Whitcher Wildlife Ltd.
Ecological Consultants.

BARROW ROAD, BARTON-UPON-HUMBER.

OS REF: TA 04218 21589.

ECOLOGICAL IMPACT ASSESSMENT.

Ref No: **220776/EcIA/6.**

Date: **28th July 2025**

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1. INTRODUCTION.

1.1. Strata are applying for planning consent to build 196 new residential dwellings on an area of arable land to the south of Barrow Road, to the east of the town of Barton-upon-Humber.

1.2. Whitcher Wildlife Ltd have been commissioned to carry out a Preliminary Ecological Appraisal and bird surveys for the site to establish whether there are any ecological matters that may affect the proposed development.

1.3. All surveys have now been completed and landscaping plans have been finalised, which allows for the conversion of the Preliminary Ecological Appraisal into an Ecological Impact Assessment.

1.4. This document is designed to state the impact of the development on both habitats and wildlife.

1.5. Appendices I to II of this report provide additional information on specific species and are designed to assist the reader in understanding the contents of this report.

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2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. The survey area was walked where access was agreed and public rights of way were used where no access was agreed. All habitats within and immediately around the survey area were documented and the dominant species within that habitat listed in line with the JNCC Handbook for Phase 1 Habitat surveys.

2.3. The survey area and immediate surrounding area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs in line with Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*. Mammal Society: -

* Badger setts.
* Badger latrines or dung pits.
* Badger snuffle holes and evidence of foraging.
* Badger paths.
* Badger prints in areas of soft mud.
* Badger hairs caught on fencing.

2.4. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 100m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Dean M, Strachen R, Gow D and Andres R (2016). *The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series).* Eds Fiona Mathews and Paul Chanin. The mammal Society, London: -

* Water vole burrows.
* Water vole faeces and latrines.
* Water vole feeding stations.
* Water vole runs.
* Water vole prints in areas of soft mud.
* Water vole lawns.
* Predator field signs.

2.5. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs in line with the P Chanin (2003). *Monitoring the Otter* and *Conserving Natura 2000 Rivers: Monitoring Series No10 Guidelines: -*

* Otter prints in soft mud.
* Otter spraints.
* Otter Holts.

2.6. The survey area was searched for watercourses and waterbodies. Where found, and where safe to enter the water, all were thoroughly searched for the presence of crayfish, for approximately 50m in each direction of the site, by searching under rocks and logs. Where stated, crayfish traps were also deployed into the watercourse. All survey work was carried out in accordance with the *Conserving Natural 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish*.

2.7. The survey area was searched for trees and structures and where found these were checked for potential bat roosting sites in line with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)* by looking for the following signs: -

* Holes, cracks or crevices.
* Bat Droppings.

2.8. The land immediately adjacent to the survey area was assessed for bat roosting potential and bat foraging potential. Connective routes and flight lines were also assessed whilst on site and using maps of the area.

2.9. The area within 500m of the survey site was cross referenced to maps to highlight all ponds close to the site. Where possible, all ponds identified were accessed using agreed access or public rights of way to assess the potential for great crested newts (*Triturus cristatus*) to be present.

2.10. The survey area was assessed for the potential for reptiles and suitable reptile habitats. Where applicable the area was also searched for the presence of reptiles.

2.11. Where appropriate, the habitat within and surrounding the survey area was searched for species such as hazel, oak, honeysuckle, bramble and other species which may provide potential habitat for hazel dormice (*Muscardinus avellanarius*). Field signs such as feeding remains and nests were also searched for where possible, in line

with P Bright, P Morris and T Mitchell-Jones *The Dormouse Conservation Handbook 2nd Edition*.

2.12. Where appropriate, the area within and surrounding the survey area was assessed for its potential to house habitat for red squirrels. Field signs of red squirrels were searched for at least every 50m, looking for any dreys, feeding signs or sightings of red squirrels.

2.13. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.14. This document is prepared in line with The National Planning Policy Framework (NPPF). This sets out the government policy on biodiversity and nature conservation and places a duty on Planning Authorities to give material consideration to the effect of a development on legally protected species when considering planning applications. The NPPF and the Planning Practice Guidance on "Natural Environment" also promote sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within the development.

2.15. This report is prepared in line with the Natural Environment and Rural Communities (NERC) Act that came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.

2.16. The survey was undertaken by Mitchel Greenhalgh, an ecological consultant with an array of experience in conducting surveys on a variety of flora and fauna in a professional capacity. Mitchel holds a level two Natural England survey licence in respect of both bats and great crested newts, a NatureScot licence in respect of bats and Natural England class licences for various invertebrates. He is also working towards gaining further survey licences. He has attended courses run by CIEEM and the FSC and also holds a BSc in environmental science attained from the University of Leeds. He is an associate member of CIEEM and he is therefore committed to continuous professional development.

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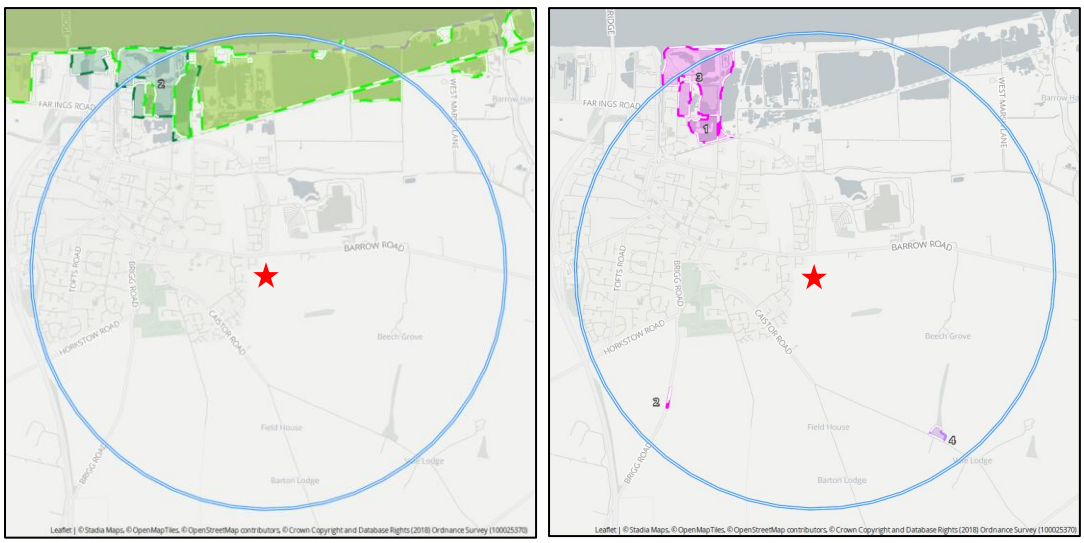
3. BASELINE ECOLOGY.

3.1. Data Search Results.

3.1.1. A request was submitted to the Greater Lincolnshire Nature Partnership (GLNP) to identify the presence of any protected species or designated sites within a 2km radius of the site.

3.1.2. GLNP provided the below maps, showing the proximity of both statutory and non-statutory sites to the survey area. None of these sites are relevant to the survey area and most refer to the Humber Estuary a Special Protection Area (SPA), Special Area of Conservation (SAC), Ramsar site and Site of Special Scientific Interest (SSSI); a Shadow HRA is provided separated by the applicant and considers the impact of the scheme on the Humber Estuary. Statutory sites are shown in the map to the left, and non-statutory sites are shown in the map to the right.



3.1.3. GLNP provided records of common bat species. The closest of these is of a noctule bat, located approximately 250m west, although most grid references provided are unspecific.

3.1.4. GLNP provided records of water vole, otter, badger. However, none of these records are relevant to the survey area.

3.1.5. GLNP provided thousands of records of bird species within a 2km radius. However, the vast majority of these are from a small number of sites, such as the

Humber Estuary, Barton Pits or Barrow Haven Reedbed. None are located directly within the site and the associated survey area.

3.1.6. GLNP provided no other records of protected species within a 2km radius of the survey area.

3.1.7. The data search cannot be made public but is available to the client upon request.

3.2. The Survey Area.

The survey area comprises the section of land including, and mostly to the south of Barrow Road / A1077 shown in the aerial image below.

3.3. Description of Habitats.

Appendix III of this report contain annotated maps marked up with the varying habitats that are cross referenced to target notes in Appendix IV of this report. The habitats on and adjacent to the site are: -

- Arable Land
- Species-poor, Intact Hedgerow
- Species-poor, Defunct Hedgerow
- Ornamental Hedgerow
- Improved Grassland
- Tall Ruderals
- Fence
- Bare Ground

3.3.1. Arable Land.

3.3.1.1. The site comprises almost entirely arable land, which at the time of the survey had a wheat crop.

3.3.1.2. There is no condition assessment criteria for arable land.

3.3.2. Species-poor, Intact Hedgerow.

3.3.2.1. There are a number of hedgerows bordering the site. These are all listed and described individually below and are mapped and labelled in an anti-clockwise order in the map shown in appendix III.

3.3.2.2. **Hedgerow A (T3). –** Hedgerow A runs the western border of the site and backs on to the rear gardens of the properties of Danson Close. This hedge comprises predominantly hawthorn (*Crataegus monogyna*) along with elder (*Sambucus nigra*),

bramble (*Rubus fruticosus*) and cherry laurel (*Prunus laurocerasus*). One ash (*Fraxinus excelsior*) tree is also present within the hedgerow and Virginia creeper (*Parthenocissus quinquefolia*) is overgrowing from a neighbouring garden.

3.3.2.3. **Hedgerow B (T4). –** Hedgerow B is the longest length of hedge on site and extends most of the southern boundary. It comprises almost entirely hawthorn (*Crataegus monogyna*) along with small amounts of dog rose (*Rosa canina*).

3.3.2.4. **Hedgerow C (T5).** – Hedgerow C comprises the southern half of the eastern boundary. The hedgerow is mainly hawthorn (*Crataegus monogyna*) with some elder (*Sambucus nigra*).

3.3.2.5. **Hedgerow G (T9)**. Hedgerow G is a small length of beech (*Fagus sylvatica*) hedge between the field and a property on Glebe Way.

3.3.2.6. The habitat condition for these hedgerows is shown below. All four hedgerows score 'poor'.

Attributes and functional groupings (A, B, C, D & E)	**Criteria (the minimum requirements for 'favourable condition'**	**Pass/Fail**			
		A	**B**	**C**	**G**
A1. Height	>1.5 m average along length	**P**	**P**	**F**	**P**

A2. Width	>1.5 m average along length	**F**	**F**	**F**	**F**
B1. Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	**P**	**P**	**P**	**P**
B2. Gap - hedge canopy continuity	· Gaps make up <10% of total length and · No canopy gaps >5 m	**P**	**F**	**P**	**P**
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · measured from outer edge of hedgerow, and · is present on one side of the hedge (at least)	**F**	**F**	**F**	**F**
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	**F**	**F**	**F**	**F**
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	**P**	**P**	**P**	**P**
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	**F**	**F**	**F**	**F**
Condition		**Poor**	**Poor**	**Poor**	**Poor**

3.3.3. Species-poor, Defunct Hedgerow.

3.3.3.1. **Hedgerow D (T6).** Hedgerow D is classed as the northern half of the eastern hedgerow. This section is consistently gappy and intensively managed.

3.3.3.2. **Hedgerow E (T7).** This hedgerow makes up the northern boundary of the site. It comprises of newly planted hawthorn (*Crataegus monogyna*) that are not yet of a density to class the hedgerow as intact.

3.3.3.3. The habitat condition for these hedgerows is shown below. Both hedgerows score 'poor'.

Attributes and functional groupings (A, B, C, D & E)	**Criteria (the minimum requirements for 'favourable condition'.**	**Pass/Fail**	
		D	**E**

A1. Height	>1.5 m average along length	**F**	**F**
A2. Width	>1.5 m average along length	**F**	**F**
B1. Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	**F**	**F**
B2. Gap - hedge canopy continuity	· Gaps make up <10% of total length and · No canopy gaps >5 m	**F**	**F**
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · measured from outer edge of hedgerow, and · is present on one side of the hedge (at least)	**P**	**F**
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	**F**	**F**
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	**P**	**P**
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	**F**	**F**
Condition		**Poor**	**Poor**

3.3.4. Ornamental Hedgerow.

3.3.4.1. **Hedgerow F (T8)**. At the north-west corner of the site, close to Barrow Road, there is a very small length of Leyland Cypress hedgerow. This is classified as a non-native, ornamental hedgerow.

3.3.4.2. No condition assessment is required for ornamental hedgerow as they automatically score as 'poor'.

3.3.5. Improved Grassland.

3.3.5.1. **IG1.** Between the site borders and the crop, there is a strip of grassland averaging approximately 1m in width. A species list was gathered during the initial survey, but by the September bird survey, this had all been cut. Species within this habitat include false oat grass (*Arrhenatherum elatius*), perennial rye grass (*Lolium perenne*), common oat (*Avena sativa*), barren brome (*Bromus sterilis*), nettle (*Urtica dioica*), cow parsley (*Anthriscus sylvestris*), creeping thistle (*Cirsium vulgare*), curled dock (*Rumex crispus*), hogweed (*Heracleum sphondylium*) and field bindweed (*Convolvulus arvensis*).

3.3.5.2. **IG2.** To the north of the site, there are areas of grassland which form the grass verges along the roadway. These comprise predominantly perennial rye grass (*Lolium perenne*) and other common species, but the sward is far too short to survey properly.

3.3.5.3. The condition assessment for this habitat is shown below. Both IG1 and IG2 pass three of the seven criteria and are therefore assessed as being 'poor' condition.

Grassland – low value (modified grassland)

	Description of criteria.	**Pass / Fail**	
1	There must be 6-8 species per m^2. Note - if a grassland has 9 or more species per m^2 it should be classified as a moderate distinctiveness grassland habitat type. **NB - this criterion is non-negotiable for achieving good condition.**	**F**	**F**
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which	**F**	**F**

	provide opportunities for insects, birds and small mammals to live and breed.		
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	**P**	**P**
4	Physical damage evident in less than 5% of total grassland area, such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities.	**F**	**F**
5	Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens.	**F**	**F**
6	Cover of bracken less than 20%.	**P**	**P**
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and undesirable species[1] make up less than 5% of ground cover.	**P**	**P**
Condition		**Poor**	**Poor**

3.3.6. Tall Ruderals.

3.3.6.1. Between the southern boundary hedgerow and the south-west corner of the site, there is a strip of tall ruderals. Species here inlcude false oat grass (*Arrhenatherum elatius*), nettle (*Urtica dioica*) and hogweed (*Heracleum sphondylium*).

3.3.6.2. The condition assessment for this habitat is shown below. The habitat passes one of the three criteria and is therefore assessed as being 'poor' condition.

Sparsely vegetated land - Ruderal/ephemeral

	Description of criteria.	**Pass / Fail.**
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	**Fail**
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. NB - To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife).	**Fail**
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. NB - To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	**Pass**
Condition		**Poor**

3.3.7. Fence.

Fences are frequently present throughout the site, typically forming the boundaries between the survey area and residential gardens, although they often cannot be seen for the hedgerows.

3.3.8. Bare Ground.

Barrow Road and its associated pavements are present to the northern end of the survey area. These areas are all classified as bare ground.

3.4. Description of Fauna.

3.4.1. No badger setts or their field signs were identified within the survey area and no records of badger are present close to the site.

3.4.2. There is no watercourse within or close to the site to provide suitable habitat for otter, water vole or white-clawed crayfish.

3.4.3. There are no structures within the survey area to provide potential features for roosting bats.

3.4.4. There are no trees within the survey area to provide potential features for roosting bats.

3.4.5. The habitat within the survey offers poor suitability for foraging and commuting bats due to its extensive arable nature. However, the hedgerows are likely to be used to some extent for commuting and foraging.

3.4.6. There are no ponds within a 500m radius of the survey area to provide suitable breeding habitat for great crested newts and other amphibians. Furthermore, there are no records of great crested newts close to the site.

3.4.7. *Birds.*

3.4.7.1. The habitat on site offers moderate habitat for nesting birds within the nesting season, which extends from March to August inclusive. This is due to the site's potential for both arable nesting birds along with smaller hedge nesting species around the perimeter. The site is situated within 2km of the Humber Estuary and therefore also has potential for use by migratory birds.

3.4.7.2. More details regarding bird surveys are listed in section 3.5 of this report.

3.4.8. The habitat offers limited suitable habitat for reptiles due to its arable nature and lack of water sources. However, suitable grassland habitat is present immediately east of the site which could be used by reptiles.

3.4.9. The survey area lies outside of the known natural home range of both red squirrel and hazel dormouse.

3.4.10. Virginia Creeper (*Parthenocissus quinquefolia*), which is an invasive, non-native plant species listed on schedule 9 of the Wildlife and Countryside Act (1981) is present within the western hedgerow on the site.

3.5. Bird Surveys.

3.5.1. As the site lies approximately 1.8km south of the Humber Estuary RAMSAR site, bird surveys were undertaken to understand how the land is used by various species.

3.5.2. Surveys were initially undertaken between August and October in 2022, with subsequent wintering bird surveys between November 2023 and March 2024, and October 2024 and March 2025. The findings of these surveys have been appended to this report.

3.5.3. The site has potential to provide suitable habitat for arable and hedge nesting species.

3.5.4. The results from the bird surveys have been appended to this report and a shadow HRA is being prepared separately to this EcIA.

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4. IMPACT ASSESSMENT, MITIGATION AND RESIDUAL EFFECTS.

4.1. Designated Sites.

4.1.1. Assessment.

The data search results show that the survey area lies approximately 1.8km south of the Humber Estuary. A Shadow HRA is therefore provided separately by the applicant and considers the impact of the scheme on the integrity of the Humber Estuary.

4.1.2. Mitigation.

A Shadow HRA is provided separately by the applicant in relation to this matter.

4.1.3. Residual Effect.

There will be **no negative impacts** on any of the designated sites in the area at a local level.

4.2. Habitats.

4.2.1. Assessment.

4.2.1.1. The habitats on site are of low value, with the exception of the hedgerows. The vast majority of the site is arable with only a small grassland margin, which does not qualify as an arable margin priority habitat as it is not managed in the interest of wildlife. The only remaining habitat is a small strip of ruderals.

4.2.1.2. The majority of the on-site habitat is to be lost to facilitate the development. The area will be mostly replaced by residential housing and associated vegetated gardens, along with some areas of scrub planting, both native and ornamental, and small areas of grassland.

4.2.1.3. Biodiversity calculations were carried out using the Biodiversity Metric 3.1, which was the metric in use at the time of site survey. The baseline on the site was

calculated at 12.39 Habitat Biodiversity Units and 1.55 Hedgerow Biodiversity Units as shown in the tables below.

Habitat Type	Area (ha)	Distinctiveness	Condition Assessment	Biodiversity Units.
Cereal Crops	5.6755	Low	N/A	11.35
Modified Grassland	0.2908	Low	Poor	0.58
Modified Grassland	0.1993	Low	Poor	0.4
Ruderal/Ephemeral	0.0273	Low	Poor	0.05
Developed Land	0.3684	V.Low	N/A	0
Total	6.56			12.39

*The metric only shows biodiversity units to two decimal places and will round up or down accordingly, which is why the above can total to 12.39 as opposed to 12.38.

Hedgerow Type	Length (km)	Distinctiveness	Condition Assessment	Biodiversity Units.
Native Hedgerow	0.774	Low	Poor	1.55
Total	0.774			1.55

4.2.2. Mitigation.

4.2.2.1. Mitigation will be provided by the creation of new areas of grassland and scrub, predominantly throughout the northern area of the site. A variety of species-rich and amenity grasslands will be seeded around the development and a section of native scrub will be planted too. Eighty-three new trees are also included within the development and will be scattered throughout to increase wildlife connectivity. These created habitats will deliver a score of 9.55 as shown in the table below.

Habitat Type	Area (ha)	Distinctiveness	Condition Assessment	Biodiversity Units.
Developed Land; Sealed Surface (Created)	3.3655	Low	N/A	0.00
Developed Land; Sealed Surface (Retained)	0.3146	Low	N/A	0.00
Vegetated Garden	1.8793	Low	N/A	3.63
Mixed Scrub	0.0281	Medium	Poor	0.11

Modified Grassland (created)	0.0916	Low	Poor	0.18
Modified Grassland (retained)	0.1151	Low	Poor	0.23
Other Neutral Grassland	0.7651	Medium	Moderate	5.12
Urban Trees*	0.1017	Medium	Poor	0.28
Total	6.56			9.55

*Urban trees not included in area calculation.

4.2.2.2. The majority of the hedgerows on site are to be retained, with the exception of two sections where the new road is to be installed. However, these sections will be mitigated for by the creation of 81m of new native hedgerow. The linear habitats will deliver a score of 1.15 as shown in the table below.

Hedgerow Type	Length (km)	Distinctiveness	Condition Assessment	Biodiversity Units.
Native Hedgerow (Retained)	0.498	Low	Poor	1.00
Native Hedgerow (Created)	0.081	Low	Poor	0.16
Total	0.589			1.15

*The metric only shows biodiversity units to two decimal places and will round up or down accordingly, which is why the above can total to 1.15 as opposed to 0.16.

4.2.3. Residual Effect.

4.2.3.1. Overall, there will be a residual net loss of 2.84 (-22.9%) habitat units and there will be a residual net loss of 0.4 (25.56%) linear/hedgerow units. This is assessed to have a **moderate negative residual impact** on the biodiversity value at a site level.

4.3. Species – Bats.

4.3.1. Assessment.

The site offers no suitability for roosting bats due to its current lack of trees or structures. The extensive arable nature of the site also makes for poor commuting and foraging habitat, although the hedgerows do provide wildlife corridors which may be used by small numbers of bats.

4.3.2. Mitigation.

4.3.2.1. All hedgerows which could be of value to bats are to be retained, with the only substantial sections to be removed being those that are already currently roadside, immature and well illuminated, making them unlikely to be used by bats. Furthermore, an additional 81m of native species hedgerow is to be planted around the site, increasing the potential of the site for use by foraging and commuting bats.

4.3.2.2. Any new lighting to be implemented around the perimeters of the site will be in the form of a sensitive lighting scheme, comprising downward directional lighting that does not directly illuminate any of the external hedgerows around the site. This will also benefit other species who use the hedgerows around the site.

4.3.3. Residual Effect.

With the above mitigation in place there will be **no negative impact** on either roosting bats or foraging and commuting bats.

4.4. Species – Birds.

4.4.1. Assessment.

4.4.1.1. The survey area is entirely arable but does offer some suitable habitat for arable ground nesting birds, although this is hampered by its close proximity to the main road.

4.4.1.2. Due to the proximity of the site to the Humber Estuary RAMSAR site, the site has been considered for its potential to host migratory birds. Bird surveys have therefore been undertaken by Whitcher Wildlife between August-October 2022, November 2023-March 2024 and October 2024-March 2025. The results of these surveys are found in Appendix VII, VIII and IX of this report.

4.4.2. Mitigation.

4.4.2.1. Where possible, the works will be carried out outside the nesting bird season. If it is necessary to undertake works within the nesting season, they will be immediately preceded by a nesting bird survey and in the event that any active bird nests are found, they along with a suitable buffer around them will be left undisturbed until the young have fledged.

4.4.2.2. Any new lighting to be implemented around the perimeters of the site will be in the form of a sensitive lighting scheme, comprising downward directional lighting that does not directly illuminate any of the external arable fields around the site. This will allow any birds nesting in surrounding fields to remain undisturbed.

4.4.2.3. All hedgerows which may be used by hedge nesting birds will be retained. Along with this, 81m of new hedgerow will be planted, and 281m^2 of native scrub will be planted within the site. This will offer new opportunities for scrub and hedge nesting birds within the site.

4.4.2.4 A Shadow HRA is provided separately by the applicant and considers the impact of the scheme on the integrity of the Humber Estuary and associated species.

4.4.3. Residual Effect.

By implementing the above mitigation measures and ensuring no impact on neighbouring arable fields, there will be **no negative impact** on birds.

4.5. Species – Invasive Plants.

4.5.1. Assessment.

One Virginia creeper plant was identified within the survey area, overgrowing the hedgerow at the south-west of the site. This is an invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981).

4.5.2. Mitigation.

Prior to any works commencing within a 10m radius of the plant, it will be cut back as far as is reasonably possible. The cuttings will then be collected and then disposed of in a biosecure manner.

4.5.3. Residual Effect.

With the above mitigation in place, the works will have a **positive residual impact** on invasive species.

5. COMPENSATION AND ENHANCEMENT MEASURES.

5.1. Biodiversity enhancements will be provided within the development in line with the requirements of the NPPF. These are detailed within the accompanying Biodiversity Enhancement Management Plan

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Prepared by:	
Mitchel Greenhalgh. BSc, ACIEEM.	Date: 28th July 2025.

Checked by:	
Ruth Georgiou. BSc, MCIEEM.	Date: 28th July 2025

6. REFERENCES.

Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Preliminary Ecological Appraisal, Second Edition.*** CIEEM, Hampshire.

Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Ecological Report Writing, Second Edition.*** CIEEM, Hampshire.

1981. ***Wildlife and Countryside Act.*** *http://www.legislation.gov.uk/ukpga/1981/69* (accessed 18/02/16)

2000. ***Countryside and Rights of Way Act.*** *http://www.legislation.gov.uk/ukpga/2000/37/contents.*

2017. ***The Conservation of Habitats and Species Regulations.*** *http://www.legislation.gov.uk/uksi/2010/490/contents/made.*

2012. ***National Planning Policy Statement.*** *https://www.gov.uk/government/publications/national-planning-policy-framework--2*

Anon. 1995. ***Biodiversity: the UK Steering Group report. Vol 2: Action Plans.*** HMSO, London.

Joint Nature Conservation Committee. 2004 (ed.). ***Handbook for Phase 1 habitat survey: A technique for environmental audit.*** JNCC, Peterborough.

1992. ***Protection of Badgers Act.*** *https://www.legislation.gov.uk/ukpga/1992/51/contents.*

Harris S, Cresswell P and Jefferies D. 1989. ***Surveying Badgers.*** Mammal Society. London.

Dean M, Strachen R, Gow D and Andres R (2016). ***The Water Vole Mitigation Handbook*** (The Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. The mammal Society, London

Chanin P. 2003(a). ***Ecology of the European Otter.*** Conserving Natura 2000, Ecology Series No.10. English Nature, Peterborough.

Chanin P. 2003(b) ***Monitoring the Otter Lutra lutra.*** Conserving Natura 2000 Rivers Monitoring Series No. 10. English Nature, Peterborough.

Peay S. 2003. ***Monitoring the White-Clawed Crayfish Austropotamobius pallipes.*** Conserving Natura 2000 Rivers Monitoring Series No. 1. English Nature, Peterborough.

English Nature. 2001. ***Great Crested Newt Mitigation Guidelines.***

Langton T, Beckett C, Foster J. 2001. ***Great Crested Newt: Conservation Handbook.*** Froglife, Suffolk.

Oldham et al. 2000. ***Great Crested Newt Habitat Suitability Assessment. ARG UK Advice Note 5, May 2010.***

Collins J. (ed.) 2016. ***Bat Surveys for Professional Ecologist: Good Practice Guidelines.*** 3rd ed. The Bat Conservation Trust, London.

English Nature. 2004. ***Bat Mitigation Guidelines.*** English Nature, Peterborough, UK.

BTHK 2018. ***Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals.*** Exeter: Pelagic Publishing.

BOCC4 Eaton et al. 2015. ***Birds of Conservation Concern 4: The Population Status of Bird's in the UK, Channel Islands and Isle of Man.***

Joint Nature Conservation Committee. 2004. ***Common Standards Monitoring Guidance for Birds.*** 2004 ed. JNCC, Peterborough.

Froglife. 1999. ***Froglife Advice Sheet 10: Reptile Survey.*** Froglife, London.

Bright P, Morris P, Mitchell-Jones T. 2006. ***The Dormouse Conservation Handbook*** 2nd edition. English Nature, Peterborough.

Joint Nature Conservation Committee. 2004 (ed.). ***Common Standards Monitoring Guidance for: Reptiles and Amphibians.*** JNCC, Peterborough.

Joint Nature Conservation Committee. 1996. ***UK Strategy for Red Squirrel Conservation.*** JNCC, Peterborough.

Appendix I. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub, but others are ground nesting or prefer man- made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1.-(5) of the Act states that:- If any person intentionally:- disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix II. INVASIVE PLANT SPECIES INFORMATION.

Ecology

The Government has acknowledged the problems that can be caused by non-native invasive species. In 2008 the Government launched "The Invasive Non-Native Species Framework Strategy for Great Britain". The strategy provides a framework for a more co-ordinated approach to invasive species management. It seeks to create a stronger sense of shared responsibility across government, key organisations, land managers and the public.

The Non-Native Species Secretariat has been established to oversee the implementation of the strategy. Details of the secretariat including risk assessments and action plans for some species are available at www.nonnativespecies.org.

In general, there are four basic methods of controlling weeds; mechanical, chemical, natural and environmental.

- ***Mechanical control*** *includes cultivation, hoeing, pulling, cutting, raking, dredging or other methods to uproot or cut weeds.*
  Where this method is used all plant material must be considered "controlled waste" and must be disposed of properly.
- ***Chemical control*** *uses approved herbicides.*
- ***Natural control*** *uses pests and diseases of the target weed to weaken it and prevent it from becoming a nuisance.*
- ***Environmental control*** *works by altering the environment to make it less suitable for weed growth, for example by increasing or decreasing water velocity.*

Surveys

A site will be searched for invasive plant species growing on site, from mature plants to new shoots. A site will also be searched for dead stems indicating that plants that may have seasonally died back are present.

Legislation

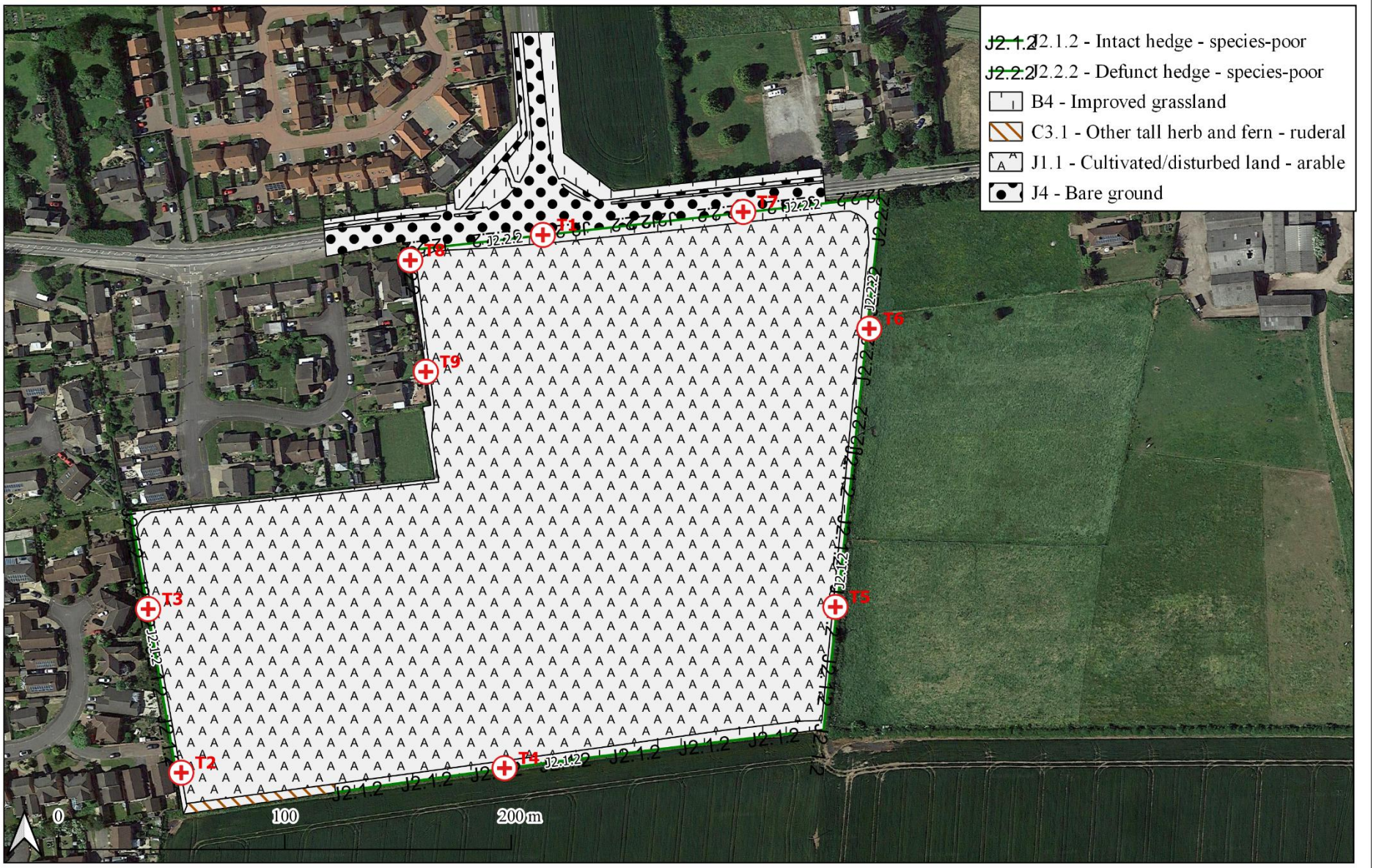
Invasive species listed under Schedule 9 are prohibited from release into the wild. Schedule 9, Section 14(2) prohibits 'planting' or 'causing to grow' in the wild of any plant listed in Part 2 of Schedule 9.

The following is a list of all the species of plant listed under Schedule 9 of The Wildlife and Countryside Act 1981.

Common Name	**Scientific Name**	**England & Wales**	**Scotland**
Alexanders, Perfoliate	*Smyrnium perfoliatum*	✓	
Algae, Red	*Grateloupia luxurians*	✓	
Archangel, Variegated Yellow	*Lamiastrum galeobdolon subsp. Argentatum*	✓	
Azalea, Yellow	*Rhododendron luteum*	✓	
Balsam, Himalayan	*Impatiens glandulifera*	✓	
Cotoneaster	*Cotoneaster horizontalis*	✓	
Cotoneaster, Entire Leaved	*Cotoneaster integrifolius*	✓	
Cotoneaster, Himalayan	*Cotoneaster simonsii*	✓	
Cotoneaster, Hollyberry	*Cotoneaster bullatus*	✓	
Cotoneaster, Small Leaved	*Cotoneaster microphyllus*	✓	
Creeper, False Virginia	*Parthenocissus inserta*	✓	
Creeper, Virginia	*Parthenocissus quinquefolia*	✓	
Dewplant, Purple	*Disphyma crassifolium*	✓	
False-acacia	*Robinia pseudoacacia*		✓
Fanwort	*Cabomba caroliniana*	✓	✓
Fern, Water	*Azolla filiculoides*	✓	✓
Fig, Hottentot	*Carpobrotus edulis*	✓	✓
Garlic, Three-Cornered	*Allium triquetrum*	✓	
Hogweed, Giant	*Heracleum mantegazzianum*	✓	✓
Hyacinth, water	*Eichhornia crassipes*	✓	✓
Kelp, Giant	*Macrocystis angustifolia*	✓	✓
Kelp, Giant	*Macrocystis integrifolia*	✓	✓
Kelp, Giant	*Macrocystis laevis*	✓	✓
Kelp, Giant	*Macrocystis pyrifera*	✓	✓
Kelp, Japanese	*Laminaria japonica*	✓	✓
Knotweed, Giant	*Fallopia sachalinensis*	✓	

Knotweed, Hybrid	*Fallopia japonica x Fallopia sachalinensis*	✓	
Knotweed, Japanese	*Fallopia japonica*	✓	
Knotweed, Japanese	*Polygonum cuspidatum*		✓
Leek, Few-flowered	*Allium paradoxum*	✓	✓
Lettuce, water	*Pistia stratiotes*	✓	✓
Montbretia	*Crocosmia x crocosmiiflora*	✓	
Parrot's-feather	*Myriophyllum aquaticum*	✓	
Pennywort, Floating	*Hydrocotyle ranunculoides*	✓	
Potato, Duck	*Sagittaria latifolia*	✓	
Primrose, Floating Water	*Ludwigia peploides*	✓	
Primrose, Water	*Ludwigia grandiflora*	✓	
Rhododendron	*Rhododendron ponticum*	✓	
Rhubarb, Giant	*Gunnera tinctorial*	✓	
Rose, Japanese	*Rosa rugosa*	✓	
Salvinia, Giant	*Salvinia molesta*	✓	✓
Seafingers, Green	*Codium fragile*	✓	
Seafingers, Green	*Codium fragile tomentosoides*		✓
Seaweed, Californian Red	*Pikea californica*	✓	✓
Seaweed, Hooked Asparagus	*Asparagopsis armata*	✓	✓
Seaweed, Japanese	*Sargassum muticum*	✓	✓
Seaweeds, Laver (except native species)	*Porphyra sp. except -* *P. amethystea* *P. leucosticta* *P. linearis* *P. miniata* *P. purpurea* *P. umbilicalis*	✓	✓
Shallon	*Gaultheria shallon*		✓
Stonecrop, Australian swamp	*Crassula helmsii*	✓	✓
Wakame	*Undaria pinnatifida*	✓	✓
Waterweed, Curly	*Lagarosiphon major*	✓	✓
Waterweeds	*All species of the genus Elodea*	✓	

Appendix III. ANNOTATED MAP OF THE SURVEY AREA - BASELINE



Site: Barrow Road / Baseline

Reference: 220776

Date: 01.09.2023

Produced by: Mitchel Greenhalgh

Appendix IV. TARGET NOTES.

T1. Barrow Road.

T2. Location of Virginia creeper.

T3. Hedgerow A.

T4. Hedgerow B.

T5. Hedgerow C.

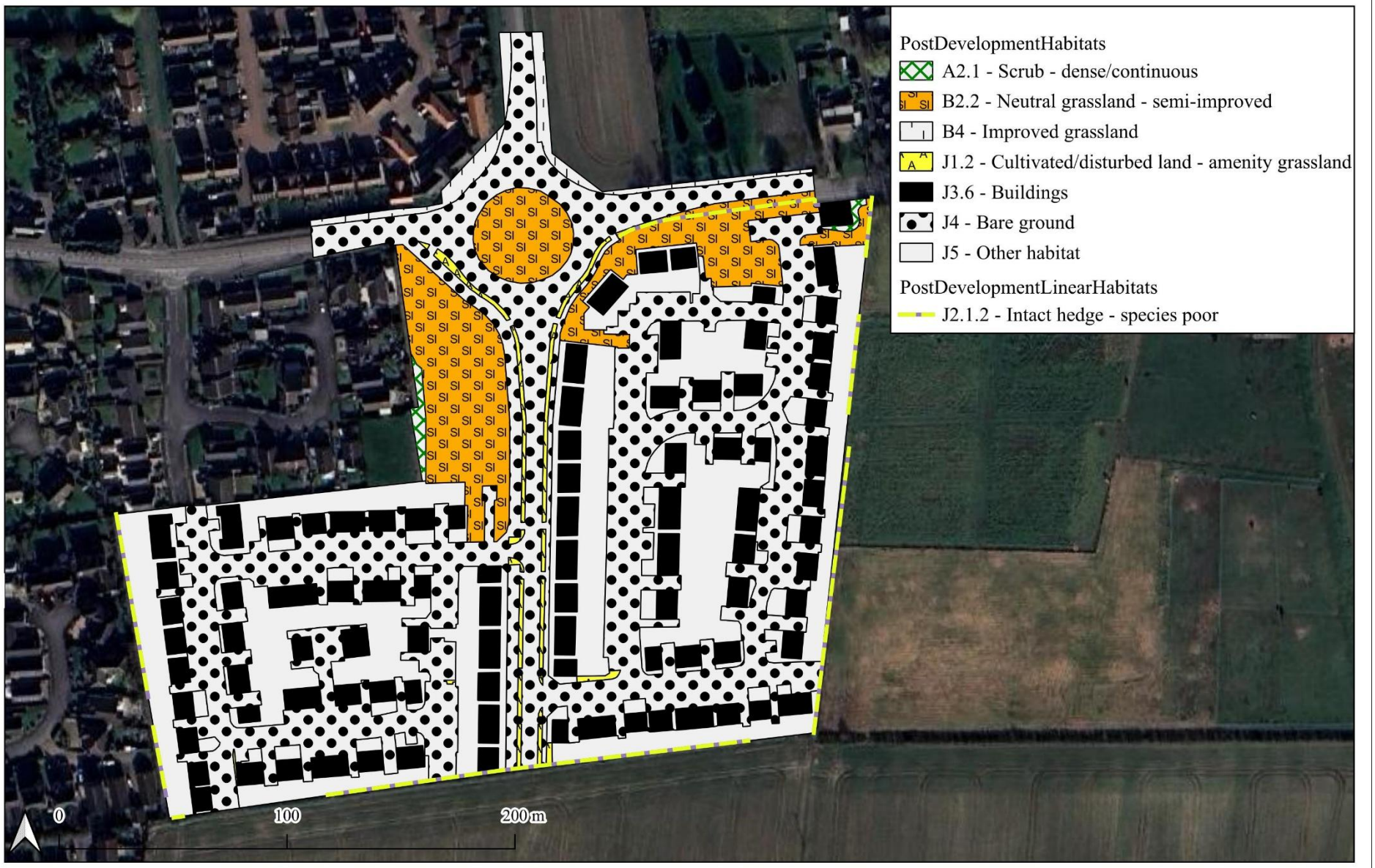
T6. Hedgerow D.

T7. Hedgerow E.

T8. Hedgerow F.

T9. Hedgerow G.

Appendix V. ANNOTATED MAP OF THE SURVEY AREA. – POST DEVELOPMENT.



Site: Barrow Road / Post

Reference: 220776

Date: 17.07.2025

Produced by: Samuel Bentley

Appendix VI. LANDSCAPING MASTERPLAN.

Appendix VII. BIRD SURVEY RESULTS 2022.

3.5.4.1. Survey One.

3.5.4.1.1. The first survey was undertaken alongside the preliminary ecological appraisal on August 1st, 2022, between the hours of 07:00 and 08:00 with a temperature of 18℃ with a light breeze.

3.5.4.1.2. Birds seen on site were wood pigeon (30), carrion crow (3), linnet (1), house sparrow (2).

3.5.4.1.3. Birds seen flying over site were kestrel (1), magpie (2), wood pigeon (18).

3.5.4.1.4. Further house sparrows could be heard singing from hedgerows, along with a brief call from a greenfinch.

3.5.4.1.5. This survey was largely quiet with bird activity at a minimum. The weather had been warm and dry for a prolonged period of time which likely reduced activity.

3.5.4.1.6. The site contained a wheat crop at the time, reducing what could be seen on the ground.

3.5.4.2. Survey Two.

3.5.4.2.1. The second survey was undertaken on September 9th, 2022, between the hours of 06:30 and 07:30 with a temperature of 15℃ with a light breeze and mist in the air.

3.5.4.2.2. Birds seen on site were wood pigeon (60), carrion crow (1), collared dove (2), house sparrow (20), starling (100+), magpie (1).

3.5.4.2.3. Birds seen flying over site were wood pigeon (30), black headed gull (3), herring gull (1), skylark (1).

3.5.4.2.4. Calls heard on site were predominantly from house sparrows within hedgerows, with one curlew heard calling to the east.

3.5.4.2.5. This survey was still largely quiet with bird activity low, but higher than the first survey, likely due to better recent weather conditions. The only birds using the site in large

numbers are wood pigeon and starling, although the starlings were mainly perching on the telephone wires.

3.5.4.2.6. The site had also been cropped, which meant ground visibility was much higher than the first survey.

3.5.4.3. Survey Three.

3.5.4.3.1. The third survey was undertaken on October 24th, 2022, between the hours of 07:30 and 08:30 with a temperature of 12℃ with a moderate breeze and mist in the air.

3.5.4.3.2. Birds seen on site were carrion crow (6), starlings (50+), herring gull (50+), blackbird (6), house sparrow (14), pheasant (5), long-tailed tit (10) and skylark (1).

3.5.4.3.3. Birds seen flying over the site were kestrel (1), herring gull (20+), starlings (50+), wood pigeon (3), magpie (3).

3.5.4.3.4. Calls heard on site included pheasant, curlew from the east and blackbirds and house sparrows in the hedgerows surrounding the site.

3.5.4.3.5. This survey showed slightly higher levels of activity than the previous two, likely due to the wet conditions. The birds using the site in large numbers were starlings and herring gulls.

Whitcher Wildlife Ltd.
Ecological Consultants.

BARROW ROAD, BARTON-UPON-HUMBER.

OS REF: TA 04218 21589.

WINTERING BIRD SURVEY RESULTS.

Ref No: **220776/WinteringBirds/Rev1.**

Date: **18th March 2024.**

Cliff Edge, Cliff Road, Darfield, Barnsley, S73 9HR.
Tel. 01226 753271.
info@whitcher-wildlife.co.uk www.whitcher-wildlife.co.uk
Company No. 4401613.

TABLE OF CONTENTS.

1. INTRODUCTION.

1.1. Strata Homes are in the process of buying a piece of arable land to the south of Barrow Road, with the intention of creating a new residential housing estate comprising 172 dwellings.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out wintering and passage bird surveys of the site to establish whether there are any issues that may affect the proposed works.

1.3. Three surveys were carried out each month between 30th November 2023 and 15th March 2024, and this report outlines the findings of that survey and makes appropriate recommendations.

****

2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. Vantage Point Surveys

2.2.1. Vantage point (VP) surveys were carried out, broadly following NatureScot methodology.

2.2.2. Vantage points were chosen to cover all open arable land within the site boundary as well as immediately adjacent fields. All of the flight activity survey area was covered in less than 2km from the vantage point.

2.2.3. Surveys began immediately on commission by the client in November 2023, and two surveys per month were conducted between December 2023 and March 2024.

2.2.4. The timing of surveys was varied to take in different times of day and different tidal states to suit the variety of species known to use the Humber Estuary. Surveys were timed to include one hour before and one hour after dusk and dawn respectively. Each survey lasted for three hours, totalling twenty-seven hours of vantage point watches. This is less than the recommended thirty-six hours due to missed survey opportunities in October and early November, but is still considered to be a good sample of the flight behaviour due to the good coverage of all other months within the survey period in combination with other survey methods used for further surveys throughout the winter months.

2.2.5. All species detected by song, call, or visually were identified to species and their locations recorded on a field-map. The activity of each registration was assigned a behaviour code in accordance with standard BTO methodology. Additional commentary was made on birds landing and taking off from within and out of the development site.

2.3. Nocturnal Surveys

2.3.1. In addition to vantage point surveys, and due to the potential for waders and/or waterfowl to use the site, nocturnal surveys were also carried out between December 2023 and March 2024.

2.3.2. The surveys were carried out at least one hour after dusk, when no daylight was visible, and each survey lasted until the whole survey area had been thoroughly searched.

2.3.3. All species encountered on the site or adjacent land were recorded. The approximate locations of priority species were plotted on a site map together with behavioural notation where appropriate. Counts of secondary species were recorded separately and based on the highest number of each species in a distinct location.

2.3.4. A thermal imaging camera capable of covering large distances and recording photos/videos was used to assist with nighttime visual identification of species.

2.4. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice, in combination with advice provided by Natural England regarding survey expectations for this site specifically.

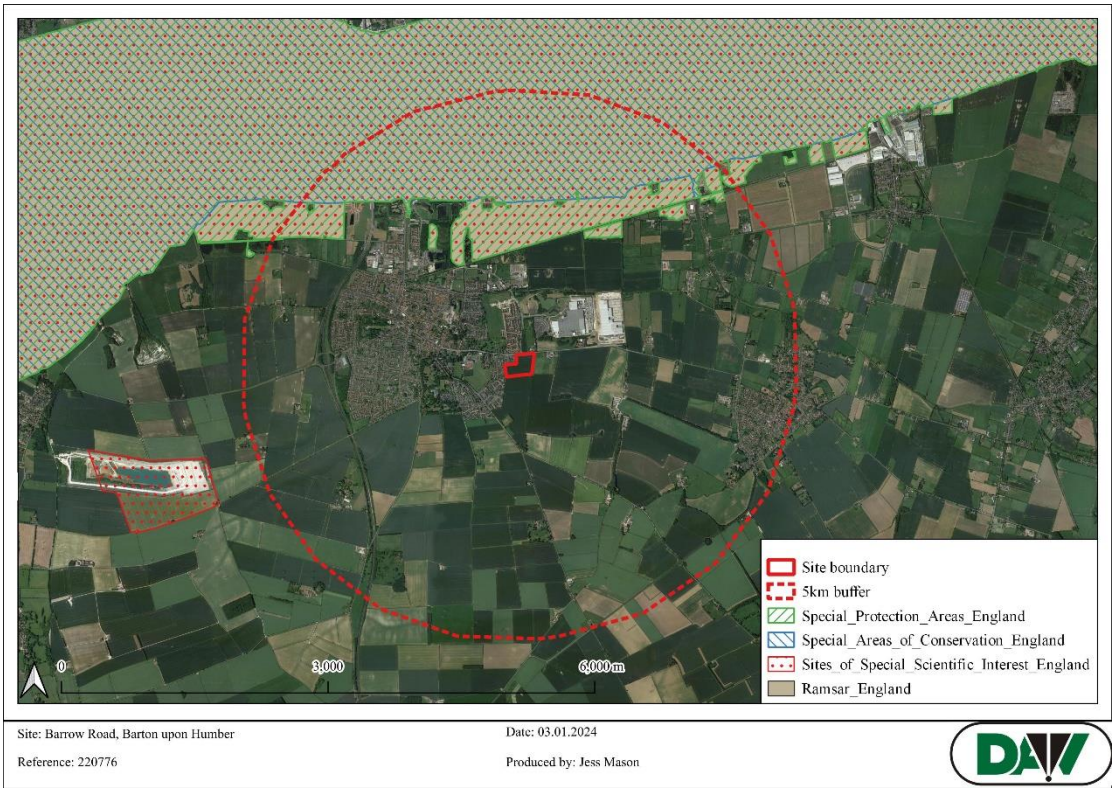
2.5. All surveys were carried out by Jess Mason MSc ACIEEM FRGS. Since 2018 Jess has had experience in a professional capacity as an Ecologist carrying out protected species and habitat surveys. Jess holds Natural England survey licences in respect of bats and great crested newts, and a Scottish Natural Heritage survey licence in respect of barn owls. She has also successfully completed a number of courses run by FSC and CIEEM in the relative protected species and carrying out site assessment using vegetation and has a MSc in Biological Recording. Jess is an Associate member of the Chartered Institute of Ecological and Environmental Management (CIEEM).

****

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A search of publicly available records shows that the site lies approximately 1.1km to the south of the Humber Estuary SPA, RAMSAR, and SSSI, shown on the map below, which are all designated for bird species.



3.1.2. Humber Estuary SPA

3.1.2.1. 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 *Recurvirostra avosetta*	59 individuals – wintering	5 year peak mean 1996/97 – 2000/01	1.7%
Bittern *Botaurus stellaris*	4 individuals – wintering	5 year peak mean 1998/99 – 2002/03	4.0%
Hen harrier *Circus cyaneus*	8 individuals – wintering	5 year peak mean 1997/98 – 2001/02	1.1%
Golden plover *Pluvialis apricaria*	30,709 individuals – wintering	5 year peak mean 1996/97 – 2000/01	12.3%

Bar-tailed godwit *Limosa lapponica*	2,752 individuals – wintering	5 year peak mean 1996/97 – 2000/01	4.4%
Ruff *Philomachus pugnax*	128 individuals – passage	5 year peak mean 1996-2000	1.4%
Bittern *Botaurus stellaris*	2 booming males – breeding	3 year mean 2000-2002	10.5%
Marsh harrier *Circus aeruginosus*	10 females – breeding	5 year mean 1998-2002	6.3%
Avocet *Recurvirostra avosetta*	64 pairs – breeding	5 year mean 1998 – 2002	8.6%
Little tern *Sterna albifrons*	51 pairs – breeding	5 year mean 1998-2002	2.1%

3.1.2.2. 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*.

3.1.3. Humber Estuary RAMSAR

The following bird species are listed as feature of the designation:

- Bar-tailed godwit, *Limosa lapponica* – Wintering
- Black-tailed godwit, *Limosa limosa* – Passage
- Black-tailed godwit, *Limosa limosa* – Wintering
- Dunlin, *Calidris alpina* – Passage
- Dunlin, *Calidris alpina* – Wintering
- Golden plover, *Pluvialis apricaria* – Passage
- Golden plover, *Pluvialis apricaria* – Wintering
- Knot, *Calidris canutus* – Passage
- Knot, *Calidris canutus* – Wintering

- Redshank, *Tringa totanus* – Passage
- Redshank, *Tringa totanus* – Wintering
- Shelduck, *Tadorna tadorna* – Wintering
- Waterbird assemblage - Wintering

3.1.4. Humber Estuary SSSI

The following bird species are listed as features of the designation:

Aggregations of non-breeding birds:

- Avocet, *Recurvirostra avosetta*
- Bar-tailed godwit, *Limosa lapponica*
- Bittern, *Botaurus stellaris*
- Black-tailed godwit, *Limosa limosa islandica*
- Brent goose (dark-bellied), *Branta bernicla bernicla*
- Curlew, *Numenius Arquata*
- Dunlin, *Calidris alpina alpina*
- Golden plover *Pluvialis apricaria*
- Goldeneye, *Bucephala clangula*
- Greenshank, *Tringa nebularia*
- Grey plover, *Pluvialis squatarola*
- Knot, *Calidris canutus*
- Lapwing, *Vanellus vanellus*
- Oystercatcher, *Haematopus ostralegus*
- Pochard, *Aythya farina*
- Redshank, *Tringa tetanus*
- Ringed plover, *Charadrius hiaticula*
- Ruff, *Philomachus pugnax*
- Sanderling, *Calidris alba*
- Scaup, *Aythya marila*
- Shelduck, *Tadorna tadorna*
- Teal, *Anas crecca*
- Turnstone, *Arenaria interpres*
- Whimbrel, *Numenius phaeopus*
- Wigeon, *Anas penelope*

3.2. The Surveyed Area.

3.2.1. The survey area comprises the section of land to the south of Barrow Road / A1077 shown in the aerial image below.

3.2.3. The survey area is situated within a semi-rural location and was surrounded by a mosaic of arable land, industrial units, and residential estates, with the Humber Estuary 1.1km to the north of the survey area.

3.3. Winter bird surveys results.

3.3.1. The dates, times and weather conditions of the vantage point surveys carried out are summarised in the table below:

Date	Start	End	Sunrise/ Sunset	Temp at start (°C)	Precipitation	Cloud cover (%)	Visibility	Wind (Beaufort)	High tide time	Low tide time
30/11/23	06:45	09:45	07:53	1	Snow at 09:30	70	Good	2	07:54 20:00	02:27 14:30
15/12/23	07:00	10:00	08:12	6	None	60	Good	2	07:41 19:55	02:12 14:24
20/12/23	14:30	17:30	15:42	11	None	80	Good	3	11:13 23:14	05:21 17:13
12/01/24	07:00	10:00	08:14	3	Light drizzle	100	Good	1	06:44 18:56	01:11 13:27
24/01/24	14:25	17:30	16:27	6	None	70	Good	2	06:08 18:14	00:36 12:43
16/02/24	06:15	09:15	07:19	8	None	100	Good	2	10:49 23:05	05:06 17:14
27/02/24	15:30	18:30	17:33	8	Occasional, light showers	100	Good	2	08:02 20:08	02:44 14:28
04/03/24	15:45	18:45	17:45	8	None	100	Good	3	00:21 13:01	06:48 19:41
15/03/24	05:15	08:15	06:15	10	Occasional, light showers	90	Good	2	09:33 21:52	04:03 16:14

3.3.2. The dates, time and weather conditions of the nocturnal surveys carried out are summarised below:

Date	**Start**	**End**	**Sunrise/ Sunset**	**Temp at start (°C)**	**Precipitation**	**Cloud cover (%)**	**Visibility**	**Wind (Beaufort)**	**High tide time**	**Low tide time**
20/12/23	18:30	19:30	15:42	9	None	80	Good	3	11:13 23:14	05:21 17:13
24/01/24	18:30	19:15	16:27	6	None	70	Good	2	06:08 18:14	00:36 12:43
27/02/24	19:30	20:15	17:33	8	Occasional, light showers	100	Good	2	08:02 20:08	02:44 14:28
04/03/24	19:45	20:30	17:45	8	None	100	Good	3	00:21 13:01	06:48 19:41

3.3. Vantage point surveys

3.3.1. Survey 1 – 30th November 2023.

No birds were recorded on the ground or taking off/landing within the survey area or immediately adjacent habitats. A flock of up to forty black-headed gulls was recorded circling a wide area covering the residential estate to the west of the survey area, occasionally passing over the survey area. This behaviour continued throughout the duration of the survey. In addition, a flock of up to sixty jackdaws was recorded flying towards the estuary from a copse of woodland approximately 350m to the southeast of the survey area, but not interacting with the survey area.

3.3.2. Survey 2 – 15th December 2023.

3.3.2.1. As in the first survey, both jackdaws and black-headed gulls were observed circling large areas throughout the survey, occasionally overlapping the site boundary. However, neither species was observed interacting with, landing, or taking off from within the site boundary or from immediately surrounding habitats. Maximum counts of 34 black-headed gulls and 28 jackdaws were recorded.

3.3.2.2. At 08:55, two curlews landed within the survey area, arriving from the west, and began foraging behaviour. At 09:08, a further forty curlews arrived from the west and landed in the open field. All forty-two curlews remained feeding within the field until 09:27, when fifteen curlews took off from the field and flew as a flock in a northwards direction towards the estuary until no longer visible. The remaining twenty-seven curlew remained in the field and were still feeding when the survey ended.

3.3.3. Survey 3 – 20th December 2023.

3.3.3.1. A flock of up to twenty-six black-headed gulls was recorded circling a wide area covering the residential estate to the west of the survey area, occasionally passing over the survey area. This behaviour continued throughout the duration of the survey. In addition, a flock of up to thirty-four jackdaws was feeding on the ground within the survey area or adjacent fields throughout the duration of the survey. Jackdaws were occasionally landing and taking off from within the site throughout the survey.

3.3.4. Survey 4 – 12th January 2024.

3.3.4.1. Seven species were recorded during this survey including black-headed gull, fieldfare, redwing, rook, jackdaw, curlew and pink-footed geese.

3.3.4.2. Black-headed gulls were recorded circling over the survey area and surrounding fields and residential areas throughout the duration of the survey, and frequently landed in the fields within the survey area to forage.

3.3.4.3. Large numbers of jackdaws, peaking at fifty-six birds, were present within the survey area or adjacent fields throughout the duration of the survey. These birds were occasionally landing and taking off from within the site throughout the survey.

3.3.4.4. A mixed flock of fieldfares and redwings, totalling approximately forty birds, was recorded flying west over the site towards the residential areas at 07:31. No birds showed any interaction with the site. Smaller numbers of rooks, totalling up to six birds, were recorded within the flocks of jackdaws.

3.3.4.5. Three skeins of pink-footed geese were recorded passing close the site at 07:46, 08:06, and 08:13. All three skeins were recorded flying at high altitude in an easterly direction, at a distance of 300m to 500m from the survey area, with between twenty and fifty birds recorded per skein. None of the birds showed any interaction with the site, and none passed directly over the site.

3.3.4.6. A flock of thirty-nine curlew landed on the site at 08:44 and began foraging. All birds remained within the site boundary until 09:40, when all birds departed in a northerly direction. At 09:46, twenty-nine curlew landed on the site and began foraging behaviours. These birds were still foraging on the site when the survey ended.

3.3.5. Survey 5 – 24th January 2024

3.3.5.1. At 16:13, approximately fifty-five lapwings were seen circling over the site, arriving from the east and circling the site and the immediately adjacent fields three times, before settling on land to the south of the site. The lapwings stayed on this land, immediately to the south of the survey area and separated from the survey area by a hedgerow, for approximately fifteen minutes before leaving the area after being disturbed by a person walking in the field.

3.3.5.2. Large numbers of rooks, peaking at thirty-eight birds, were present within the survey area or adjacent fields throughout the duration of the survey. These birds were occasionally landing and taking off from within the site throughout the survey.

3.3.5.3. Two black-headed gulls and twelve jackdaws were periodically observed passing over the survey area, but not interacting with the site.

3.3.6. Survey 6 – 16th February 2024

3.3.6.1. No birds were recorded on the ground or taking off/landing within the survey area or immediate adjacent habitats. A skein of twenty-six greylag geese flew at a high altitude from west to east over the survey area, but did not stop or interact with the site in any way. In addition, a flock of up to thirty-two jackdaws was recorded flying towards the estuary from a copse of woodland approximately 350m to the southeast of the survey area, but not interacting with the survey area.

3.3.7. Survey 7 – 27th February 2024

3.3.7.1. No birds were recorded taking off/landing within the survey area or immediate adjacent habitats.

3.3.7.2. However, three grey partridges were observed passing through the field on the ground, occasionally calling. The partridges were seen sporadically in different areas of the field and hedgerow throughout the duration of the survey.

3.3.7.3. Other species recorded passing over the site, but not landing or interacting with the site, included: a flock of up to twelve jackdaws, skeins of fifteen and five greylag geese, and three black-headed gulls.

3.3.8. Survey 8 – 4th March 2024

3.3.8.1. No birds were recorded on the ground or taking off/landing within the survey area or immediately adjacent habitats. Species recorded passing over the site, but not landing or interacting with the site, included: a flock of up to twenty-four jackdaws, three black-headed gulls, and five woodpigeons.

3.3.9. Survey 9 – 15th March 2024

3.3.9.1. At 05:40, six rooks were recorded passing over the site, and appeared to be leaving a roost approximately 350m to the southeast of the survey area, passing straight over the site without stopping or showing any interaction with the site.

3.3.9.2. At 06:05, a flock of eight curlew flew over the site in a southerly direction, without stopping or showing any interaction with the site, followed immediately by two herring gulls flying in the same direction.

3.3.9.3. Other species recorded flying over or close to the site without showing any interaction with the site included one magpie, thirteen starling, two woodpigeon, and a flock of twenty-eight black-headed gulls.

3.3.10 Summary of vantage point survey results

A summary of the peak counts of individual birds recorded during the surveys is provided in the table below.

Species		**Peak no. of individual birds observed roosting/foraging within the survey area**								
Common name	***Latin name***	**30/11/23**	**15/12/23**	**20/12/23**	**12/01/24**	**24/01/24**	**16/02/24**	**27/02/24**	**04/03/24**	**15/03/24**
Curlew	*Numenius arquata*	0	42	0	39	0	0	0	0	0
Grey partridge	*Perdix perdix*	0	0	0	0	0	0	3	0	0
Lapwing	*Vanellus vanellus*	0	0	0	0	55	0	0	0	0
Rook	*Corvus frugilegus*	0	0	0	0	38	0	0	0	0
Species		**Peak no. of individual birds observed in flight passing over the survey area (not roosting/foraging)**								
Common name	***Latin name***	**30/11/23**	**15/12/23**	**20/12/23**	**12/01/24**	**24/01/24**	**16/02/24**	**27/02/24**	**04/03/24**	**15/03/24**
Black-headed gull	*Chroicocephalus ridibundus*	40	34	26	20	2	0	3	3	28
Curlew	*Numenius arquata*	0	0	0	0	0	0	0	0	8
Fieldfare	*Turdus pilaris*	0	0	0	~20	0	0	0	0	0
Greylag goose	*Anser anser*	0	0	0	0	0	26	15	0	0
Herring gull	*Larus argentatus*	0	0	0	0	0	0	0	0	2
Jackdaw	*Corvus monedula*	60	28	34	56	12	32	12	24	0
Magpie	*Pica pica*	0	0	0	0	0	0	0	0	1
Pink-footed goose	*Anser brachyrhynchus.*	0	0	0	50	0	0	0	0	0
Redwing	*Turdus iliacus.*	0	0	0	~20	0	0	0	0	0
Starling	*Sturnus vulgaris*	0	0	0	0	0	0	0	0	13
Woodpigeon	*Columba palumbus*	0	0	0	0	0	0	0	5	2

3.4. Nocturnal surveys

3.4.1. Survey 1 – 20th December 2023.

The survey area was searched from a vantage point using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. No birds were observed. Transects were then walked through the survey area, scanning adjacent fields, which confirmed that no birds were roosting within the survey area or immediately adjacent habitats.

3.4.2. Survey 2 – 24th January 2024

The survey area was searched from a vantage point using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. No birds were observed. Transects were then walked through the survey area, scanning adjacent fields, which confirmed that no birds were roosting within the survey area or immediately adjacent habitats.

3.4.3. Survey 3 – 27th February 2024

The survey area was searched from a vantage point using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. No birds were observed. Transects were then walked through the survey area, scanning adjacent fields, which confirmed that no birds were roosting within the survey area or immediately adjacent habitats.

3.4.4. Survey 4 – 5th March 2024

The survey area was searched from a vantage point using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. Two grey partridges were observed roosting in the stubble. No other birds were observed. Transects were then walked through the survey area, scanning adjacent fields, which confirmed that no further birds were roosting within the survey area or immediately adjacent habitats.

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Prepared by:	
Jess Mason MSc ACIEEM FRGS.	Date: 18th March 2024.

Checked by:	
Ruth Georgiou. BSc, MCIEEM.	Date: 19th March 2024.

4. REFERENCES.

Chartered Institute of Ecology and Environmental Management. 2017. ***Guidelines for Ecological Report Writing, Second Edition.*** CIEEM, Hampshire.

1981. ***Wildlife and Countryside Act.*** *http://www.legislation.gov.uk/ukpga/1981/69* (accessed 18/02/16)

2000. ***Countryside and Rights of Way Act.***
http://www.legislation.gov.uk/ukpga/2000/37/contents.

2017. ***The Conservation of Habitats and Species Regulations.***
http://www.legislation.gov.uk/uksi/2010/490/contents/made.

2012. ***National Planning Policy Statement.***
https://www.gov.uk/government/publications/national-planning-policy-framework--2

Anon. 1995. ***Biodiversity: the UK Steering Group report. Vol 2: Action Plans.*** HMSO, London.

BOCC4. 2021. ***Birds of Conservation Concern 5: The Population Status of Bird's in the UK, Channel Islands and Isle of Man.***

Joint Nature Conservation Committee. 2004. ***Common Standards Monitoring Guidance for Birds.*** 2004 ed. JNCC, Peterborough.

Scottish Natural Heritage. 2017. ***Recommended bird survey methods to inform impact assessment of onshore wind farms*** (Version 2).

Appendix I. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub but others are ground nesting or prefer man- made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix II. DEVELOPMENT PLAN.

Whitcher Wildlife Ltd.
Ecological Consultants.

BARROW ROAD, BARTON-UPON-HUMBER.

OS REF: TA 04218 21589.

WINTERING BIRD SURVEY RESULTS.

Ref No: **220776/WinteringBirds2025/Rev1.**

Date: **28th March 2025.**

The Business Village, Cudworth, Barnsley, S72 8RP
info@whitcher-wildlife.co.uk www.whitcher-wildlife.co.uk
Company No. 4401613.

TABLE OF CONTENTS.

1. INTRODUCTION.

1.1. Strata are currently progressing the planning application PA/2023/1607 of which relates to a proposed residential development at land to the south of Barrow Road.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out wintering bird surveys upon the site to establish whether there are any issues that may affect the proposed works.

1.3. Three surveys were carried out each month between October 2024 and March 2025, and this report outlines the findings of each survey and makes appropriate recommendations.

1.4. It must be noted that in September 2024, the planning application PA/2023/1981 was approved, granting planning permission for the erection of a major roundabout and development of link road infrastructure directly through the site. Natural England did not object to this application.

1.5. It is anticipated that construction works to such infrastructure will commence in May 2025, therefore permanently altering and disturbing the site and its existing landscaping setting.

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2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. Vantage Point Surveys

2.2.1. Vantage point (VP) surveys were carried out, broadly following NatureScot 'amended' vantage point surveys methodology, as recommended in advice provided by Natural England in their planning consultation response (November 2023).

2.2.2. Vantage points were located at a central high point of the site and was chosen to cover all open arable land within the site boundary.

2.2.3. Two vantage point surveys per month were conducted between October 2024 and March 2025.

2.2.4. The timing of surveys was varied to take in different times of day and were conducted within three hours either side of low tide and high tide respectively. Each survey lasted for three hours, totalling thirty-six hours of vantage point watches.

2.2.5. All of the flight activity was recorded as well as birds landing or taking off within the development boundary. Additional commentary was made on birds landing and taking off from within and out of the development site. All species detected by song, call, or visually were identified to species and their locations recorded on a field-map. The activity of each registration was assigned a behaviour code in accordance with standard BTO methodology.

2.3. Nocturnal Surveys

2.3.1. In addition to vantage point surveys, and due to the potential for waders and/or waterfowl to use the site, nocturnal surveys were also carried out between October 2024 and March 2025.

2.3.2. The surveys were carried out at least one hour after dusk, when no daylight was visible, and each survey lasted until the whole survey area had been thoroughly searched.

2.3.3. All species encountered on the site were recorded. The approximate locations of priority species were plotted on a site map together with behavioural notation where appropriate. Counts of secondary species were recorded separately and based on the highest number of each species in a distinct location.

2.3.4. A thermal imaging camera capable of covering large distances and recording photos/videos was used to assist with nighttime visual identification of species.

2.4. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice, in combination with advice provided by Natural England regarding survey expectations for this site specifically.

2.5. All surveys were carried out by Jess Mason MSc ACIEEM FRGS. Since 2018 Jess has had experience in a professional capacity as an Ecologist carrying out protected species and habitat surveys. Jess holds Natural England survey licences in respect of bats, barn owls and great crested newts, and a Scottish Natural Heritage survey licence in respect of barn owls. She has also successfully completed a number of courses run by FSC and CIEEM in the relative protected species and carrying out site assessment using vegetation and has a MSc in Biological Recording. Jess is an Associate member of the Chartered Institute of Ecological and Environmental Management (CIEEM).

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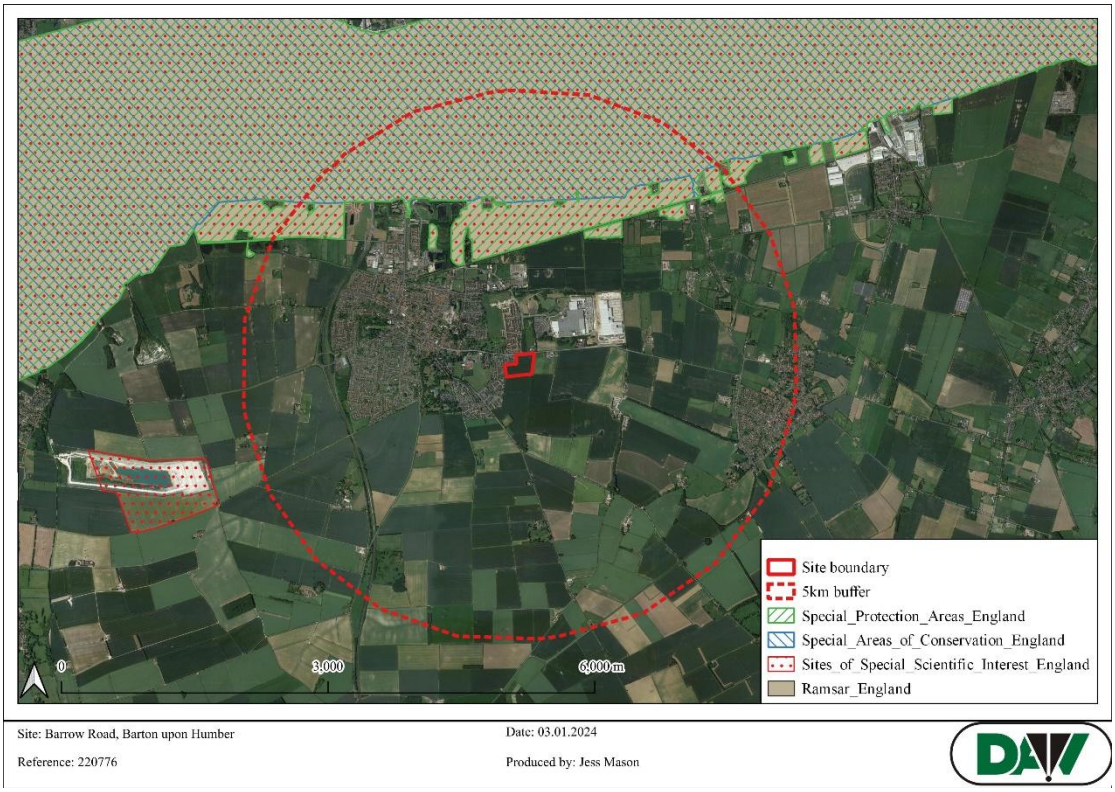
3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A search of publicly available records shows that the site lies approximately 1.1km to the south of the Humber Estuary SPA, RAMSAR, and SSSI, shown on the map below, which are all designated for bird species.



3.1.2. Humber Estuary SPA

3.1.2.1. The Humber Estuary 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 *Recurvirostra avosetta*	59 individuals – wintering	5 year peak mean 1996/97 – 2000/01	1.7%
Bittern *Botaurus stellaris*	4 individuals – wintering	5 year peak mean 1998/99 – 2002/03	4.0%
Hen harrier *Circus cyaneus*	8 individuals – wintering	5 year peak mean 1997/98 – 2001/02	1.1%
Golden plover *Pluvialis apricaria*	30,709 individuals – wintering	5 year peak mean 1996/97 – 2000/01	12.3%

Bar-tailed godwit *Limosa lapponica*	2,752 individuals – wintering	5 year peak mean 1996/97 – 2000/01	4.4%
Ruff *Philomachus pugnax*	128 individuals – passage	5 year peak mean 1996-2000	1.4%
Bittern *Botaurus stellaris*	2 booming males – breeding	3 year mean 2000-2002	10.5%
Marsh harrier *Circus aeruginosus*	10 females – breeding	5 year mean 1998-2002	6.3%
Avocet *Recurvirostra avosetta*	64 pairs – breeding	5 year mean 1998 – 2002	8.6%
Little tern *Sterna albifrons*	51 pairs – breeding	5 year mean 1998-2002	2.1%

3.1.2.2. The Humber Estuary 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*.

3.1.3. Humber Estuary RAMSAR

The following bird species are listed as feature of the designation:

- Bar-tailed godwit, *Limosa lapponica* – Wintering
- Black-tailed godwit, *Limosa limosa* – Passage
- Black-tailed godwit, *Limosa limosa* – Wintering
- Dunlin, *Calidris alpina* – Passage
- Dunlin, *Calidris alpina* – Wintering
- Golden plover, *Pluvialis apricaria* – Passage
- Golden plover, *Pluvialis apricaria* – Wintering
- Knot, *Calidris canutus* – Passage
- Knot, *Calidris canutus* – Wintering

- Redshank, *Tringa totanus* – Passage
- Redshank, *Tringa totanus* – Wintering
- Shelduck, *Tadorna tadorna* – Wintering
- Waterbird assemblage - Wintering

3.1.4. Humber Estuary SSSI

The following bird species are listed as features of the designation:

Aggregations of non-breeding birds:

- Avocet, *Recurvirostra avosetta*
- Bar-tailed godwit, *Limosa lapponica*
- Bittern, *Botaurus stellaris*
- Black-tailed godwit, *Limosa limosa islandica*
- Brent goose (dark-bellied), *Branta bernicla bernicla*
- Curlew, *Numenius Arquata*
- Dunlin, *Calidris alpina alpina*
- Golden plover *Pluvialis apricaria*
- Goldeneye, *Bucephala clangula*
- Greenshank, *Tringa nebularia*
- Grey plover, *Pluvialis squatarola*
- Knot, *Calidris canutus*
- Lapwing, *Vanellus vanellus*
- Oystercatcher, *Haematopus ostralegus*
- Pochard, *Aythya farina*
- Redshank, *Tringa tetanus*
- Ringed plover, *Charadrius hiaticula*
- Ruff, *Philomachus pugnax*
- Sanderling, *Calidris alba*
- Scaup, *Aythya marila*
- Shelduck, *Tadorna tadorna*
- Teal, *Anas crecca*
- Turnstone, *Arenaria interpres*
- Whimbrel, *Numenius phaeopus*
- Wigeon, *Anas penelope*

3.2. The Surveyed Area.

3.2.1. The survey area comprises the section of land to the south of Barrow Road / A1077, shown in the aerial image below.

3.2.2. The survey area is situated within a semi-rural location and was surrounded by a mosaic of arable land, industrial units, and residential estates, with the Humber Estuary 1.1km to the north of the survey area.

3.3. Winter bird surveys results.

3.3.1. The dates, times and weather conditions of the vantage point surveys carried out are summarised in the table below:

Date	Start	End	High/low tide survey	High tide time	Low tide time	Sunrise/ Sunset	Temp at start (℃)	Precipitation	Cloud cover (%)	Visibility	Wind (Beaufort)
24/10/24	10:30	13:30	High	12:21 -	06:14 18:19	07:46 17:44	9	None	100	Good	2
31/10/24	10:15	13:15	Low	05:24 17:48	12:23 -	07:00 16:29	11	None	100	Good	3
07/11/24	09:00	12:00	High	09:36 21:46	03:45 15:57	07:13 16:16	10	None	100	Good	1
20/11/24	09:00	12:00	High	09:06 21:07	03:32 15:32	07:38 15:56	1	None	30	Good	1-2
02/12/24	11:00	14:00	Low	07:21 19:36	01:53 14:05	07:59 15:44	10	None	50	Good	2
19/12/24	08:45	11:45	High	09:35 21:28	03:59 15:45	08:16 15:42	5	None	10	Good	1
14/01/25	10:15	13:15	Low	06:26 18:36	00:57 13:08	08:11 16:31	6	None	50	Good	2
28/01/25	09:00	12:00	Low	05:27 17:40	12:00 -	07:53 16:36	8	Light showers	100	Good	1
10/02/25	09:00	12:00	Low	04:36 16:53	11:18 23:58	07:30 17:01	5	Light rain	100	Good	2-3
24/02/25	11:00	14:00	High	03:07 15:38	09:31 21:59	07:00 17:29	11	None	30	Good	2-3

Date	Start	End	High/low tide survey	High tide time	Low tide time	Sunrise/ Sunset	Temp at start (°C)	Precipitation	Cloud cover (%)	Visibility	Wind (Beaufort)
04/03/25	09:00	12:00	High	09:12 21:25	03:40 15:49	06:41 17:45	7	None	0	Good	1-2
21/03/25	13:00	16:00	Low	10:11 22:34	04:10 16:25	06:00 18:17	14	None	0	Good	2-3

3.3.2. Vantage point surveys

3.3.2.1. A summary of the peak counts of individual birds recorded during the surveys is provided in the table on the following page.

3.3.2.2. No birds were recorded foraging or roosting within the survey area or immediately adjacent habitats. No qualifying species of the Humber Estuary SPA were recorded within the survey area. Common species of such habitats such a common gull, black-headed gull, corvid species, and woodpigeon were recorded infrequently and at low abundance.

Species		Peak no. of individual birds observed											
Common name	***Latin name***	**24/10/24**	**31/10/24**	**07/11/24**	**20/11/24**	**02/12/24**	**19/12/24**	**14/01/25**	**28/01/25**	**10/02/25**	**24/02/25**	**04/03/25**	**21/03/25**
Black-headed gull	*Chroicocephalus ridibundus*	26	110**	4	3	5	1	2	2	0	2	1	0
Pink-footed goose	*Anser brachyrhynchus.*	24***	0	0	0	0	16***	0	0	0	0	0	0
Starling	*Sturnus vulgaris*	65	60	25	34	43	6	3	0	3	0	2	0
Woodpigeon	*Columba palumbus*	12	0	12	26	17	24	15	22	23	11	17	10
Carrion crow	*Corvus corone*	4	25**	4	7	16	13	12	2	8	6	2	3
Herring gull	*Larus argentatus*	4	6	2	3	6	1	0	0	1	0	0	0
Kestrel	*Falco tinunculus*	0	0	0	0	1	0	0	0	0	0	1	0
Pied wagtail	*Motacilla alba*	0	1	0	0	1	0	0	0	1	1	0	1
Magpie	*Pica pica*	2	0	1	0	1	1	0	1	0	1	2	0
Rook	*Corvus frugilegus*	3	0	6	0	0	2	0	0	0	4	0	0
Buzzard	*Buteo buteo*	0	0	1	0	0	0	1	0	0	0	0	1

SPA qualifying species or non-qualifying species of interest in bold

** Tractor and plough present at the start of the survey, fields ploughed on same day. Birds following tractor

*** Commuting over the site, showing no interaction with the survey area

3.3.3. Nocturnal surveys

3.3.3.1. The dates, time and weather conditions of the nocturnal surveys carried out are summarised below:

Date	**Start**	**End**	**High tide time**	**Low tide time**	**Sunrise/ Sunset**	**Temp at start (°C)**	**Precipitation**	**Cloud cover (%)**	**Visibility**	**Wind (Beaufort)**
29/10/24	19:30	20:40	04:06 16:39	11:02 23:16	06:56 16:34	13	None	60	Good	1-2
14/11/24	19:40	20:40	04:19 17:03	11:27 23:45	07:27 16:05	9	None	80	Good	1
11/12/24	19:30	20:30	01:46 14:49	08:47 21:12	08:09 15:41	6	None	100	Good	1-2
08/01/25	19:30	20:30	12:56 -	06:41 18:56	08:15 16:01	-2	None	0	Good	0-1
03/02/25	19:30	20:30	09:40 21:41	04:02 16:05	07:43 16:47	5	None	0	Good	2
13/03/25	20:30	21:30	11:58 -	05:41 18:45	05:55 06:20	4	None	10	Good	1

3.3.3.2. The survey area was searched using thermal imaging equipment, scanning the whole field, field margins, and hedgerows. No birds were observed roosting within the survey area during any of the surveys.

3.4. Summary of results

3.4.1. Eleven species were recorded during the vantage point surveys, all of which are common species that can typically be expected in arable habitats within this geographical area. These species were recorded in numbers which are not considered notable.

3.4.2. No species listed as qualifying species for the Humber Estuary SPA were observed within the survey area during the vantage point or nocturnal surveys.

3.4.3. Overall, based on the low number of common species recorded, and the absence of SPA qualifying species, it is assessed that the site is not functionally linked to the Humber Estuary SPA.

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4. REFERENCES.

Bird Survey & Assessment Steering Group (2023). *Bird Survey Guidelines for assessing ecological impacts, v.1.1.1*. Available at https://birdsurveyguidelines.org (Accessed 15/04/2024)

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

CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester.

Department for Levelling Up, Housing and Communities (2023) *National Planning Policy Framework (NPPF).* Available at https://www.gov.uk/government/publications/national-planning-policy-framework--2 (Accessed: 15/04/2024).

Natural England (2014) *Protected species and development: advice for local planning authorities.* (updated 2021) Available at: https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications (Accessed: 05/03/2021).

Natural Environment and Rural Communities Act 2006 Available at https://www.legislation.gov.uk/uksi/2019/579/contents/made (Accessed: 15/04/2024). 25

Stanbury, A. et al (2021) *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747.* Available at https://britishbirds. co.uk/content/status-our-bird-populations (Accessed 15/04/2024)

Joint Nature Conservation Committee (2004). *Common Standards Monitoring Guidance for Birds.* 2004 ed. JNCC, Peterborough.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 Available at https://www.legislation.gov.uk/uksi/2019/579/contents/made (Accessed: 15/04/2024).

The Wildlife and Countryside Act 1981 (as amended). Available at http://www.legislation.gov.uk/ukpga/1981/69 (Accessed: 15/04/2024). JNCC, Peterborough.

Appendix I. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub but others are ground nesting or prefer man- made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix II. DEVELOPMENT PLAN.