both eroding and accreting; although coastal squeeze is resulting in net losses, and cord grass *Spartina anglica* is a major colonising species. In areas of reduced salinity such as the Upper Humber there are extensive areas of common reed *Phragmites australis* with some sea club-rush *Bolboschoenus maritimus*. Mid-level saltmarsh tends to be much more floristically diverse, and in the higher level marsh with its dendritic network of drainage channels, salt pans and borrow pits grasses dominate with thrift *Armeria maritima* where the marsh is grazed by cattle and sheep. Extensive areas of eel grass *Zostera marina* and *Z. noltii* have been known to occur at Spurn Bight, although in recent years records are limited. Behind the sandflats of the Cleethorpes coast the mature sand-dune vegetation contains some locally and nationally rare species including chestnut flat sedge *Blasmus rufus*, bulbous meadow grass *Poa bulbosa* and dense silky-bent *Apera interrupta*. The sand dunes, which cap the shingle spit that forms Spurn Peninsula are dominated by marram grass *Ammophila arenaria* and patches of dense sea buckthorn *Hippophae rhamnoides*.

Ecosystem services

Aesthetic

Education

Food

Recreation

Storm/wave protection

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

None reported

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds

Species Information

Species Information

Birds

Species currently occurring at levels of national importance:

Great bittern, *Botaurus stellaris*

stellaris subspecies – W Europe, NW Africa (breeding) population

2 booming males, breeding, representing an average of 10.5% of the GB population
(3 year mean 2000-2002)

Eurasian marsh harrier, *Circus aeruginosus*

Europe population

10 females, breeding, representing an average of 6.3% of the GB population
(5 year mean 1998-2002)

Pied avocet, *Recurvirostra avosetta*

Western Europe (breeding) population

64 pairs, breeding, representing an average of 8.6% of the GB population
(5 year mean 1998-2002)

Little tern, *Sterna albifrons*

albifrons subspecies, Western Europe (breeding) population

51 pairs, breeding, representing an average of 2.1% of the GB population
(5 year mean 1998-2002)

Dark-bellied brent goose, *Branta bernicla*

bernicla subspecies

2,098 individuals, wintering, representing an average of 2.1% of the GB population
(5 year peak mean 1996/7-2000/1)

Eurasian wigeon, *Anas penelope*

Northwestern Europe (non-breeding) population

5,044 individuals, wintering, representing an average of 1.2% of the GB population
(5 year peak mean 1996/7-2000/1)

Common teal, *Anas crecca*

crecca subspecies, Northwestern Europe (non-breeding population)

2,322 individuals, wintering, representing an average of 1.2% of the GB population

(5 year peak mean 1996/7-2000/1)

Common pochard, *Aythya ferina*

Northeastern & Northwestern Europe (non-breeding) population

719 individuals, wintering, representing an average of 1.2% of the GB population

(5 year peak mean 1996/7-2000/1)

Greater scaup, *Aythya marila*

marila subspecies, Western Europe (non-breeding) population

127 individuals, wintering, representing an average of 1.7% of the GB population

(5 year peak mean 1996/7-2000/1)

Common goldeneye, *Bucephala clangula*

clangula subspecies, Northwestern & Central Europe (non-breeding) population

467 individuals, wintering, representing an average of 1.9% of the GB population

(5 year peak mean 1996/7-2000/1)

Great bittern, *Botaurus stellaris*

stellaris subspecies – W Europe, NW Africa (breeding) population

4 individuals, wintering, representing an average of 4.0% of the GB population

(5 year peak mean 1998/9-2002/3)

Hen harrier, *Circus cyaneus*

Europe population

8 individuals, wintering, representing an average of 1.1% of the GB population

(5 year peak mean 1997/8-2001/2)

Eurasian oystercatcher, *Haematopus ostralegus*

ostralegus subspecies

3,503 individuals, wintering, representing an average of 1.1% of the GB population

(5 year peak mean 1996/7-2000/1)

Pied avocet, *Recurvirostra avosetta*

Western Europe (breeding) population

59 individuals, wintering, representing an average of 1.7% of the GB population

(5 year peak mean 1996/7-2000/1)

Great ringed plover, *Charadrius hiaticula*

hiaticula subspecies

403 individuals, wintering, representing an average of 1.2% of the GB population

(5 year peak mean 1996/7-2000/1)

Grey plover, *Pluvialis squatarola*

squatarola subspecies, Eastern Atlantic (non-breeding) population

1,704 individuals, wintering, representing an average of 3.2% of the GB population

(5 year peak mean 1996/7-2000/1)

Northern lapwing, *Vanellus vanellus*

Europe (breeding) population

22,765 individuals, wintering, representing an average of 1.1% of the GB population

(5 year peak mean 1996/7-2000/1)

Sanderling, *Calidris alba*

Eastern Atlantic (non-breeding) population

486 individuals, wintering, representing an average of 2.3% of the GB population
(5 year peak mean 1996/7-2000/1)

Curlew, *Numenius arquata*

arquata subspecies

3,253 individuals, wintering, representing an average of 2.2% of the GB population
(5 year peak mean 1996/7-2000/1)

Ruddy turnstone, *Arenaria interpres*

interpres subspecies, Northeastern Canada & Greenland (breeding) population

629 individuals, wintering, representing an average of 1.3% of the GB population
(5 year peak mean 1996/7-2000/1)

Great ringed plover, *Charadrius hiaticula*

psammodrroma subspecies

1,766 individuals, passage, representing an average of 5.9% of the GB population
(5 year peak mean 1996-2000)

Grey plover, *Pluvialis squatarola*

squatarola subspecies, Eastern Atlantic (non-breeding) population

1,590 individuals, passage, representing an average of 2.3% of the GB population
(5 year peak mean 1996-2000)

Sanderling, *Calidris alba*

Eastern Atlantic (non-breeding) population

818 individuals, passage, representing an average of 2.7% of the GB population
(5 year peak mean 1996-2000)

Ruff, *Philomachus pugnax*

Western Africa (non-breeding) population

128 individuals, passage, representing an average of 1.4% of the GB population
(5 year peak mean 1996-2000)

Whimbrel, *Numenius phaeopus*

islandicus subspecies

113 individuals, passage, representing an average of 2.3% of the GB population
(5 year peak mean 1996-2000)

Common greenshank, *Tringa nebularia*

Northwestern Europe (breeding) population

77 individuals, passage, representing an average of 5.5% of the GB population
(5 year peak mean 1996-2000)

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic

Aquatic vegetation (e.g. reeds, willows, seaweed)

Archaeological/historical site

Environmental education/ interpretation

Fisheries production

Livestock grazing

Non-consumptive recreation

Sport fishing
 Sport hunting
 Tourism
 Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? **No**

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	+
Local authority, municipality etc.	+	+
National/Crown Estate	+	+
Private	+	+
Public/communal	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	
Cutting of vegetation (small-scale/subsistence)	+	
Fishing: commercial	+	+
Fishing: recreational/sport	+	+
Gathering of shellfish	+	+
Bait collection	+	+
Permanent arable agriculture		+
Permanent pastoral agriculture	+	+
Hunting: recreational/sport	+	+
Industrial water supply	+	+
Industry	+	+
Sewage treatment/disposal	+	+
Harbour/port	+	+

Flood control	+	+
Irrigation (incl. agricultural water supply)		+
Mineral exploration (excl. hydrocarbons)		+
Oil/gas exploration	+	+
Transport route	+	+
Domestic water supply		+
Urban development		+
Non-urbanised settlements		+
Military activities	+	+
Horticulture (incl. market gardening)		+

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Disturbance to vegetation through cutting / clearing	1	Reedbeds being cut and cleared on margins of pits associated with angling. Management agreements and enforcement to address.	+		
Vegetation succession	1	Lack of reedbed management leading to scrub encroachment. Management agreement to address.	+		
Water diversion for irrigation/domestic/industrial use	1	Abstraction causes reduced freshwater input. Review of consents well advanced but not yet implemented.	+	+	
Overfishing	2	Substantial lamprey by-catch in eel nets in River Ouse.		+	
Pollution – domestic sewage	1	Reduced dissolved oxygen in River Ouse is a barrier to fish migration. Review of consents well advanced but not yet implemented.	+	+	+
Pollution – agricultural fertilisers	1	Reduced dissolved oxygen in River Ouse is a barrier to fish migration. To be addressed through Catchment Sensitive Farming Initiatives and implementation of Water Framework Directive.	+	+	+
Recreational/tourism disturbance (unspecified)	1	Particularly illegal access by motorised recreational vehicles and craft. Control through management scheme.	+		

Other factor	1	Coastal squeeze causing loss of intertidal habitats and saltmarsh due to sea level rise and fixed defences. The Humber Flood Risk Management Strategy has been developed and is being implemented.	+		+

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
Overfishing - Overfishing – to be considered through an ‘in-combination’ assessment of possible factors as part of the Review of Consents exercise.

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+
National Nature Reserve (NNR)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	+
Management agreement	+	+
Site management statement/plan implemented	+	
Area of Outstanding National Beauty (AONB)		+
Special Area of Conservation (SAC)	+	
IUCN (1994) category IV	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Fauna.

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Seal populations are monitored by the Sea Mammal Research Unit

Humber Wader Ringing Group

Spurn Bird Observatory

National Nature Reserve monitoring

Environment.

Institute of Estuarine & Coastal Studies, Hull: various

Industrial Concerns: monitoring on behalf of companies such as Associated British Ports and BP

Environment Agency monitoring: various

Geomorphological studies associated with shoreline management planning

National Nature Reserve monitoring

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

There are four National Nature Reserves with associated facilities within the Ramsar site (Spurn, Far Ings, Donna Nook and Saltfleetby – Theddlethorpe Dunes) and a number of other visitor, information and/or education centres including the Spurn Bird Observatory, the Cleethorpes Discovery Centre, Water's Edge and Far Ings. A wide range of Humber wide and area-specific information is available through a range of media (eg leaflets, displays, internet etc) including 'Humber Estuary European Marine Site Codes of Conduct' developed with a range of stakeholders to cover a range of recreational and educational activities and 'Coastal Futures' – a partnership project working with local communities affected by flood risk and associated issues including managed realignment includes proactive education work within schools.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

Sailing: marinas at Brough, Winteringham, Hull, Grimsby and South Ferriby.

Bathing etc: Cleethorpes (some 6m visitors/yr).

Walking/Horse riding: throughout

Beach fishing, match sea-fishing, non-commercial bait digging.

Non-commercial samphire collection

Wildfowling

Tourist amusements: Cleethorpes.

Bird watching: throughout but particularly at Blacktoft Sands RSPB reserve and the four National Nature Reserves.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,

European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House, Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

Site-relevant references

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STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0030170
SITENAME Humber Estuary

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- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0030170	Back to top
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1.3 Site name

Humber Estuary

1.4 First Compilation date 2007-08	1.5 Update date 2015-12
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1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough PE1 1JY
Email:

Date site proposed as SCI:	2007-08
Date site confirmed as SCI:	2008-12
Date site designated as SAC:	2009-12
National legal reference of SAC designation:	Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010 (http://www.legislation.gov.uk/uksi/2010/490/contents/made).

2. SITE LOCATION

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			784.46	0	G	C	B	C	C
2110			18.33	0	G	C	A	C	C
2120			14.66	0	G	C	B	C	C
2130	X		14.66	0	G	C	C	C	C
2160			65.98	0	G	C	B	C	C

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
F	1102	Alosa alosa			p				P	DD	D			
F	1103	Alosa fallax			p				P	DD	D			
M	1364	Halichoerus grypus			p	1800	1800	i		G	C	B	B	C
F	1099	Lampetra fluviatilis			p				P	DD	A	B	C	C
F	1095	Petromyzon marinus			p	251	500	i		M	B	C	C	C
M	1365	Phoca vitulina			p				P	DD	D			

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

Habitat class	% Cover
N03	4.4
N07	0.4
N04	0.4
N02	94.9
Total Habitat Cover	100.10000000000002

Other Site Characteristics

1 Terrestrial: Soil & Geology: shingle, sedimentary, sandstone, neutral, mud, sand, alluvium, clay 2 Terrestrial: Geomorphology and landscape: coastal, floodplain, lowland 3 Marine: Geology: gravel, mud, sedimentary, sand, sandstone/mudstone, clay, shingle, limestone/chalk 4 Marine: Geomorphology: shingle bar, lagoon, islands, estuary, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), cliffs

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which the area is considered to support a significant presence. Estuaries for which this is considered to be one of the best areas in the United Kingdom. Mudflats and sandflats not covered by seawater at low tide for which this is considered to be one of the best areas in the United Kingdom. Coastal lagoons for which the area is considered to support a significant presence. Salicornia and other annuals colonising mud and sand for which the area is considered to support a significant presence. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) for which the area is considered to support a significant presence. Embryonic shifting dunes for which the area is considered to support a significant presence. which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 1000 hectares. Shifting dunes along the shoreline with *Ammophila arenaria* (?white dunes?) for which the area is considered to support a significant presence. Dunes with *Hippophae rhamnoides* for which the area is considered to support a significant presence. which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 1000 hectares. Fixed dunes with herbaceous vegetation (?grey dunes?) for which the area is considered to support a significant presence. *Petromyzon marinus* for which the area is considered to support a significant presence. *Lampetra fluviatilis* for which the area is considered to support a significant presence. *Halichoerus grypus* for which the area is considered to support a significant presence.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
H	M01		B
H	E02		O
H	J02		B
H	H02		B
H	K01		I

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
H	D05		I
H	A02		I
H	B02		I
H	A04		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

Conservation Objectives - the Natural England links below provide access to the Conservation Objectives (and other site-related information) for its terrestrial and inshore Natura 2000 sites, including conservation

advice packages and supporting documents for European Marine Sites within English waters and for cross-border sites. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <http://publications.naturalengland.org.uk/category/6490068894089216>

<http://publications.naturalengland.org.uk/category/3212324>

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK01	1.8	UK04	100.0		

6. SITE MANAGEMENT

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6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

6.3 Conservation measures (optional)

For available information, including on Conservation Objectives, see Section 4.5.

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucio-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
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4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67