

The Lighthouse Green Fuels Order

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Preliminary Ecological Appraisal

Lighthouse Green Fuels



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This assessment has been prepared by INCA for the exclusive use of Alfamar Projects in accordance with the agreed scope of work. The findings, conclusions, and recommendations contained within this report are based on the conditions encountered and information available at the time of the survey.

While every effort has been made to ensure the accuracy and reliability of the information presented, ecological surveys and assessments are subject to seasonal variations.

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It is the responsibility of the client to ensure compliance with all relevant UK legislation, planning policies, and best practice guidance regarding biodiversity and ecological considerations. Any future development proposals should seek updated ecological assessments where necessary.

For further clarification, professional advice should be sought before acting on any information contained in this report.

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1. Introduction

In April 2025 INCA prepared and Preliminary Ecological Appraisal (PEA) to identify any Valued Ecological Receptors (VERS) or the potential for VERS, on land at the former INEOS Nitriles (the Site). This included habitats and species (INCA Report Number INCA2025-21). In July 2025 an Addendum to the PEA was prepared to update the PEA with interim survey results and included an additional area of land (Area 4) (INCA Report Reference: INCA2025-35). This report provides a summary of the previous two reports and includes updates on ongoing ecological surveys survey work and includes the results of ecological appraisals of the wider Red Line Boundary (RLB) (Figure 1) where accessible.

As this report brings together several different surveys the following names have been used to identify the different areas. The original survey area, and extension is referred to as the Main Site and includes Areas 1 to 4 (Figure 2). Area 1 has also been extended to include recent surveys on the adjacent jetty and ancillary land (Figure 3).

The Main Site Areas are as follows:

- 1) the former INEOS operational area, south of the Seal Sands Road and bordering the river;
- 2) a large area adjacent to the east of Area 1 which has been left to re-vegetate naturally over a period of decades;
- 3) land to the north of the Seal Sands Road, which is on a substrate of sand resulting from the infilling of this former intertidal area in the 1970s. This area does not appear to have ever had any development on it.
- 4) Western extension of area 3.

Within the wider RLB additional walkover surveys have been undertaken on accessible land including Huntsman Drive and Green Lizard Estates (GLE) Pipeline Corridor (Huntsman and GLE Land) (Figure 4), Seal Sands Road (Figures 5 to 9), Linkline Corridor (Figure 10) and Navigator Land (Figure 11) north of the Tees. A separate PEA Report has been produced for the Navigator Land (INCA reference INCA 2026-27) as such a summary of its findings is reproduced here.

South of the River Tees, Dabholm Beck, Dabholm Gut and adjacent areas across PD ports (Dabholm Land) (Figures 12 and 13).

It is intended solely for the client Alfanar, to identify potential ecological constraints and to inform the need for further surveys.

INCA has at one time or other conducted ecological surveys across the whole of the Site however some areas of the Site were surveyed several years ago. Consequently, this report is informed by an up-to-date walkover survey to assess whether there had been any significant changes to the habitats and what the potential for the presence of VERS is currently.

2. Baseline information

2.1 Legislative and Policy Context

This PEA has been undertaken with reference to relevant UK wildlife legislation, national planning policy and current ecological guidance. Key legislation relevant to this assessment includes the Wildlife and Countryside Act 1981 (as amended), which affords protection to certain species and habitats; the

Conservation of Habitats and Species Regulations 2017 (as amended), which transpose the requirements of the Habitats Directive; and the Natural Environment and Rural Communities (NERC) Act 2006, which requires public authorities to have regard to the purpose of conserving biodiversity and identifies habitats and species of principal importance under Section 41.

National planning policy is set out in the National Planning Policy Framework (NPPF), which seeks to minimise impacts on biodiversity, protect designated sites, and secure measurable net gains for biodiversity. From February 2024, development proposals were required to deliver a minimum 10% Biodiversity Net Gain (BNG) under the provisions of the Environment Act 2021, unless exemptions apply. In this case, as a Nationally Significant Infrastructure Project (NSIP) the project is currently exempt from requiring BNG. This exemption is currently proposed to end on November 2nd 2026.

This appraisal has been prepared in accordance with current best practice guidance, including the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017), and follows the principles of proportionate survey effort and ecological risk based assessment. Central grid references to notable locations referenced in the report are provided at Appendix 3.

The findings of this PEA are intended to inform the ecological considerations associated with the proposed development and to determine whether further ecological survey, assessment or mitigation is required to support the planning process.

2.2 Desk-based ecological information

The following ecological baseline study is primarily informed by data collected by INCA, which has undertaken ecological surveys across industrial land on Teesside over a period of more than 20 years. INCA has served as the principal body responsible for collating ecological data across industrial sites in the region, resulting in a substantial and relevant dataset of species records for the Site and its wider surroundings.

2.3 Internationally designated sites

There are two internationally designated sites within 10 km of the Site; Teesmouth and Cleveland Coast Special Protection Area (SPA) and Teesmouth and Cleveland Coast Ramsar (Figure 14 a and b)).

Some details of these sites, including their distance from the Site at their closest point are given in Table 1 below.

Table 1. Internationally Designated Sites within 10 km of the centre of the Site

Site	Approx. Distance (km) at closest point	Grid Reference	Main Ecological Interest	Area (ha)
Teesmouth and Cleveland Coast SPA	Immediately adjacent to the East of the Main Site and Navigator Land, adjacent to the north and west of Dabholm	NZ5521229 8	Wintering and passage waterbirds, breeding populations of Avocet, Common Tern <i>Sterna hirundo</i> , Little Tern <i>Sternula albifrons</i>	12226.28

	Land and adjacent to the north of the western extent of Huntsman Drive.			
Teesmouth and Cleveland Coast Ramsar	Immediately adjacent to the East of the Main Site and Navigator Land, adjacent to the north and west of Dabholm Land and adjacent to the north of the western extent of Huntsman Drive.	NZ56112402	Waterbirds, breeding populations of Avocet <i>Recurvirostra avosetta</i> , Common Tern, Little Tern	2094.02

The Teesmouth and Cleveland Coast SPA/Ramsar lies immediately adjacent to Navigator, Dabholm and Huntsman Drive.

Notwithstanding this proximity, the areas within the Site comprise predominantly neutral grassland, scrub, artificial substrates and are heavily disturbed which are unsuitable to support the qualifying bird assemblages of the SPA/Ramsar. One Curlew *Numenius arquata* was observed potentially nesting at the western extent of Dabholm, however, in general the intensity of operational disturbance, poor habitat suitability, and the absence of appropriate roosting, nesting, or foraging resources mean that the Site does not function as supporting or functionally linked land for the designated features.

2.4 Nationally Designated Sites

There are three nationally designated sites within a 5 km radius of the Site; Teesmouth and Cleveland Coast Site of Special Scientific Interest (SSSI), Seaton Dunes and Common Local Nature Reserve (LNR) and Teesmouth National Nature Reserve (NNR) (Figure 15).

Some details including their distance from the Site at their closest point are given in Table 2.

Table 2. Nationally designated sites within 5km of the Site

Site	Approx. Distance (km)	Grid Reference	Main Ecological Interest	Size (ha)
Teesmouth and Cleveland Coast SSSI	Immediately adjacent to the East of the Main Site and Navigator Land, adjacent to the north and west of	NZ55192296	Several features with River Tees with the following units being the closest to the Site: Navigator – Unit 7 River Tees. Dabholm – Unit 25 Bran Sands Lagoon and Dabholme Gut.	2964.37

Site	Approx. Distance (km)	Grid Reference	Main Ecological Interest	Size (ha)
	Dabholm Land and adjacent to the north of the western extent of Huntsman Drive and south of Linkline Corridor.		Huntsman and Linkline Corridor – Unit 22 RSPB Saltholme .	
Teesmouth NNR	0.75 north west of Navigator Land	NZ52952594	Main habitat is sand dunes, grazing marsh, intertidal sand and mudflats	350
Seaton Dunes and Common LNR	2.4 km north of Navigator Land	NZ 529 284	Dune system encompassing foredune, mobile dunes, semi and fixed sand dunes and lying marsh.	96.35

2.4.1 Teesmouth and Cleveland Coast SSSI

The Teesmouth and Cleveland Coast SSSI represents an amalgamation and rationalisation of the seven individual SSSIs previously designated within the Teesmouth area. The designation extends the geographic coverage of the former SSSIs to underpin the non marine elements of the Teesmouth and Cleveland Coast SPA and Ramsar site, while also incorporating additional areas outside the SPA and introducing new interest features. The Teesmouth and Cleveland Coast SSSI was formally confirmed by Natural England in January 2019.

Navigator lies adjacent to Unit 7 River Tees, which was assessed as being in unfavourable – declining condition in March 2025 due to declining numbers of Common Tern and Sandwich Tern *Thalasseus sandvicensis*.

Dabholm lies adjacent to Unit 25 Bran Sands Lagoon and Dabholme Gut which was assessed in March 2025 as unfavourable declining condition due to the declining numbers of Common Tern and Shelduck *Tadorna tadorna*.

Huntsman and Linkline Corridor lie adjacent to Unit 22 RSPB Saltholme, which was assessed in March 2025 as unfavourable – declining due to the declining condition of Common Tern, Ruff *Philomachus pugnax* and Shelduck.

The interest features of the SSSI and their distance to the Site at their closest point are shown in Table 3 below.

Table 3. Ecological Interest features of the Teesmouth and Cleveland Coast SSSI in relation to the Site

Qualifying feature	Principal locations with respect to the Site	Approximate Distance to the Site (km)
Saltmarsh	There are substantial amounts either side of Greatham Creek and a small amount on the North Tees Brinefields	1.4 N Greatham Creek 0.9 W Brinefields
Sand Dunes	Seaton Dunes in Hartlepool	2.6 N
Harbour Seal <i>Phoca vitulina</i>	Present in the estuary and river. Hauls out on Seal Sands and Greatham Creek.	0.9 N Seal Sands 1.4 N Greatham Creek
Breeding Birds	Saltholme and Dorman's Pool; North Tees Brinefields	0.9 W Brinefields
Non-breeding Birds	River Tees and Seal Sands	Adjacent to River Tees 0.9 N Seal Sands
Invertebrate Assemblage	Seaton Dunes	2.6 N

2.4.2 Teesmouth NNR

The reserve comprises extensive intertidal mudflats and is divided into two principal areas. North Gare is characterised by sand dunes, species rich vegetation including wildflowers and orchids, and supports breeding and foraging bird species such as Lapwing *Vanellus vanellus* and Curlew. Seal Sands forms a major intertidal mudflat and represents an important feeding area for wading birds. Teesmouth NNR is also particularly notable for its populations of Harbour Seal and Grey Seal *Halichoerus grypus*, including the only regular breeding colony of Harbour Seal on England's northeast coast.

2.5 Priority Habitat

A search of MAGIC (Multi-Agency Geographic Information for the Countryside) shows an area of priority habitat, in the form of mudflats, directly to the east of Navigator and directly north and west of Dabholm.

Coastal and floodplain grazing marsh priority habitat is also mapped as present adjacent to the western extent of Huntsman Drive and Linkline Corridor (Figure 16).

2.6 Notable Species

In this report, the term “notable species” encompasses both protected species and priority species. Protected species are those afforded legal protection under relevant statutory instruments, including the Wildlife and Countryside Act 1981 (as amended). Priority species are those listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 as being of principal importance for the conservation of biodiversity in England.

For the purposes of this assessment, widely distributed and common priority species that are primarily included for monitoring or research purposes (for example, certain moth species) are excluded. The term also includes invasive non-native species, where it would constitute an offence to allow them to spread or establish in the wild.

In addition to having some familiarity with the Site itself, INCA has also conducted ecological surveys across almost every part of the industrial areas on the Tees as well as the surrounding areas that are designated for nature conservation therefore has a very good understanding of the potential for various VERS to be present on the Site and surrounding area.

This baseline information is based principally on INCA’s own data, where other information has been incorporated this is stated in the relevant section/report. It concentrates on records within a 2 km radius of the extremities of the Site but data from further afield has been incorporated where it gives further context. This information is to be read as a contextual summary of the available data rather than a detailed list of records.

2.6.1 *Water Vole Arvicola amphibius*

The Water Vole population on Teesside, north of the Tees, has been almost entirely confined to Saltholme for over a decade, though it was more widespread until the early 2000s. Within Saltholme its distribution is largely restricted to the main reedbed, north of the visitor centre but with occasional records in the ditches and watercourses within the wider reserve.

Apart from Saltholme, there have been occasional records within the past decade from Cowpen Marsh, though it is not known if a population is resident there. An area of habitat was created specifically for Water Voles on the Highfield Environmental site, adjacent to the A1185 and immediately north of Cowpen Marsh. It is not known if this currently supports Water Vole. A small population exists on Greenabella Marsh but this is 2 km to the north and separated from the Site by the intertidal Greatham Creek, which is likely to prevent dispersal.

As far as is known there has only ever been one record of Water Vole from the east of the A178, which was from Dorman’s Pool in 2009. Significant areas of apparently suitable habitat still exist at Dorman’s Pool and potentially at Saltholme East Pool.

South of the Tees Water Vole is considered to be absent in the surrounding area, with no recent confirmed records within a 2 km radius of the Site. The most recent record is from 2007, from the Fleet watercourse in an area now known as Long Acres. The closest known location for Water Voles within the past 5 years is on Spencer Beck approximately 5 km southwest of the Site.

2.6.2 *Otter Lutra lutra*

Otters are established across all suitable waterbodies and watercourses on Teesside.

North of the Tees they have been recorded on all the large waterbodies within a 2 km radius of the Site and have bred in this area. The closest known records are from Dorman's Pool, which is within 500 m of the Site. Road casualties of this species on the A178, especially beside Saltholme Pools, are not uncommon with typically one or two occurring on something like an annual basis. Otters are known to use the River Tees so may commute, at least on occasion, across various parts of the Site.

South of the Tees Otter are known to breed at Coatham Marsh and have been sighted on Dabholm Gut and Beck (Most recent sightings are from 2024), although no holts or other resting places have been identified.

*2.6.3 Badger *Meles meles**

Badgers have never been recorded with a 2 km radius of the Site. North of the Tees the closest record is from an industrial site at Haverton Hill, approximately 4 km to the west. This was of a single badger foraging and was from 2024. The closest sett that has been recorded is in the Greatham area, 4.5 km to the north.

South of the Tees, Badgers are very uncommon in Redcar and Cleveland with the closest known current population of Badger to the Site being in Eston Hills approximately 5 km to the south. Whilst historically Badger have been recorded from Wilton Woods, 4 km to the south, there appear to be no recent records, and it is unclear if the species is still present there.

*2.6.4 Great Crested Newt (GCN) *Triturus cristatus**

Great Crested Newt have never been recorded on the North Tees industrial estates except for an unconfirmed record from the 1980s from Hargreaves Quarry immediately to the south of the Site. The closest record to the Site known to INCA is from immediately south of Cowpen Bewley village, approximately 3.5 km to the northwest, though this was a single individual found terrestrially. The closest known breeding population is just north of Cowpen Bewley village, 4 km from the Site.

Amphibian surveys have been carried out by INCA on several waterbodies on the Seal Sands industrial estate between 2017 and 2025, including some within the Site, but all were negative for GCN. It should be noted that many of the waterbodies on North Tees are saline to varying extents and while many of these do support Common Toad *Bufo bufo*, they are possibly too saline for GCN. Environmental DNA (eDNA) surveys have been undertaken of most of the waterbodies on RSPB Saltholme with negative results.

Although the former Hargreaves Quarry has been transformed into the Augean landfill site since the 1980s there is still a series of ponds there surrounded by natural habitat that have been untouched. However, it is understood that it has been surveyed for GCN since the 1980s but with negative results.

South of the Tees GCN are considered to be absent from the surrounding area. There is an unconfirmed record from a pond on the golf course at Coatham Sands from 1988, but this pond is no longer present. In 2019, INCA carried out an eDNA survey of a small waterbody within 200 m of this former pond and the result proved negative.

INCA carried out standard GCN surveys of all ponds on the former Steelworks in 2007 and these all proved negative. In addition, INCA has undertaken eDNA surveys at various waterbodies on other parts of the surrounding industrial areas and Lazenby village over the period 2018-2020 and all have also proved to be negative for GCN.

2.6.5 Reptiles

North of the Tees, there has never been more than a handful of records of reptiles between the Tees and the north of Hartlepool. Three of these have been in the borough of Stockton-on-Tees and all within 2 km of the Site, with the closest being 600 m to the west. Two records were of Common Lizard *Zootoca vivipara*, one at either end of Dorman's Pool. Both were in 2010 and both are considered to be accurate. The record from the south end of Dorman's Pool was from the track which has been extensively used by birdwatchers for decades. As there have been no other records before or since it is considered that these lizards are likely to have been introduced.

There is also a record from 1984 of Slow Worm *Anguis fragilis*, at what was then Hargreaves Quarry. The record is considered correct but as Slow Worms are otherwise entirely absent from Stockton-on-Tees and indeed from everywhere in vice county 66¹, except for the Pennine fringes and a few sites on the Durham coast this might also have been an introduction. There have been several reptile surveys of parts of the Seal Sands industrial estate, including on part of the Site itself, carried out by INCA and others and as far as INCA is aware, all have proved negative.

The only species of reptile known to occur within 2 km of the South Tees Site RLB is Common Lizard. Common Lizard are established along the dunes and coastal grassland from South Gare to Redcar.

A medium-sized population was present on land adjacent to the Stell watercourse 840 m to the north of the Site, but this was trapped out and translocated off site in 2020/21. A series of repeat surveys in that location in 2025 found a single individual so it is assumed that a viable population is no longer present, although residual individuals cannot be ruled out. The furthest from the coast that a Common Lizard has been found is a single individual at the Northumbria Water Pumping Station in 2009 (Northumbrian Water data) which is immediately adjacent to the Dabholm (East) land. A reptile survey of the vegetated mounds immediately to the east of the Pumping Station and immediately north of the Site, was carried out in 2021 with negative results. A survey of the land around the railway line in the same area was carried out by Quants Ecology in 2018 also with negative results.

2.6.6 Bats

The industrial areas on North Tees are assumed to be very poor for bats, in part because of the high levels of light pollution but also the lack of roosting opportunities. This has proved to be the case on the few occasions that parts of the industrial sites have been surveyed for bats. Several surveys have taken place over a number of years across land that forms part of RSPB Saltholme, which would appear to be much more suitable habitat for bats than the industrial areas to the east where the main body of the Site is located. However, bat activity at Saltholme is still consistently low with only low single figures of Common Pipistrelles *Pipistrellus pipistrellus*, and Noctules *Nyctalus noctula*, regularly reported. Daubenton's bat *Myotis daubentonii*, has been recorded over the main lake on occasion but is not regularly present. A Natterer's bat *Myotis nattereri* was found grounded close to the visitor centre in 2025. There are a number of bat detector records of Nathusius' Pipistrelle *Pipistrellus nathusii* at Saltholme and these have occurred with sufficient frequency to suggest that they may be genuine rather than simply Common Pipistrelles shifting their call frequency. A grounded Nathusius' Pipistrelle, has been found 2 km to the north in 2010, so the species is known in the wider area. No other bat species are known to have occurred near the Site.

¹ A vice-county is a system of geographical division of Britain and Ireland created for the purpose of biological recording. 152 vice-counties exist across both Britain and Ireland. Each vice-county is assigned a name and a number.

South of the Tees, to date, INCA has not found any bat roosts on any industrial sites, despite undertaking surveys of several industrial sites, including the bridges over the access route to Dabholm Gut. INCA has carried out several surveys on the corridor to Dabholm Gut and surrounding industrial areas, and in all cases bat activity was low and almost entirely attributable to Common Pipistrelle.

2.6.7 Priority Mammals and Amphibians

- Hedgehog *Erinaceus europaeus*, has been recorded from the Main Site itself and as casualties on roads along the access routes.
- Brown Hare *Lepus europaeus*, occurs on the Site, along Dabholm Beck and Gut and adjacent to the access routes.
- Harvest Mouse *Micromys minutus*, occurs at Saltholme and has recently been recorded on Dorman's Pool. In the south it has been recorded at Coatham Marsh.
- Common Toad *Bufo bufo* is almost ubiquitous in water bodies on Teesside.

2.6.8 Butterflies

Both Dingy Skipper *Erynnis tages*, and Grayling butterfly *Hipparchia semele*, are widespread in suitable habitats across the industrial areas on North and South Tees. Small Blue butterfly *Cupido minimus* was introduced to CATS in 2019 by INCA and has subsequently spread to nearby areas including adjacent to part of the Main Site.

2.6.9 Moths

Reedbed indicator species are well represented among the notable species on North Tees. Of these, a number of species listed as 'local' use Common Reed *Phragmites australis* as their larval foodplant. These include the Brown-veined Wainscot *Archana dissoluta*, Chilo phragmitella (a large microlepidopteran species within the family Crambidae), Fen Wainscot *Arenostola phragmitidis*, Obscure Wainscot *Mythimna obsoleta*, Silky Wainscot *Chilodes maritimus*, Southern Wainscot *Mythimna straminea* and Twin-spotted Wainscot *Lenisa geminipuncta*.

A number of uncommon grassland indicator species occur near the Site. Butterflies are listed within the Red List of British Butterflies (Fox et al, 2020). Their needs are varied due to the diverse range of larval foodplants involved. The species include:

- *Aproaerema sangiella* (Nationally Scarce A) – A rare gelechiid species which is associated with Bird's-foot trefoil *Lotus corniculatus* and have been recorded only from the Brinefields.
- Annulet *Charissa obscurata* (Local) – Have been recorded from South Gare, the Seal Sands Estate and the Wilton International Site, where it is associated with a range of herbaceous plants.
- Bordered Sallow *Pyrrhia umbra* (Local) - Uses Rest Harrow *Ononia repens*. It occurs at Bran Sands, South Gare and on the Seal Sands Industrial Estate.
- *Caryocolum marmorea* (Nationally Scarce B) – This scarce gelechiid species uses Common Mouse-ear *Cerastium fontanum* and it prefers dry, sandy, sites. The moth has been recorded from the Seal Sands Estate.
- *Chionodes fumatella* (Nationally Scarce B) – Another scarce gelechiid which occurs in similar habitats to *C.marmorea*. The moth also occurs on the Seal Sands Estate, where it can be frequent. It is thought to be associated with various mosses.
- *Grapholita lunulana* – Another notable tortricid (Nationally Scarce B), this species uses areas of rougher grassland containing vetches *Vicia spp.*, which it uses as larval foodplant. This moth is found across the estuary in suitable habitat.

- Grass Rivulet *Perizoma albulata* (Local) - This is distributed across sites in the lower Tees Valley, particularly near the coast, where it uses areas of rougher grassland with the foodplant Yellow-rattle *Rhinanthus minor*.
- Six-belted Clearwing *Bembecia ichneumoniformis* (Nationally Scarce B) – a rare day-flying moth which uses Bird’s-foot trefoil, which is so far has from the Seal Sands Estate in the Teesside area.
- *Stenoptilia zophodactylus* (Local) - This small plume moth is associated with calcareous grassland containing Yellow-wort *Blackstonia perfoliata* on the Seal Sands Industrial Estate.
- The Forester *Adscita statice* (Local) – A day-flying species which uses the sorrels *Rumex acetosa* and *Rumex acetosella*. There is a large population of the moth at Coatham Stob near Stockton-on-Tees but apart from this it is virtually unknown on Teesside apart from a small population in the open grassland on the Seal Sands Estate, on or adjacent to the Site.
- The Large Red-belted Clearwing Moth *Synanthedon culiciformis*, was recorded from Birch Woodland on the Site in 2023. This moth is listed as Nationally Scarce B.

Part of the Main Site contains what is effectively Dune Grassland and could support species associated with this habitat including Archer’s Dart *Agrotis vestigialis* (Local), and White Colon *Sideridis turbida*, both using a range of larval foodplants. These areas are also likely to support other sand dune moth species that have been recorded from the surrounding area such as *Longaletedes elymi* (Nb), using Lyme Grass *Elymus arenarius*, and Shore Wainscot *Mythimna litoralis* (Nb) using Marram Grass *Ammophila arenaria*.

2.6.10 Other Terrestrial Invertebrates

The area of open, sandy grassland that occupies a part of the northern area of the Main Site may support significant species of other invertebrate taxa.

2.6.11 Wintering (Special Protection Area) birds

The RLB for the Project crosses or lies adjacent to several parts of the Teesmouth and Cleveland Coast Special Protected Area (SPA) designated for its wintering bird population. There are no records of the Main Site being used by numbers of SPA birds. The habitats across most of the Main Site are unsuitable for SPA birds. There is no longer any significant open water and large parts of the Site are covered in dense, tall vegetation. The open areas of hardstanding only have the potential to be used by flocks of roosting Lapwing, but this would be a recent opportunity as this area previously consisted of buildings and other infrastructure. The relatively small area of open, sandy grassland to the north could support occasional low numbers of Curlew but use by other SPA birds is unlikely. The ancillary areas and access routes do not provide suitable habitat for the qualifying species of the SPA and are regularly disturbed.

2.6.12 Breeding birds

Four Schedule 1 bird species (Wildlife and Countryside Act 1981, as amended) are known to nest on the Seal Sands Industrial Estate; Marsh Harrier *Circus aeruginosus*; Little Ringed Plover *Charadrius dubius*; Barn Owl *Tyto alba* and Peregrine *Falco peregrinus*.

3. Survey details

Walkover surveys were carried out across the Main Site, ancillary areas and access routes, where accessible. Habitats were categorised using the UK Habitats Classification system. The presence or

potential for presence of all VER species was noted, as was the presence of Invasive non-native plant species (INNS) as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

3.1 Main Site

Walkover surveys were carried out on 9th and 16th April, 11th June, 4th July and 14th August 2025 of Areas 1, 2 and 3. The entirety of the Site was visited between the two surveys. Area 4 was surveyed on 18th June 2025.

The survey on 9th April was carried out by Phil Roxby and Ian Bond from INCA who each have at least 20 years of experience of carrying out ecological surveys. The survey on 16th April was carried out by Ian Bond. The surveys on the 11th June, 4th July and 14th August were carried out by Sarah Barry who has over 10 years of experience of carrying out ecological surveys. Area 4 was surveyed by Ian Bond.

In May 2026 ARUP undertook a walkover survey of the jetty and adjacent areas along the eastern edge of Area 1.

3.2 Ancillary Land and Access Routes

Walkover surveys of Dabholm Land were undertaken on 12th and 19th May 2026 by Sue Charlton MCIEEM and Morgan Robson-Young, both Ecologists with INCA. Sue has over 20 years' experience carrying out Ecological Surveys.

A walkover survey of Navigator Land was undertaken on 11th May 2026 by Mark Morris, Ecologist at INCA, accompanied by Jonathan Marshall of Navigator.

ARUP ecologists undertook walkover surveys of Seal Sands Road on 7th May 2026. Huntsman and GLE Pipeline, and Linkline Corridor were also undertaken in May 2026 by ARUP Ecologists.

3.3 Survey Limitations

3.3.1 Main Site

The surveys of Areas 1, 2 and 3 were undertaken in early April, when certain plant species were not identifiable. Nevertheless, it is considered that any species of INNS would be evident at that time of year, and it was possible to identify vegetation with sufficient detail to categorise all habitats. The surveys were undertaken in weather conditions and at a time of year and day which was not optimal for recording several species, however as the objective of the survey was just to assess the potential for VERN, this is not considered to have been a limitation.

3.3.2 Ancillary Land and Access Routes

No access directly onto the GLE Pipeline corridor was possible at the time of the survey. The survey was undertaken from a vantage point from the TV1 Terminal eastern fenceline. Areas further north or east were therefore difficult to view and were verified using aerial imagery.

Huntsman Road is a private road with no confirmation of access to survey the road and verges so the assessment was completed whilst driving to and from the Alfanar TV1 Terminal, could not go any further than the Terminal as it becomes SABIC/Navigator land.

Linkline Corridor route south of the Main Site was inaccessible at the time of survey and was observed from the Site boundary using binoculars. In addition, no observation of the western extent of the corridor was possible due to nesting Marsh Harrier.

The extreme western end of Dabholm Gut was inaccessible due to potentially nesting Curlew. An assessment of the habitats present was made using binoculars and if required a repeat survey can be undertaken outside of the bird breeding season.

There were no restrictions with regard to timing, weather or access during the Navigator or Seal Sands Road surveys.

4. Survey results

4.1 Main Site

4.1.1 Area 1.

4.1.1.1 Habitats

Currently this is largely bare ground. Using the UK Habitats Classification it comprises three components:

- a) Developed land, sealed surface. These are roads and areas covered in concrete or tarmac.
- b) Artificial unvegetated, unsealed surface. These are areas such as where the former buildings have been demolished leaving a crushed aggregate base. Most of these areas are starting to be colonised by vegetation but currently this confined almost entirely to Buddleia *Buddleia davidii*, and Narrow-leaved Ragwort *Senecio inaequidans* (Photograph 1).
- c) Sparsely vegetated land (vacant/ derelict land). These are areas of former operational land which have been decommissioned at an earlier stage, and which have vegetated to the extent whereby they would not be classed as artificial, unvegetated, unsealed land. This is taken to be where the vegetation cover exceeds 20%. The vegetation in this area is also dominated by Buddleia and Narrow-leaved Ragwort but includes some other ruderal plant species and small elements of grass. (See Photograph 2). The Schedule 9 invasive plant species, Wall Cotoneaster *Cotoneaster horizontalis*, is frequent in these areas.

The additional survey of the Jetty undertaken by ARUP found an extension of the Artificial Unsealed Surface Habitat described by INCA from within Area 1 present to the north and in association an area of Vacant derelict land immediately north of the fenceline within Navigator's land.

An extension of the 'Artificial intertidal structure' habitat recorded along the jetty foreshore. Consists of gabion baskets filled with rocks. Bank tops up to the fenceline made up of loose slag substrate or hardstanding. Mostly bare ground with patches of vegetation.

Sparsely vegetated land habitat was present in the south of this area adjacent to the river and within the INEOS fenceline. Dense areas of vegetation dominated by Buddleia with short grasses frequent, clover *Trifolium sp*, ragwort *Jacobaea sp*, saxifrage *Saxifraga sp*, dandelion *Taraxacum sp* and Bramble *Rubus fruticosus agg.* occasional.

To the southwest of this area was Developed Land Sealed Surface habitat, in the form of a hardstanding concrete bund around storage tanks.

4.1.1.2 Species

The areas with a crushed aggregate base would appear to be very well suited to Little Ringed Plover and to some other nesting waders such as Oystercatcher *Haematopus ostralegus*, and Ringed Plover *Charadrius hiaticula*. Otherwise, no nesting birds are expected in this area.

In terms of wintering waterbirds, there is the potential for flocks for Lapwing, to roost on the open areas but if so, this would be a recent development as this area was previously covered by buildings and it seems more likely that they would continue to use traditional roosting areas such as at Saltholme. ARUP noted roosting birds include Herring Gull *Larus argentus*, Stock Dove *Columba oenas*, Oystercatcher and Shelduck along the jetties. There was no other potential for wintering waterbirds.

The parts of this area that include some fine-leaved grass species are likely to support a good population of Grayling butterfly.

No other notable species are expected to be present in this area.

4.1.2 Area 2.

4.1.2.1 Habitats

This is a complex mosaic of habitats, including many elements that would be classed as wetlands. It is understood that this area formerly contained a large, shallow tank covering several hectares, which held water, and which was subsequently filled in. This would account for the presence of the wetland elements in an area of the Seal Sands Industrial estate which typically has dry, sandy substrates. Scrub, mainly in the form of various Willow *Salix spp.*, is present across much of the area but not in sufficient quantity to be a distinct habitat parcel in its own right. Wall Cotoneaster and other Cotoneaster species are frequent in the drier parts.

The following vegetation types are present:

Reedbeds. Reedbed is present in several discrete blocks and would appear to total at least three hectares. This is significant as a criterion for selection of Local Wildlife Site in the Tees Valley is Reedbeds of a minimum of 0.1ha. Therefore, these habitats would be of County significance. Reedbeds are also a Priority Habitat and are classed as being of high distinctiveness in the Biodiversity Metric.

Other Wetlands. Where there is surface water, which is now confined to small, shallow patches, the vegetation is dominated by Sea Club Rush *Schoenoplectus maritima*, with Small Reed *Calamagrostis sp.*, around the margins. The Sea Club Rush has largely infilled any open water but some small areas typically <1m² still occur between the emergent vegetation. This element clearly fits the UK Habitats Classification category of Other Wetlands. (See Photograph 3).

Other Neutral Grassland (ONG). Where the water table is below the surface the vegetation appears to be damp grassland but containing a high proportion of various sedges *Carex spp* rather than grasses. This habitat type does not easily fit the UK Habitats Classification categories. It might therefore need to be classified as Other Neutral Grassland but with a high proportion of sedges.

In drier areas the grasslands vary between locations in the composition of the grasses though typically it is predominantly either Red Fescue *Festuca rubra*, or Yorkshire Fog *Holcus lanatus*. Forbs are at

least occasional and may be frequent later in the season but appear to be of limited diversity. Wall Cotoneaster is invading.

Bramble scrub. This occurs as discrete, dense patches but it is also extensively spreading across the grassland.

Sparsely vegetated land (Open Mosaic Habitat). This is an area of loose, relatively sandy substrate and meets all the criteria required for classification as Open Mosaic Habitat (OMH). (See Photograph 5). Its boundaries are not clearly defined, as is typically the case with a habitat mosaic, but it will extend to at least 1ha and is confined to one area adjacent to the southern boundary. OMH is a Priority Habitat and is classed as being of high distinctiveness in the Biodiversity Metric.

Willow scrub. Willow is invading but is relatively young and mainly <5m, so is scrub rather than woodland. It is scattered throughout much of Area 2 and may or may not be classed as a separate habitat depending on the scale at which the habitats are mapped.

4.1.2.2 Species

Breeding birds

During the walkover survey the only birds of note that were seen during the survey were a pair of Marsh Harrier which were circling over the Site. There is suitable habitat in Area 2 for them to breed. The habitats in Area 2 will also support the interest feature of the SSSI, “breeding birds of wetlands and their margins”. In this respect they are likely to be as important as some areas that have been included within the SSSI.

Wintering birds

The habitats are unsuitable to support the species or assemblages of wintering waterbirds associated with the SPA.

Great Crested Newt

Only the largest of the former waterbodies had sufficient water to potentially support breeding GCN, with the very small areas of open water between the emergent vegetation typically being 5-10cm deep but occasionally as much as 30cm deep.

Reptiles

There is some suitable habitat for reptiles in the grassland and OMH around the northern and southern boundaries of Area 2. There is connecting habitat in the form of a large embankment connecting the Site to the location of the nearest record of Common Lizard.

Otters

There was no suitable habitat on the Site for resident Otter though they could traverse the Site if travelling between the river and the Saltholme area.

Water Vole

There was no suitable habitat on the Site for Water Voles.

Badger

There were no signs of Badger on the Site. The Site does not form a potential corridor between areas known to be used by Badgers.

Bats

The habitats being well vegetated would potentially be suitable for foraging bat species which could tolerate the light levels in the surrounding area. There was no opportunity for roosting bats.

Hedgehog

A hedgehog dropping was found. There is abundant suitable habitat for them in this area.

Brown Hare

Areas of open habitat were limited so Brown Hare is unlikely to be present other than transient between other areas.

Harvest Mouse

Much of this area appeared to be suitable habitat for Harvest Mouse.

Common Toad

Common Toads are known to breed in ponds within 1km so a few individuals may be present during the terrestrial phase of their life cycle.

Invertebrates

There is some potential for priority butterfly species in the more open areas. The reedbed and wetland areas are likely to support the notable moth species that are known to be present in similar habitats in the surrounding area.

4.1.3 Areas 3 and 4.

4.1.3.1 Habitats

The majority of Area 3 comprised Birch Woodland. Based on the size of the trees, the woodland is estimated to be approximately 20 years old, however the sandy substrate could have limited tree growth rates so it may be a little older. There was some Willow mixed with the Birch *Betula sp.* but the younger specimens of this were overshadowed by the Birch and were in poor condition. There was no shrub understorey, and the ground flora consisted of grass and dune species that had managed to persist. The woodland was assessed as Other broadleaved woodland (See Photograph 6).

Surrounding the woodland and interspersed within openings between the trees were patches of Marram Grass and of sparsely vegetated ground (See Photograph 7). The latter would clearly meet the criteria for OMH if taken in isolation but given the species composition and the relationship to the patches of Marram then the most appropriate ecological classification might be to consider both elements as coming under the UK Habitats Classification of Dune Grassland. However, given the history of this area, the most reasonable classification would be to consider all the open areas including the Marram as OMH. There are occasional examples of Schedule 9 species of *Cotoneaster* throughout the open habitats.

Other Neutral Grassland. In places where the sward was relatively closed and less forb-rich. Depending on their size and precise location in relation to the Site, these may be considered an element of the OMH or may be separated out from them.

Area 4 is a continuation of Area 3. There is no demarcation between the two areas either in terms of physical markers or the vegetation types. The two areas contain the same habitats, but where they do vary is that a little over two thirds of Area 4 is the habitat type described as OMH/Dune Grassland, whereas this habitat covers a much smaller proportion of Area 3. The remainder of Area 4 is ONG with small amounts of woodland and Willow scrub.

4.3.2 Species

Otter

There was no suitable habitat on the Site for resident Otter though they could traverse the Site if travelling between the river and the Saltholme area.

Water Vole

There was no suitable habitat on the Site for Water Voles.

Badger

There were no signs of Badger on the Site. The Site does not form a potential corridor between areas known to be used by Badgers.

Bats

The trees are too small to support roosting bats though the habitats could potentially be suitable for foraging by bat species which could tolerate the light levels in the surrounding area.

Great Crested Newt

There are no ponds within 500 m and the terrestrial habitats would appear to be sub-optimal for GCN.

Reptiles

The vegetation structure of the habitats does not appear to be suitable for those reptile species that are resident in northeast England.

Breeding birds

The Birch Woodland is unlikely to support any significant breeding bird species. The open areas within Area 3 were too small to be of significance for an assemblage of breeding birds but several Skylark *Alauda arvensis* territories were observed within Area 4 during the survey and there would appear to be some potential for other ground nesting species, including Little Ringed Plover.

Wintering birds

The habitats are unsuitable to support the species or assemblages of birds associated with the SPA or SSSI, though the more open areas may support the occasional foraging Curlew.

Hedgehog

The habitats would be suitable for foraging Hedgehogs, but the vegetation appears to be too sparse to be suitable for them to be resident.

Brown Hare

The habitats are likely to form part of the home range of Brown Hare.

Harvest Mouse

The habitats in this area are unsuitable for Harvest Mice.

Common Toad

Common Toads are known to breed in ponds within 1 km so a few individuals may be present during the terrestrial phase of their life cycle.

Invertebrates

The Birch Woodland supports the Large Red-belted Clearwing moth, a Nationally Scarce B species of moth. The open areas in the wider area are likely to support species and assemblages of County significance but the extent of such habitats within the Site is very limited.

4.2 Ancillary Land and Pipeline Corridor

4.2.1 PD Ports Land including Dabholm Beck and Gut

4.2.1.1 Habitats

To the south of Dabholm Beck and Gut, habitats comprised of ONG, Dense Bramble and Mixed Scrub (Figures 11 and 12). The grassland comprised of some areas with a more short, sparse sward on loose aggregate but mostly it comprised of a longer more closed sward occurring on deeper soils and in areas of inundation (Photograph 8). The grassland was generally unmanaged, with rabbit *Oryctolagus cuniculus* grazed lawns in areas. Species included False-oat grass *Arrhenatherum elatius*, Cock's-foot *Dactylis glomerata*, Tufted Hair-grass *Deschampsia cespitosa* and Barren Brome *Anisantha sterilis*. With herbs including Yarrow *Achillea millefolium*, Creeping Cinquefoil *Potentilla reptans*, White Dead-nettle *Lamium album*, Perennial Sow-thistle *Sonchus arvensis*, Wild Carrot *Daucus carota*, Ribwort Plantain *Plantago lanceolata*, Wall Rocket *Diplotaxis tenuifolia*, Common Vetch *Vicia sativa*, Mouse-ear Hawkweed *Pilosella officinarum*, Narrow-leaved Ragwort, Creeping Thistle *Cirsium arvense*, Common Nettle *Urtica dioica*, Black Medic *Medicago lupulina* and Black Knapweed *Centaurea nigra*. In the more open areas Kidney vetch *Anthyllis vulneraria* was also present.

Bramble Scrub was present along the banks of Dabholm Gut, whilst a more Mixed Scrub habitat was present in association with a Dry Ditch and along the banks at the eastern edge of the area adjacent to the road to the bridge crossing the Beck (Photograph 9), and on spoil mounds surrounding an area of bare aggregate currently used as a truck waiting area. Species within the Mixed Scrub included Hawthorn *Crataegus monogyna*, Elder *Sambucus nigra*, Bramble and Dog Rose *Rosa canina*.

Wall cotoneaster was found within the scrub growing on the verge near to the road bridge.

Roads and tracks were comprised either of Developed Land-Sealed Surface, or Artificial Unvegetated-Unsealed Surface. An area of hardstanding was also assigned the habitat type Artificial Unvegetated-Unsealed Surface along with aggregates mounds stored at the north of this area and extending onto the track north to the Beck (Photograph 10)

4.2.1.2 Species

Gadwall *Anas strepera* and Mallard *Anas platyrhynchos* were observed on Dabholm Beck and Gut during the survey with a single Whimbrel *Numenius phaeopus* observed on Dabholm Gut (Outside of the RLB). A Curlew was also observed potentially nesting at the eastern end of Dabholm Gut. A Sedge Warbler *Acrocephalus schoenobaenus* was observed singing within the scrub on the southern bank of Dabholm Beck.

A Brown hare was seen along the hardcore tract between the truck waiting area and the Beck.

4.2.2 Huntsman Drive and GLE Pipeline Corridor

4.1.5.1 Habitats

Huntsman Drive comprised of a Tarmac road assigned to 'Built linear feature' habitat, which extended from the junction with Seaton Carew Road up to the gatehouse into North Tees land. Verges were maintained Modified Grassland, with dense Mixed Scrub adjacent.

The GLE Pipeline Corridor extending north from Huntsman Drive (Figure 3), comprised of Sparsely Vegetated Land on an aggregate substrate. Denser vegetation occurred along and under the pipeline but this is routinely sprayed off and so has become dominated by a Saxifrage sp. and mosses. Other areas around scrub, tracks and beneath a pylon were less vegetated and had a mix of species with young shoots of Buddleia dominating. Other species included Birds-foot Trefoil *Lotus corniculatus*, Oxtongue *Picris* sp., Dandelion, Bramble and fine grasses.

Artificial Unsealed Surface Habitat was present in the form of the existing tracks through the Site which appear to be occasionally used, the only vegetation observed was a Saxifrage species or colonising grasses in between tracks.

Mixed Scrub habitat was present in three main areas of the Site. Within a fenced area beneath a pylon in the north dominated by Buddleia with occasional young Birch trees and in the east and west, dominated by Buddleia with Hawthorn, Sea Buckthorn *Hippophae rhamnoides* and Birch.

An area of Bramble Scrub was present in the south of the area, which also contained several stands of the Schedule 9 species Japanese Rose *Rosa rugosa*.

Other Neutral Grassland was present across the centre of the area, which varied in sward height between a tall sward (>20 cm) in the east, and a short sward (≤10 cm) along the western edge associated with the pipeline.

Along the southern boundary with Huntsman Drive was a stretch of regularly mown Modified Grassland.

4.1.5.2 Species

Along Huntsman Drive, Dense Scrub outside of the RLB boundary either side of the road, largely along southern verge, could provide nesting and foraging opportunities for breeding birds and foraging, commuting and sheltering opportunities for mammals.

Within the Pipeline corridor Dense Scrub and Neutral Grassland offer foraging, sheltering and nesting habitats for birds, small mammals and invertebrates. However, routine use of tracks/roadway by operators and spraying of urban habitats and edges of scrub, grassland likely reduces suitability for protected species.

4.2.3 Linkline Corridor

4.1.6.1 Habitats

Habitat present along the surveyed Linkline Corridor are detailed within Figure 9. Artificial Unsealed Surface was present beneath the northern and southern pipelines and adjacent tracks. It was also present along the southern corridor in association with a larger open area, likely a car park or storage area and as a mound of deposited material.

Two small areas of Neutral Grassland south of the southern pipeline corridor at either end of a long patch of Mixed Scrub.

Four small Reedbeds were present, two of which were between the pipelines in the east of the area, amongst scrub, one was just south of these, below the southern pipeline, with the fourth adjacent to the southern pipeline further to the west.

A small patch of Bramble Scrub bisected the reedbeds between the pipelines, with a second patch located along the southern boundary adjacent to the area of hardstanding.

Mixed Scrub was present along a large part of the southern extent of the southern pipeline corridor, comprised of Scrub dominated by Willow and Buddleia with Hawthorn and Birch occasional.

4.1.6.2 Species

Singing Chiffchaff *Phylloscopus collybita*, finches, Woodpigeon *Columba palumbus* were noted within the scrub, with other common passerines likely present throughout the year.

Rabbit *Oryctolagus cuniculus* dropping and foraging signs were noted along the INEOS fenceline so assume they may also be present within scrub and travel into/out of main site under gaps in fences.

The Site has potential as a commuting route for local small mammals and Roe Deer *Capreolus capreolus*.

4.2.4 Seal Sands Road

4.1.7.1 Habitats

Developed Land Sealed Surface was present in the form of the tarmac roads, car parks/laybys, and pavements across the area.

Artificial Unvegetated Unsealed Surface comprised the remaining fine aggregate car parks/laybys along Seal Sands Road, tracks and managed areas underneath the existing above ground pipelines (Linkline Corridor running to Navigator) and also included sections of the derelict railway where adjacent scrub and grassland has not completely colonised.

Bramble Scrub dominated the roadside verges and merged into the areas of Neutral Grassland. Stands of Hawthorn and Whitebeam *Sorbus aria* were occasionally present. Some areas appeared managed where underground pipelines were present or where it encroached upon roadsides.

Mixed Scrub was present as one area of Cotoneaster dominated scrub on the verge east of Seal Sands Road.

Two stands of Other Sea Buckthorn Scrub were present. One located adjacent to the derelict railway in the western extent of the road and (Figure 6) and one located within a larger area of surrounding Bramble Scrub on the eastern verge of Seal Sands Road, where it turns north (Figure 4).

One small square of Willow Scrub was located north of the derelict railway on its own in the left hand part of Figure 8. Stands of Elder were occasional.

Other Neutral Grassland was present along road verges and comprised dominant Yorkshire Fog *Holcus lanatus* and Red Fescue grasses with Cocks-foot, Lyme Grass, Marram Grass frequent. Dominant herbs included Ribwort Plantain, Narrow-leaved Ragwort and Wild Parsnip *Pastinaca sativa*, Vetch sp. *Vicia* sp, Dock sp. *Rumex* sp, Thistle sp. *Cirsium* sp (including Carline Thistle), a Saxifrage, Toadflax *Linaria vulgaris*, Bird's-foot Trefoil, Black Knapweed, Vernal Sedge *Carex caryophyllea*, Yarrow, Dandelion, Danish Scurvy-grass *Cochlearia danica* (a Hawkweed), and liverworts present ranging from abundant to occasional. Scattered Scrub throughout included Bramble, Hawthorn, Rose sp., Sea Buckthorn and Willow. Areas adjacent to the road and with underground pipelines are mown with a shorter sward. Areas beyond this have a taller sward with colonising areas of scrub and patches of bare ground along roadside. Patches of dense marram grass were present along the eastern verge opposite Navigator which may indicate sandy substrate.

4.1.7.2 Species

Dense Scrub and grassland provide foraging, sheltering and nesting opportunities for birds, especially migratory passerines and ground nesting birds. Meadow Pipit *Anthus pratensis*, Blackbird *Turdus turdus*, Stonechat *Saxicola rubicola*, Robin *Erithacus rubecula*, Dunnock *Prunella modularis* and Carrion Crow *Corvus corone* were noted displaying breeding behaviour across the verges.

Pipelines and above ground infrastructure provide perching opportunities for scavengers and birds of prey.

Large aggregates under derelict railways and dense vegetation potentially provide commuting and sheltering opportunities for small mammals and reptiles although habitats are isolated by roadways with frequent traffic.

Rabbit dropping present throughout, but no warrens identified, could be present within Dense Scrub

Several butterfly species (Large White *Pieris brassicae* and Peacock *Aglais io* confirmed) and Burnet moth *Zygaena filipendulae* caterpillar noted amongst vegetation. Likely that verges and scrub provide foraging and breeding habitat for a range of terrestrial invertebrates.

4.2.5 Navigator Land

4.1.8.1 Habitats

The Site comprised Neutral Grassland, bisected by an access track and associated pipeline infrastructure running through and along the margins of the Site (Figure 10).

The grassland is variable in species composition, with dominant grasses including Cock's-foot, Yorkshire Fog and False Oat-grass. The majority of the grassland appeared unmanaged, with the exception of a narrow strip associated with below ground pipeline infrastructure, marked by concrete

marker posts. To the north of this area was an established above ground pipeline corridor extending towards the River Tees.

Across the unmanaged grassland areas there was extensive encroachment by Bramble with cover typically ranging from approximately 20–40 % of the sward and showing evidence of ongoing spread. In some areas, particularly towards the western boundary adjacent to the Intertek site, the Bramble had developed into Dense Scrub. The Intertek site itself comprised a single operational building, associated car parking, small areas of ornamental landscaping, and a conifer belt of Leyland Cypress *Cupressus × leylandii* along the north western boundary. North of the Intertek site and the pipeline corridor were further areas of grassland heavily dominated by Bramble Scrub.

Around parts of the margins of the grassland compartments there are small patches of more diverse grassland where limited forb rich vegetation has developed. These areas included species such as Birds-foot Trefoil, alongside occasional other forbs.

A gravel track and above ground pipeline infrastructure extend through the Site and were classified as artificial, unvegetated, unsealed surfaces. At the eastern end of the Site, towards the River Tees, a band of Bramble Scrub was present near the high water mark. Beyond this was an area of muddy gravel which transitions into Intertidal Mudflat associated with the estuarine zone between the high and low water marks.

4.1.8.2 Species

No invertebrates were recorded during the survey visit, which was undertaken under generally unsuitable weather conditions, being cool and overcast.

Nesting Skylark and Lapwing were observed in adjacent grassland outside the RLB.

5.0 Recommendations

No impact is expected on existing access routes within the RLB, which will be used as such and where no works are to be undertaken and these are screened out. These include Huntsman Drive, Dabholm Road and Teesport Road.

Table 4 summarises the likely status of the various VERS within each area of the Main Site and Table 5 summarises the likely status of VERS within the Ancillary Land and any actions that are recommended to take further consideration of them.

Table 4. Summarises of the likely status of the various Valued Ecological Receptors within each area of the Main Site

VER	Area 1		Area 2		Areas 3&4	
	Likely status	Action required	Likely status	Action required	Likely status	Action required
Habitats	No significant habitats	Screened out	Several areas of Priority Habitat	Mitigation required for any loss or degradation	Some Priority habitats present	Mitigation required for any loss or degradation
Water Vole	Absent with a high level of confidence	Screened out	Absent with a high level of confidence	Screened out	Absent with a high level of confidence	Screened out
Otter	Absent with a high level of confidence except for potential occasional commuting	Mitigation during construction	Absent with a high level of confidence except for potential occasional commuting	Mitigation during construction	Absent with a high level of confidence except for potential occasional commuting	Mitigation during construction
Badger	Absent with a high level of confidence	Screened out	Absent with a high level of confidence	Screened out	Absent with a high level of confidence	Screened out
GCN	Absent with a high level of confidence	Screened out	Very low likelihood but some potential habitat	eDNA survey	Absent with a high level of confidence	Screened out

VER	Area 1		Area 2		Areas 3&4	
	Likely status	Action required	Likely status	Action required	Likely status	Action required
Reptiles	Absent with a high level of confidence	Screened out	Very low likelihood but some potential habitat	None. Likelihood of presence too low to merit survey	Absent with a reasonable level of confidence	Screened out
Bats	Absent with a high level of confidence	Screened out	Likely to be a limited amount of foraging activity	None.	Potential for low level of use	None
Harvest Mouse	Absent with a high level of confidence	Screened out	Reasonable likelihood of presence	Mitigation during construction	Absent with a high level of confidence	Screened out
Brown Hare	Absent but may commute across the site	Mitigation during construction	Absent but may commute across the site	Mitigation during construction	Will likely commute across the Site	Mitigation during construction
Hedgehog	Absent with a high level of confidence except for potential occasional commuting	Mitigation during construction	Known presence	Mitigation during construction	Known presence	Mitigation during construction

VER	Area 1		Area 2		Areas 3&4	
	Likely status	Action required	Likely status	Action required	Likely status	Action required
Common Toad	Absent with a high level of confidence	Screened out	Reasonable likelihood of presence	Mitigation during construction	May be present in small numbers during the terrestrial phase	Mitigation during construction
Breeding birds	Possibility of Schedule 1 species but otherwise not significant	Surveys required	Possibility of Schedule 1 species and a significant species assemblage	Surveys required	Unlikely to be significant on the INEOS site but some use by Priority species on the adjacent area	Surveys may be required depending on the eventual RLB.
Wintering birds	Very limited likelihood of presence SPA bird presence	Surveys required	Very limited likelihood of presence SPA bird presence	Surveys required	Very limited likelihood of presence SPA bird presence	Surveys required
Invertebrates	Grayling butterfly likely but otherwise not significant	Grayling butterfly survey. Mitigation during construction	Likely to support Priority and other notable Lepidoptera	Survey required Mitigation during construction	Nationally Scarce B moth species present on the Site. Other significant species may be present	Surveys may be required depending on the eventual RLB.

VER	Area 1		Area 2		Areas 3&4	
	Likely status	Action required	Likely status	Action required	Likely status	Action required
Invasive plants	Known presence	Survey and management plan as part of a CEMP	Known presence	Survey and management plan as part of CEMP	Known presence	Survey and management plan as part of CEMP

Table 5. Summarises of the likely status of the various Valued Ecological Receptors within each area of the Ancillary Areas.

VER	Dabholme, Navigator, Seal Sands Road, Linkline Corridor and GLE Land	
	Likely status	Action required
Habitats	Grassland and scrub of medium to low ecological value present across the areas. Navigator - Priority intertidal mudflat habitat present only within the River Tees at the SSSI/SPA/Ramsar boundary. Dabholm – SPA/SSSI and Priority intertidal habitat lie adjacent to the Area.	Measures to avoid harm to the National Site Network Site and Priority Habitat to be detailed within any CEMP.
Water Vole	Absent with a high level of confidence.	Screened out
Otter	Potential for commuting otter along Dabholm Beck and Gut.	Mitigation during construction and survey of Bran Sands lagoon
Badger	Absent with a high level of confidence	Screened out
GCN	Absent with a high level of confidence	Screened out
Reptiles	Negligible potential to be present	Screened out

Bats	No roosting potential; low potential for occasional foraging/commuting only	Screened out
Harvest Mouse	Very low potential to be present	Screened out
Brown Hare	Occasional, transient use of open areas possible across most areas, confirmed present on Dabholm.	Mitigation during construction
Hedgehog	Low-level foraging or commuting use possible	Mitigation during construction
Common Toad	Negligible potential to be present	Screened out
Breeding birds	Potential for breeding by common ground-nesting birds; nesting confirmed on land adjacent to Navigator, and Curlew confirmed breeding at Dabholm.	Potential for ground nesting birds, and passerines within scrub. A Curlew was observed nesting during the survey.
Wintering birds	Negligible ecological function for SPA assemblages. Suitable habitat within the Beck and Gut at Dabholm.	Screened out apart from Dabholme, wintering bird surveys to inform mitigation during works
Invertebrates	Dingy Skipper and Grayling present on higher-quality brownfield habitat off-site	Screened out

	Habitats not optimal and limited but foodplants are present and there are areas with a more open sward.	
Invasive plants	INNS recorded on Dabholm, and Seal Sands Road, No other INNS recorded during survey	Survey and management plan as part of CEMP

6.0 Summary of Surveys to date

A suite of ecological surveys recommended within the PEA have been undertaken during 2025 and 2026, a summary of these surveys is provided below. For detailed information on the scope, survey design and results please see the individual reports accompanying this PEA.

6.1 UK Habitat Survey of Main Site

Field surveys were carried out between May and August by Sarah Barry and Ian Bond, INCA ecologists and Phil Roxby, INCA Director, all of whom are experienced surveyors of vegetation in lowland habitats.

6.1.1 Baseline Ecological Conditions

The baseline survey did not find any Irreplaceable or Very high distinctiveness habitats on Site

6.1.2 High distinctiveness habitats

The following habitats are the only ones occurring within the Site that have been categorised as high distinctiveness, i.e. scoring six in the Statutory Biodiversity Metric.

6.1.3 Reedbeds

There is a small reedbed in Area 3. It is below the 0.04ha minimum mapping area but has been assessed separately as reedbeds are a priority habitat. Otherwise, reedbeds were confined to Area 2. All the reedbeds were dry, ie no water above ground level. One reedbed habitat parcel passed sufficient criteria to achieve moderate condition but the remaining reedbed habitat parcels were in poor condition. One reedbed covered almost 5ha but several others were large enough to meet the criteria for designation as a Local Wildlife Site, which for the Tees Valley is all reedbeds greater than 0.1ha.

6.1.4 Open Mosaic Habitat (OMH)

Open Mosaic Habitat is extensive on the north side of the road. Across Areas 3 & 4 it covers approximately 13ha, which is almost half of the total all habitats in those areas. Most of this is in Area 4. In these areas it would in most cases be in good condition except for the presence of a few examples of INNS, mainly in the form of Cotoneasters.

In Area 2 there is one area which meets the description for OMH. This is a relatively small area but one which slightly exceeds the minimum size threshold for OMH. Like the OMH in Areas 3 & 4, it fails good condition due to the presence of INNS.

None of the habitat parcels in Area 1 would be considered OMH, in part because the substrate is either sealed or fairly compact but also professional judgement would dictate that none of the habitat parcels in Area 1 merit being classed as a high distinctiveness habitat.

6.1.5 INNS

In this context, INNS refers to plant species listed under Schedule 9 of the Wildlife and Countryside Act (1981) as amended, or the Invasive Alien Species (Enforcement and Permitting) Order 2019

In Areas 3 & 4, there are examples of various Cotoneaster species that are listed under Schedule 9. These were sporadic, occurring mainly as individual plants rather than as groups, nevertheless they were widely distributed in the open habitats across these areas. There was also a small patch of Japanese Rose, another Schedule 9 species in Area 4.

Some examples of Cotoneasters also occurred in Areas 1 & 2 but again were sporadic except for one specific location in Area 1 where Wall Cotoneaster, was quite dense.

There were occasional examples of Japanese Rose in Area 2.

There was a clump of Giant Hogweed *Heracleum mantegazzianum*, in the large reedbed in Area 2.

6.1.5 Priority Habitats and Species

The Priority Habitats that are present on the Site are limited to those listed above as being of high distinctiveness, ie Reedbeds and OMH,

No Priority plant species were identified within the Site, and none are known or would be expected to be present in this location.

6.2 Breeding Bird Survey (INCA report reference INCA 2025-46)

Areas 3 & 4.

Seven surveys have been completed covering areas 3 and 4 combined. Surveys were undertaken on the 22nd March, 7th May, 14th May, 4th June, 19th June, 3rd July and 5th July, in good weather conditions. There was very little breeding bird activity overall; mainly Chiffchaff and Willow Warbler *Phylloscopus trochilus* associated with the blocks of scrub with low single figures of Meadow Pipit in the open areas. Only a single Skylark territory was identified on any individual breeding bird survey although visits during other ecological surveys suggest that at least 2-3 Skylark territories are present.

Area 1.

Due to access restrictions only five surveys could be undertaken of Area 1, which had very few breeding bird territories overall. The surveys were undertaken on 3rd April, 23rd April, 5th June, 19th June and 3rd July under good weather conditions. There was a single nesting pair each of Ringed Plover and Oystercatcher and at least one Skylark territory. Otherwise breeding bird territories were largely confined to a few pairs of Meadow Pipit, with Linnets *Linaria cannabina* on the periphery.

Area 2.

Due to access restrictions only five surveys were undertaken of area 2 also. This had a relatively high density of breeding bird territories however the suite of breeding bird species associated with wetlands and their margins, which is one of the SSSI interest features, was less well represented than anticipated. This is probably due to the Reedbeds not having any associated standing water. The most significant species was the Schedule 1 species, Marsh Harrier, which is almost certainly nesting there. Other species associated with wetlands were confined to low single figures of Sedge Warbler territories, though Cetti's Warbler *Cettia cetti* and Water Rail *Rallus aquaticus* were recorded there on the final visit in July.

6.3 Butterfly surveys

Three surveys have been undertaken during the Dingy Skipper flight period (May to early June).

Surveys were conducted on 14 May, 23 May and 11 June and recorded 19, 16 and 3 Dingy Skipper respectively. The later date would be at the end of the flight period, which this year is likely to have been early due to the prolonged period of warm, dry weather. It should be noted that the Guidelines for the selection of Local Wildlife Sites in the Tees Valley includes a designation criterion of a population of Dingy Skipper of ten or more, therefore area 2 is of County significance with respect to Dingy Skipper.

No surveys were conducted on areas 3 & 4 specifically for them, though they are known to be present on area 4 and the habitat there would appear to be ideal for them. In fact, during the Grayling survey on 16 July, an example of a second brood Dingy Skipper was seen which is very unusual.

Three surveys have been conducted for Grayling on areas 1 & 2. The first on 11 June was negative, likely due to it being before the flight season had commenced. A second survey on 3 July counted a total of 23 across both areas, split more or less evenly between the two areas. Surveys for other taxa in areas 1 & 2 in July have also incidentally noted Grayling on the wing. A third survey on 16 July recorded 82 Grayling in area 1 and 18 in area 2.

There has been a single survey for Grayling on areas 3 & 4, undertaken on 16 July. This recorded 8 Grayling on area 4 and none on area 3.

Surveys for Dingy Skipper and Grayling are now complete. Records of other species of butterfly were noted and any significant records will be reported on in due course but a summary of the importance of each area for butterflies and moths is given below.

Area 1: Generally fairly poor for butterflies, lacking a varied structure and nectar sources, although there are large numbers of Grayling within and bordering the two compounds which are beside the Seal Sands road. The more wide-open, exposed, parts of area 1 are less significant and support only a scattering of Grayling with little else. The moth assemblage is likely to be fairly poor in this location.

Area 2: Good for Dingy Skipper in the spring along the southern edge of the Reedbed. Grayling were recorded in the early July survey in the same location but on 16 July they were along the track along the northern edge of the reedbed. Small Blue also seen in this area in spring. Moths have been previously surveyed here with a number of regionally significant species occurring, including some of the specialised wainscots feeding on *Phragmites*.

Area 3: Numbers of only common butterfly species were seen on the survey on 16 July, but small numbers of the more significant butterfly species could use the open habitats in this area, for example a single Small Blue was recorded on the eastern perimeter during one of the habitat surveys. The Birch wood supports Large Red-belted Clearwing moth.

Area 4: Numbers of Grayling were surprisingly low. In general, the flat open areas are fairly poor for butterflies, with the richest areas being in the shelter of the bund in the north of this area. Grayling, Small Blue, Dingy Skipper, Brown Argus *Aricia agestis*, Six-belted Clearwing and other Priority Species have been noted from this bund area, by Butterfly Conservation staff, but not by INCA this year as we did not gain permission to access this area until mid-July. Although we couldn't survey it for moths, the Dune Grassland along the entire line of the bund is likely to be important for species such as White Colon, Shore Wainscot, Archer's Dart and other scarce coastal moth species which INCA has recorded previously in other parts of the estuary.

6.4 Bat surveys

Three transect surveys were undertaken in 2025. One in spring (29th May), mid -summer (21st July) and late summer /autumn (25th September).

During the Spring survey only one bat was recorded during the transect in Area 2, a Noctule which briefly passed over the far western perimeter and was likely using Dorman's Pool as a feeding area. No bats were recorded during the transect survey of areas 3 & 4.

The static detectors were left out in Areas 2 and 3. There was a single bat detection which was of the Noctule recorded on the transect survey of Area 2.

No further bat activity was recorded in the subsequent surveys.

6.5 Great Crested Newt

Great Crested Newt has never been recorded on the Seal Sands industrial estates except for an unconfirmed record from the 1980s from Hargreaves Quarry which is over 1 km south of the former INEOS site.

The closest known breeding population is just north of Cowpen Bewley village, 4km to the west.

Within the survey sites 1-4 there are only two waterbodies, each comprising a very small pool of water that was almost entirely full of emergent vegetation. Pond 1 was 30cm deep at its deepest point though by far the majority was much shallower than this and Pond 2 was no more than 10cm deep throughout. A habitat suitability index (HSI) has been carried out on both ponds, with both coming out as being below average suitability. The HSI calculations and scores are shown in Table 6.

It was not possible to undertake eDNA surveys of the two ponds as they dried up shortly after 9th April. It should be noted that 2025 was notably dry in the spring and summer months and in a typical year water might be expected to persist for longer. However, given the nature of the waterbodies it is likely that they would still dry up by mid-Summer, thereby preventing amphibians from completing their life cycle. It is worth noting that no anuran tadpoles were observed in either pool on 9th April, which is a time of year when it is expected that they would be readily observed if present.

The only other waterbody within 250 m of sites 1-4 is Dorman's Pool. This is a very large waterbody with approximately 13 ha of open water and a similar area of emergent vegetation around its perimeter. This has also been subject to a HSI assessment, which scores it as below average. Its low score is due mainly to the presence of high numbers of waterbirds and what is assumed to be a high fish population that is sustaining several of the waterbird species.

Given the absence of GCN in the surrounding area both historically and recently and the low suitability of the waterbodies, it is concluded that GCN is absent.

Table 6. HSI scores

	Pond 1	Pond 2	Dorman Pool
Grid Ref	NZ521237	NZ520236	NZ513234
Factor 1. Field Score	1	1	1
Pond area, sq metres	25	15	135000
Factor 2. Pond Area	0.1	0.1	0.8
Factor 3. Pond drying	0.1	0.1	0.9
Factor 4. Water Quality	0.33	0.33	1
Factor 5. Shade	1	1	1
Factor 6. Fowl	1	1	0.67
Factor 7. Fish	1	1	0.01
Factor 8. Ponds	0.6	0.6	0.6
Factor 9. Terrestrial	1	1	1
Factor 10. Macrophytes	0.8	0.9	0.5
Factors multiplied	0.0018	0.0018	0.0014
H.S.I. score	0.52	0.52	0.51
Pond suitability	Below average	Below average	Below average

6.6 Riparian Mammal

A screening assessment of three watercourses, 14 ditches and 24 waterbodies within and adjacent to the RLB was undertaken for their suitability to support Otter and Water Vole. Of these nine ditches were identified for further survey for Water Vole and one waterbody and three watercourses were identified for further Otter survey.

There were no signs of water voles in ditches 7, 8 and 10.

Ditch 8, appeared to be ideal for water vole in its current state. Although there is a considerable growth of reeds there is open water between the reeds and steep, grassy banks on each side which would be suitable for creating burrows. There were numerous small areas of mud or flat areas of grass at the base of the banks, which would have been suitable for water voles to create latrines on. Neither latrines nor burrows were found, nor were any other less definitive signs. Ditch 7 is essentially an extension of ditch 8. Ditch 10, had no open water though the water table was at the surface. The ditch was approximately 45cm wide and was full of emergent vegetation, mainly Sea Club Rush.

A second Water Vole survey in summer will be required for ditches, 1, 7 & 8. Although they are less optimal habitat, it is recommended that surveys of ditches 2-6 are also included in the summer survey. Ditches 9 & 10 are unsuitable to support water voles and can be discounted as needing further survey.

There were no signs of otter in Dabholm Gut or Dabholm Beck.

The banks of both watercourses were constructed of Riprap and whilst this was still largely exposed along the Gut the Beck was fairly well vegetated with patches of dense bramble scrub. The Riprap was generally compact with no observable gaps that an otter could use as a resting place. With regards to the western section, although no access was possible during this survey, it is known from other surveys that there are a small number of gaps in the Riprap at that end.

Notwithstanding the western end of Dabholm Gut, which could not be surveyed on this occasion, no possible locations for otter resting places were observed. Given that both Dabholm Gut and Dabholm Beck lie adjacent to a very busy working corridor, it is likely that these areas are too disturbed for Otters to use as resting places.

Bran Sands Lagoon will be subject to less disturbance than either Dabholm Gut or Dabholm Beck and it is likely that Otters use it at least on occasion for foraging. It is recommended that it is surveyed to determine its potential for Otter resting places. In line with guidance, the survey should be limited to those areas within 200 m of the development.

7.0 Conclusion

Given the results of the ecological surveys to date no further survey work is required with regards to bats, GCN, reptiles, breeding birds, and invertebrates. An Otter survey of Bran Sands Lagoon is recommended during summer 2026.

Following the walkover surveys of the wider RLB no further surveys are recommended unless any ground works are planned during the nesting bird season, which would require nesting bird checks to be carried out within 48 hrs prior to any works commencing.

Several areas within the wider RLB could not be surveyed or could only be viewed from adjacent land due to access restriction. Where these are access routes utilising the existing road infrastructure no impacts are expected and no further surveys are required.

The remaining Areas within the RLB that have not been surveyed are outside the scope of this assessment.

8.0 References

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

Wildlife and Countryside Act 1981. Available at: <https://www.legislation.gov.uk/ukpga/1981/69/contents> (Last accessed April 2026).

The Conservation of Habitats and Species Regulations 2019. Available at: <https://www.legislation.gov.uk/ukdsi/2019/9780111176573> (Last accessed April 2026).

The Teesmouth and Cleveland Coast SPA Access to Evidence
<https://publications.naturalengland.org.uk/publication/6619918699069440> (Accessed May 2026)

Countryside and Rights of Way Act 2000. Available at:
<https://www.legislation.gov.uk/ukpga/2000/37/contents> (Last accessed April 2026).

Environmental Protection Act 1990. Available at:
<https://www.legislation.gov.uk/ukpga/1990/43/contents> (Last accessed April 2026).

Natural Environment and Rural Communities (NERC) Act 2006. Available at:

<https://www.legislation.gov.uk/ukpga/2006/16/contents> (Last accessed April 2026).

Environment Act 2021. Available at: <https://www.legislation.gov.uk/ukpga/2021/30/contents> (Last accessed April 2026).

National Planning Policy Framework 2024. Available at:
<https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-January-2024.pdf> (Last accessed April 2026).

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification Version 2.01 at <http://www.ukhab.org/>

Fox, R., Warren, M.S., and Brereton, T.M. (2010). A new Red List of British Butterflies, Species Status 12; 1-32. Joint Nature Conservation Committee, Peterborough.

Guidelines for the Selection of Local Wildlife Sites in the Tees Valley – Version 6, January 2010. Tees Valley Biodiversity Partnership.

MAGIC Maps. Available at: <http://magic.defra.gov.uk/MagicMap.aspx>

Appendix 1. Figures



Figure 1 Red Line Boundary

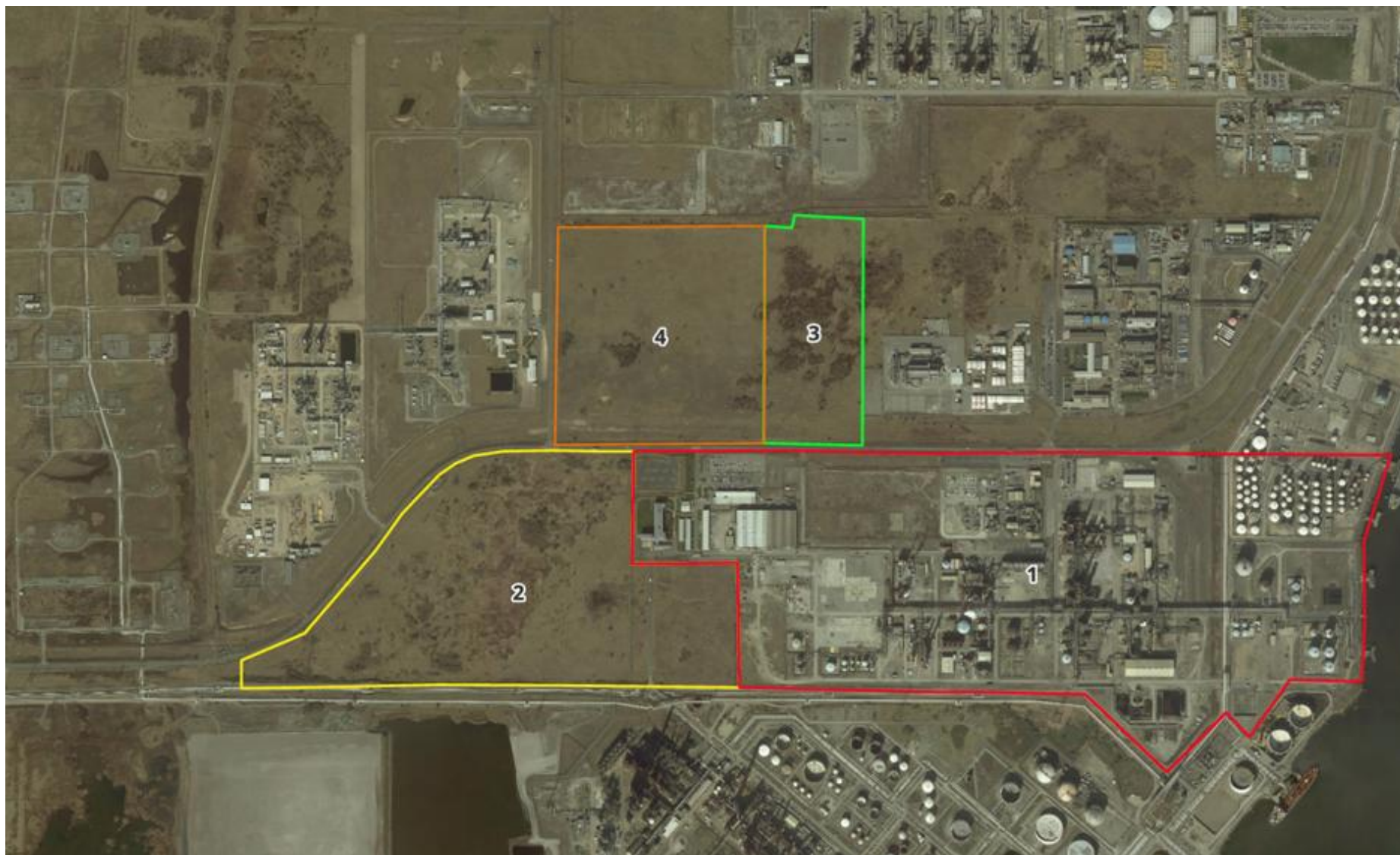


Figure 2. Areas 1 to 4 of the Main Site

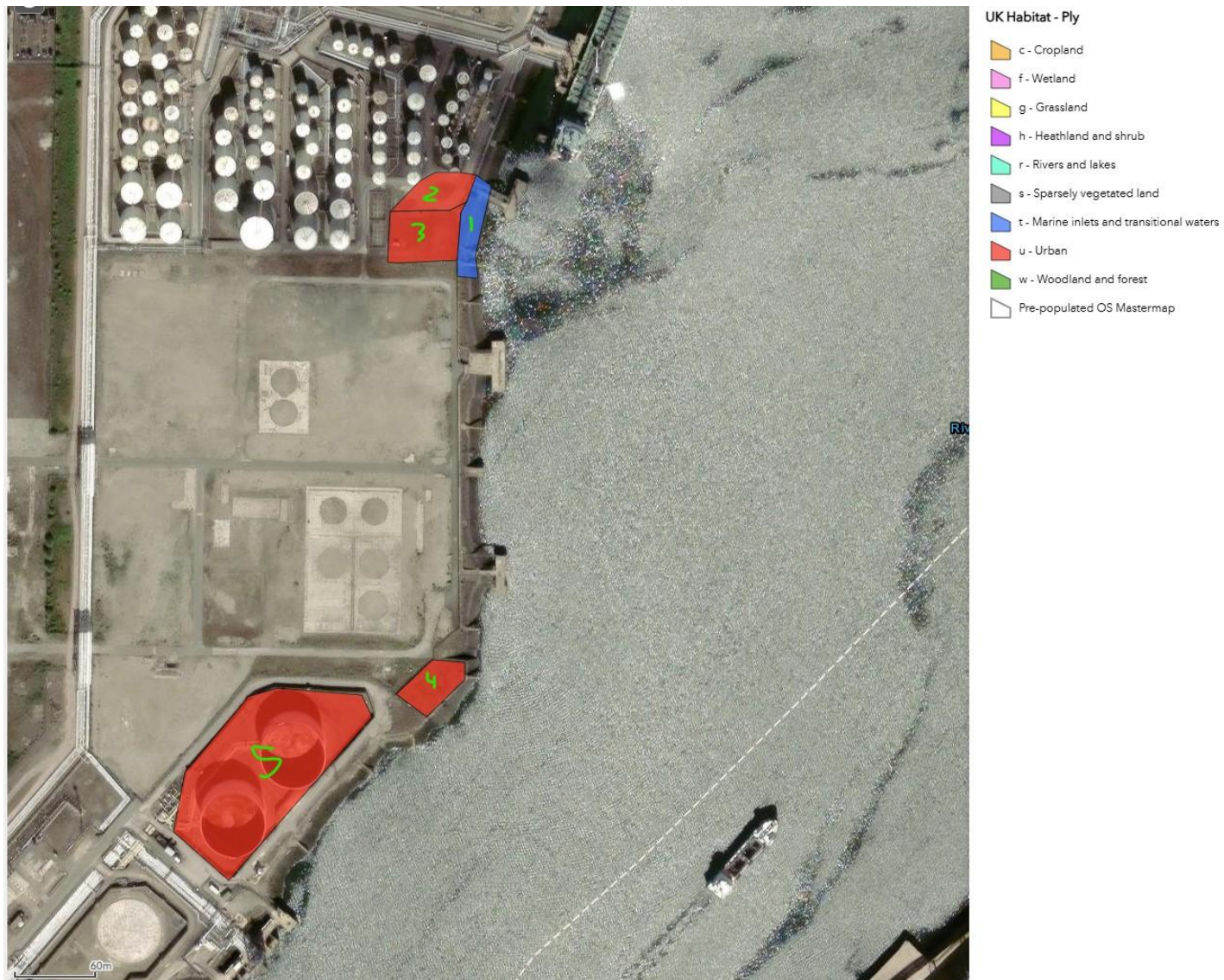


Figure 3. INEOS Jetty and Adjacent Ancillary Land Areas

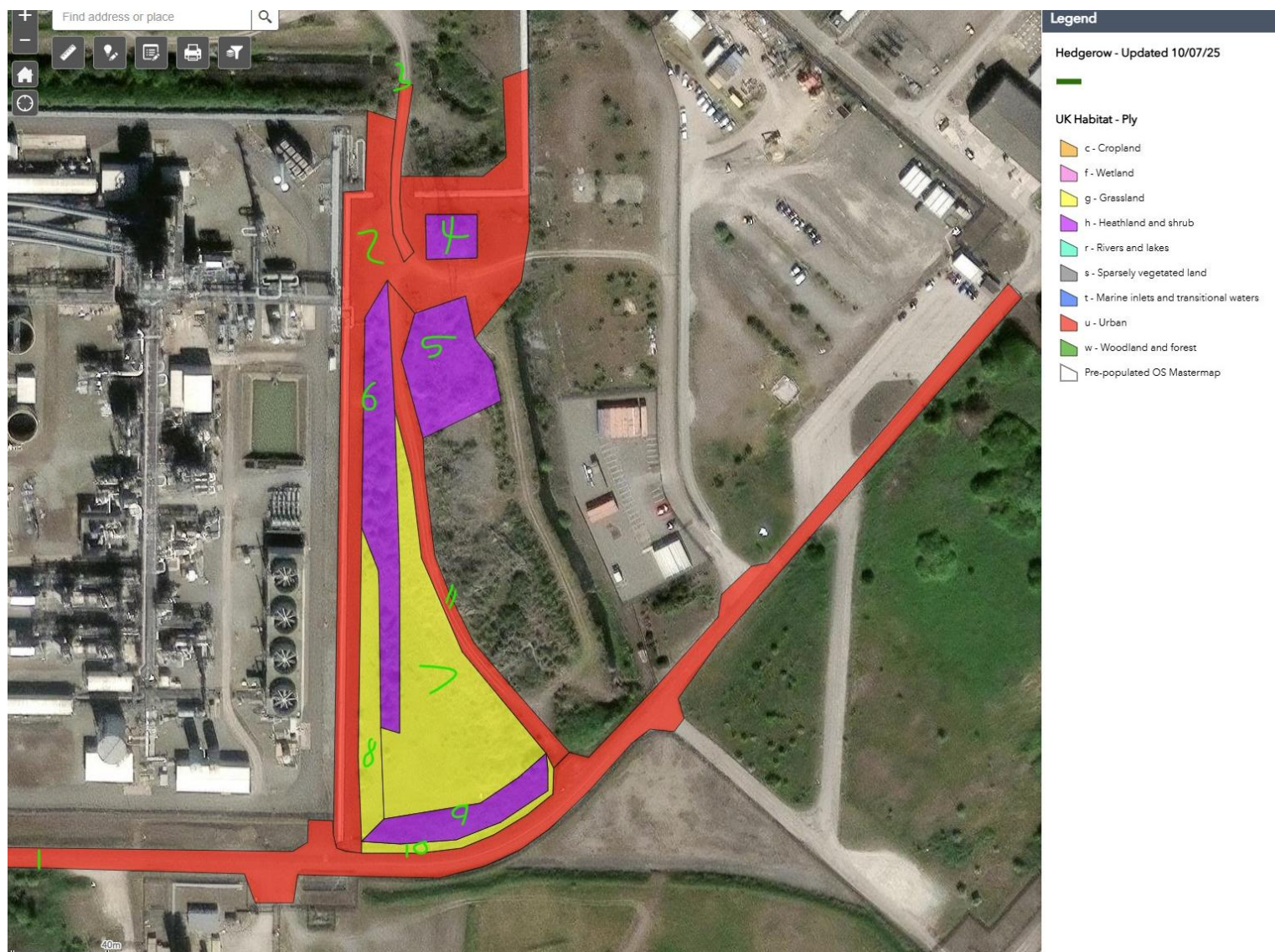


Figure 4. Huntsman Drive and GLE Pipeline Corridor.

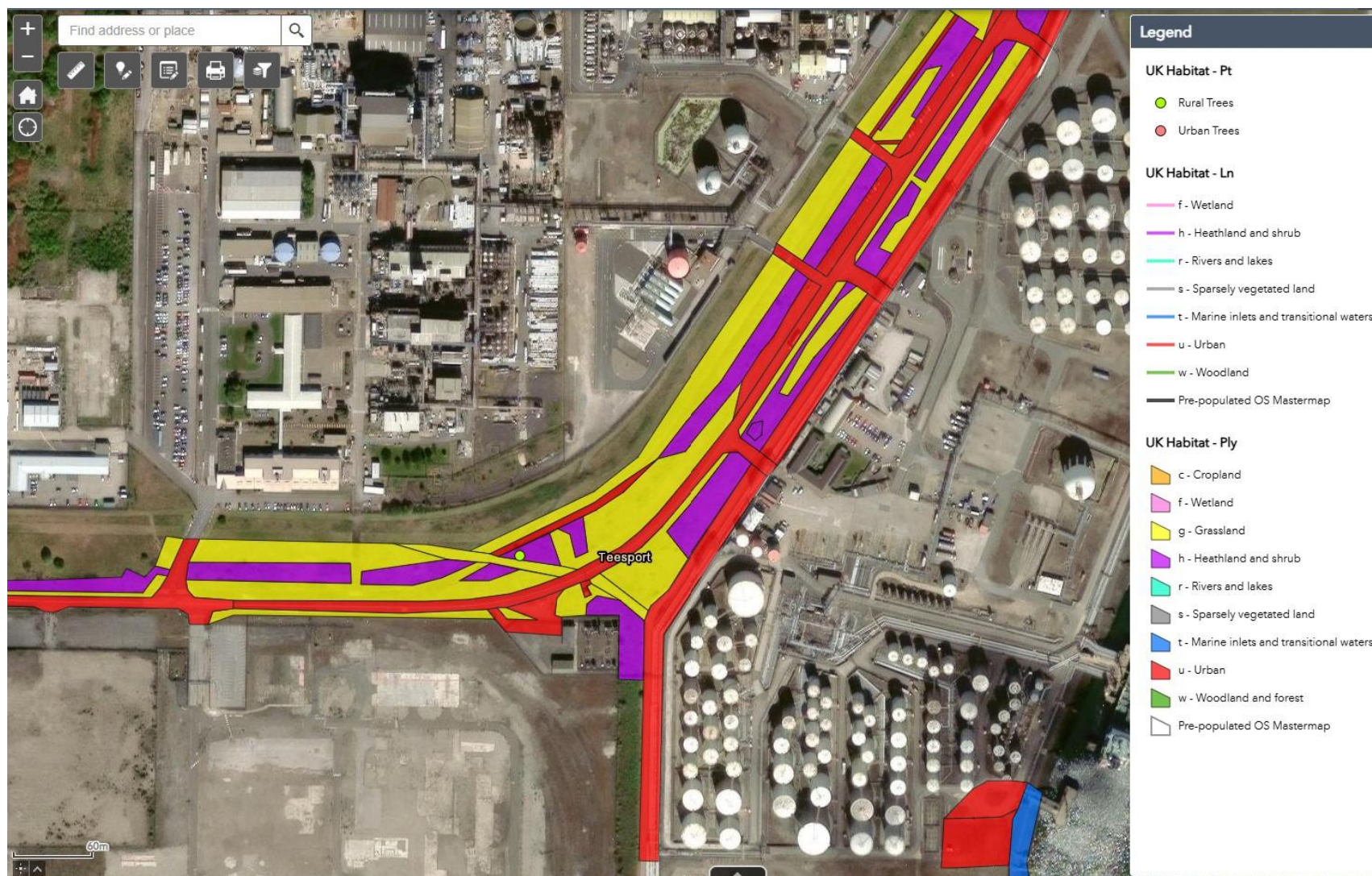


Figure 5. Seal Sands Road (South).

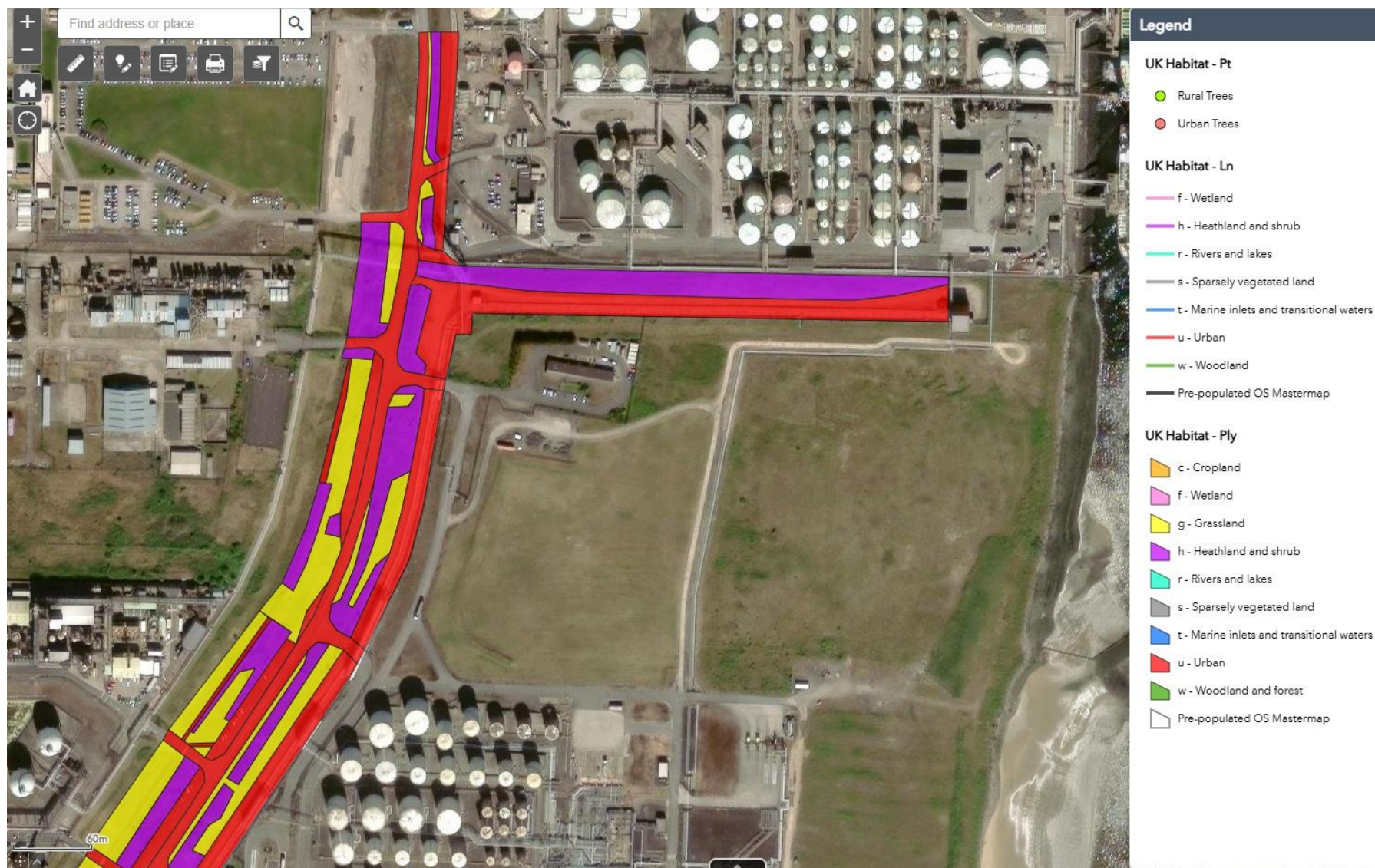


Figure 6. Seal Sands Road (North).

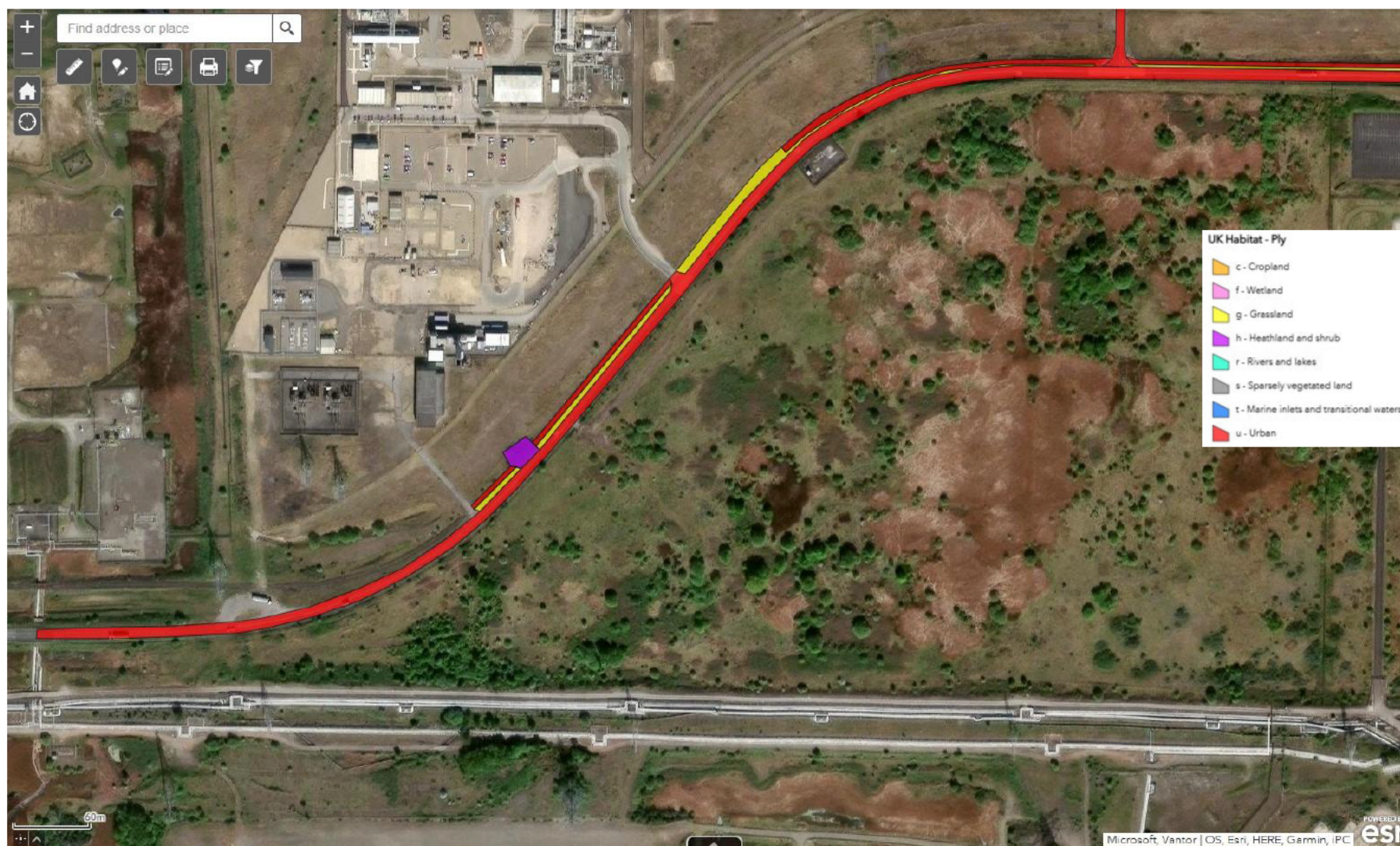


Figure 7. Seal Sands Road Western Extent.



Figure 8. Seal Sands Road Central Western Extent.

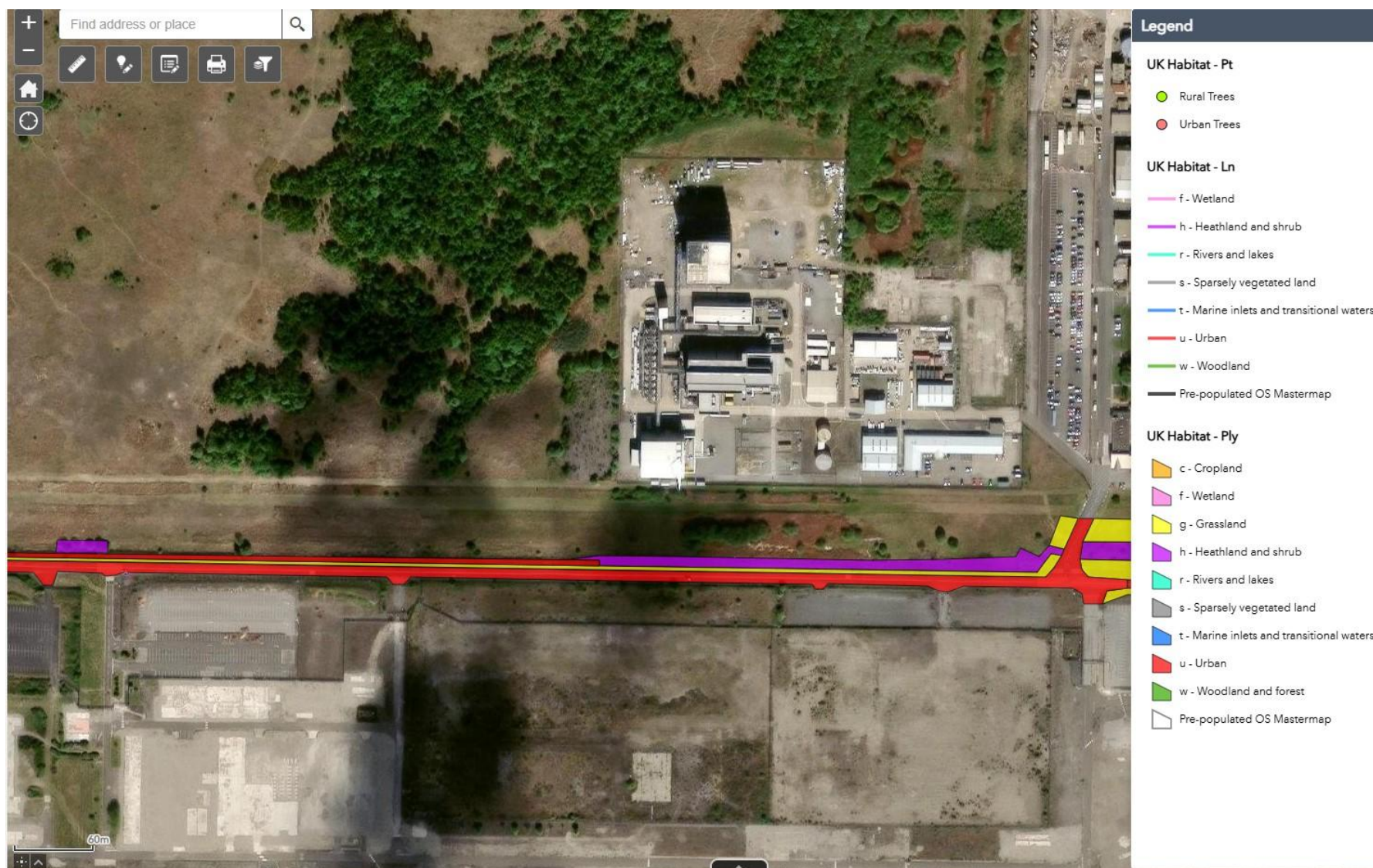


Figure 9. Seal Sands Road Central Eastern Extent.

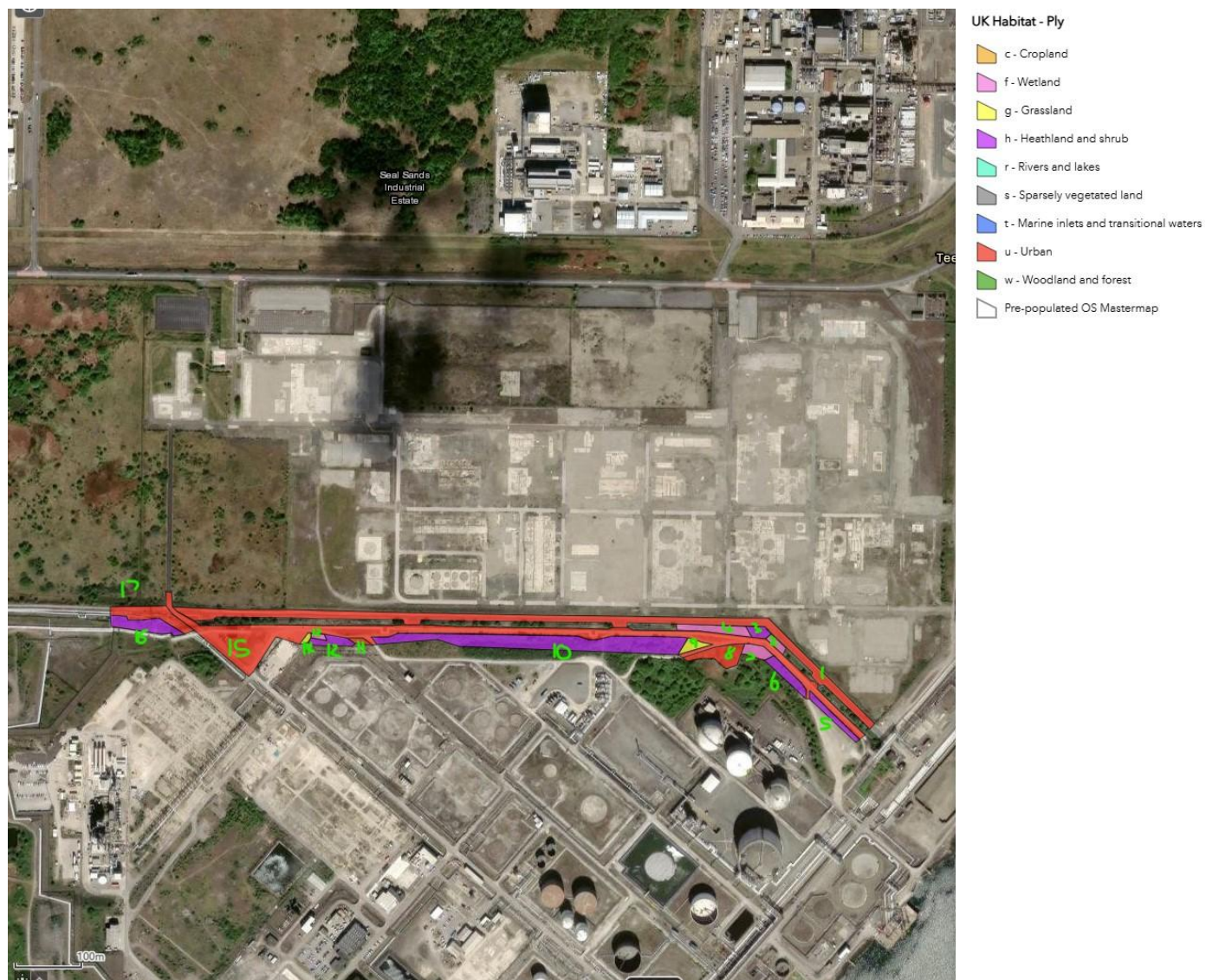


Figure 10. Linkline Corridor.

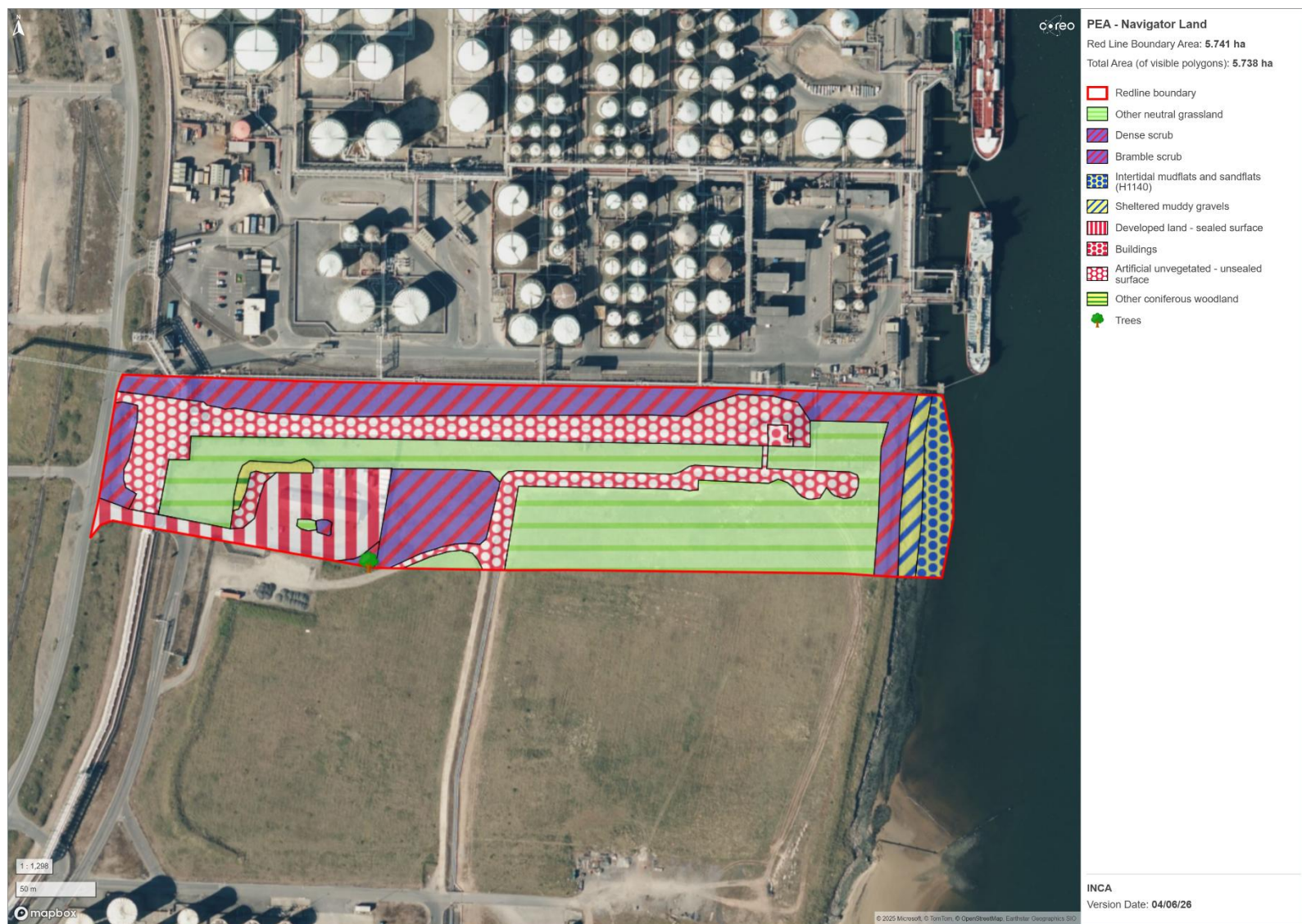


Figure 11. Navigator Land.

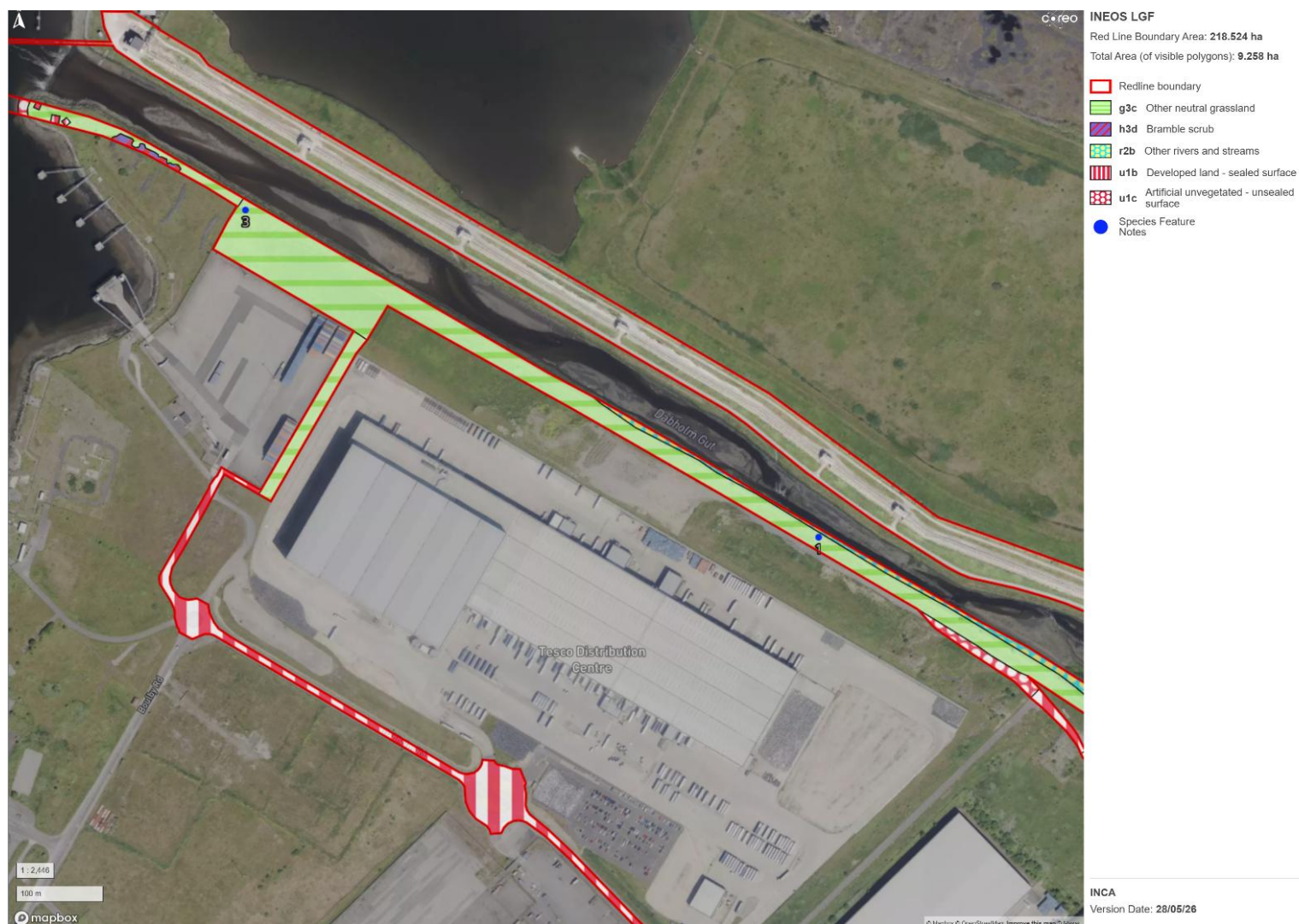


Figure 12. Dabholm Land (Western end)



Figure 13. Dabholm Land (East).

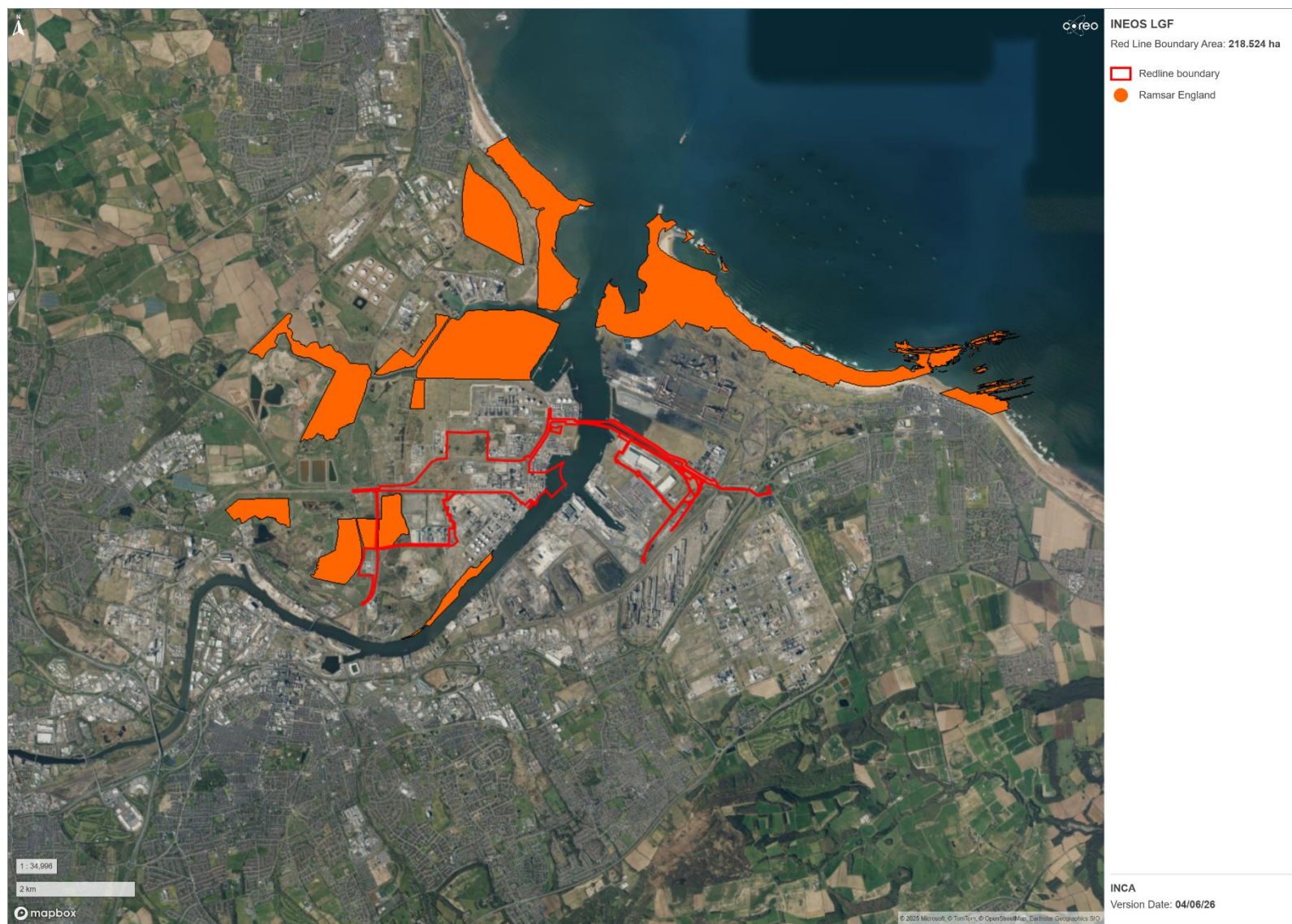


Figure 14b International Designated Sites - Ramsar

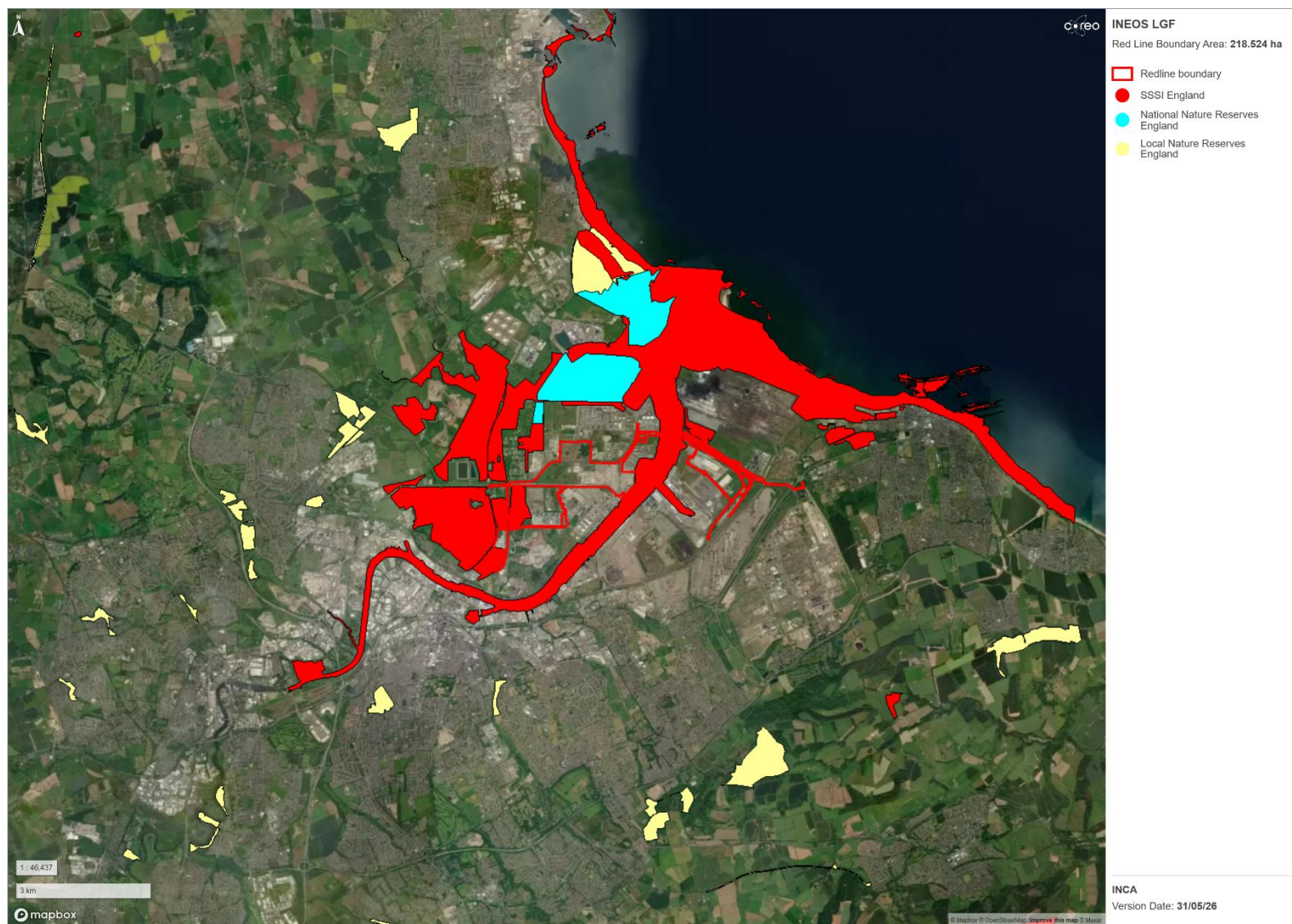


Figure 15 Nationally Designated Sites

Appendix 2 Photographs



Photograph 1. Artificial, unsealed, unvegetated land in Area 1.



Photograph 2. Sparsely vegetated, vacant/ derelict land in Area 1.



Photograph 3. Wetland with Sea Club Rush.



Photograph 4. Partially open water.



Photograph 5. Sparsely vegetated land (Open Mosaic Habitat).



Photograph 6. Birch woodland.



Photograph 7. Marram grass and open ground surrounding the woodland.



Photograph 8. Other neutral grassland along Dabholm Beck.



Photograph 9. Mixed scrub Dabholm Beck.



Photograph 10. Truck waiting area. Artificial Unvegetated-Unsealed Surface,

Appendix 3 Central Grif References

Location	Central Grid Reference
Bran Sands	NZ555265
Brinefields	NZ511245
CATS Terminal	NZ520249
Coatham Marsh	NZ586248
Coatham Sands	NZ565267
Cowpen Bewley	NZ482248
Cowpen Marsh	NZ502246
Dorman's Pool	NZ513230
Eston Hills	NZ591197
Fleet Pond	NZ454316
Greatham Creek	NZ502257
Greenabella Marsh	NZ518260
Hargreaves Quarry	NZ516222
Haverton Hill	NZ492231
Highfields Environmental Site	NZ495252
Lazenby Village	NZ569195

Northumbrian Water Pumping Station	NZ566241
Saltholme	NZ503233
Seal Sands Industrial Zone	NZ530247
South Gare	NZ557280
The Stell watercourse	NZ573245
Spencer Beck	NZ535186
Former Steelworks	NZ561254
Wilton	NZ585198
Wilton Industrial Complex	NZ574214

