

The Great Grid Upgrade

Proposed Electricity Substation and Overhead Line Works at Weston Marsh

Non-Breeding Bird Survey Report

June 2026

nationalgrid

Proposed Electricity Substation and Overhead Line Works at Weston Marsh

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1. Introduction

1.1 Overview

- 1.1.1 This Non-Breeding Bird Survey report has been prepared by National Grid Electricity Transmission plc (National Grid).
- 1.1.2 National Grid are proposing to undertake works to construct a new electricity substation, new sections of overhead line and modification of existing overhead lines west of the Spalding Tee-Point in the Weston Marsh area, within the administrative boundary of South Holland District Council (SHDC) in Lincolnshire.

1.2 Summary of the Scheme

- 1.2.1 In totality, the Scheme consist of four components, each planned to be progressed via separate consenting routes. These are summarised in **Table 1.1**.

Table 1.1 Components of the Scheme

Works Required	Consenting Regime
Construction of the new Air Insulated Substation (AIS) – 400kV Weston Marsh Substation A, associated landscaping and environmental mitigation works, drainage, highways and other associated works	Town and Country Planning Act 1990 (TCPA) Component referred to as ‘ Substation Works ’ (Ref 1)
Construction of new sections of overhead line to connect the new substation into the existing 4ZM overhead line Removal of a section of the existing 4ZM overhead line Other associated works	Section 37 (S37) of the Electricity Act 1989 (Ref 2) and deemed consent pursuant to section 90(2) of the Town and Country Planning Act 1990 Component referred to as ‘ S37 4ZM Overhead Line Works ’
Construction of a new section of overhead line to connect the existing 2WS overhead line into the new substation. Removal of a section of the existing 2WS overhead line Other associated works	S37 of the Electricity Act 1989 and deemed consent pursuant to section 90(2) of the Town and Country Planning Act 1990 Component referred to as ‘ S37 2WS Overhead Line Works ’
Reconductoring works required on the existing 4ZM overhead line Two spans of temporary overhead lines	The Town and Country Planning (General Permitted Development) (England) Order 2015 (Ref 3) and The Overhead Lines (Exemption) (England and Wales) Regulations 2009 (Ref 4) Component referred to as ‘ Exempt Overhead Line Works ’

- 1.2.2 The Substation Works will require consent from SHDC under the TCPA.
- 1.2.3 The new S37 4ZM Overhead Line Works and S37 2WS Overhead Line Works (collectively referred to as ‘the S37 Overhead Line Works’) will require consent from the Secretary of State for Energy Security and Net Zero under S37 of the Electricity Act 1989 (S37).
- 1.2.4 The Exempt Overhead Line Works constitute permitted development under Part 15 Class B of the Town and Country Planning (General Permitted Development) (England) Order 2015 and The Overhead Lines (Exemption) (England and Wales) Regulations 2009.
- 1.2.5 The Scheme Site Boundary, which consists of the land required to construct and operate the Scheme in its entirety, is illustrated on **Figure 1**. The areas of land required to construct and operate each individual component described in **Table 1.1** are also illustrated on **Figure 1**.
- 1.2.6 The Scheme in its totality is a standalone development to enable connection of the Outer Dowsing Offshore Wind Farm to the national electricity transmission system. Each component stated in **Table 1.1** above is required for the Scheme to fully function as part of the National Electricity Transmission System (NETS).

1.3 Purpose of this Report

- 1.3.1 The purpose of this report is to present the results of the non-breeding bird surveys undertaken and to inform the ecology baseline for the Scheme. This report has been prepared in support of the necessary consent applications required to deliver the Scheme. It has been informed by engagement between National Grid and the relevant consenting authorities.
- 1.3.2 The baseline non-breeding bird survey data has been collected across the Scheme Site Boundary in its entirety. However, the survey results in **Section 4** are presented in relation to each component of the Scheme as outlined in **Table 1.1**. This approach enables the relevant consenting authority to readily identify and consider only those survey results that are associated with the application before them, whilst also maintaining a clear understanding of the Scheme in its wider context.
- 1.3.3 The objectives of this report are to:
- 1) establish the presence, spatial distribution and usage of the defined Study Area (as described in section 3.1) by the target species (with consideration for Special Protection Areas (SPA) and Ramsar features) within the Study Area;
 - 2) determine the variation between birds recorded in flight and on the ground in order to understand any collision risk with infrastructure. Collision risk and any method for assessment is considered within the Ecological Impact Assessment;
 - 3) to highlight the temporal variations in species’ abundance, including highlighting any key species of value that may influence the design of the Scheme; and
 - 4) to provide baseline ornithological information to inform the assessment of impacts on non-breeding birds from the Scheme as part of the EclIA and/or **Habitats Regulations Assessment Report (HRA)** [document number GWNC-ARU-SS50-XXXXXX-RPT-ES-000014].

- 1.3.4 The assessment of potential impacts to non-breeding birds and mitigation (where required) of the Substation Works are be reported within the **Ecological Impact Assessment** [document number GWNC-ARU-SS50-XXXXXX-RPT-ES-000005].

2. Legislative and Policy Framework

2.1 Overview

2.1.1 Legislation and national and local planning policy relevant to the Scheme is described in the Planning, Design and Access Statement (TCPA application) and the Section 37 Statement (S37 application). Key legislation and policy specifically relevant to non-breeding birds is summarised in the following sections.

2.2 National Planning Policy Framework

2.2.1 The revised National Planning Policy Framework (NPPF) was published in December 2024 (Ref 5) and further amended on 7 February 2025. It is a material consideration for planning decisions. The NPPF establishes a presumption in favour of sustainable development (paragraph 11) as its central principle and requires the planning system to pursue three mutually supportive overarching objectives (economic, social and environmental objectives (paragraph 8)).

2.2.2 Chapter 15 of the NPPF is directly relevant to the receptors identified within this report. Paragraph 187 requires planning policies and decisions to protect and enhance sites of biodiversity value and to minimise impacts on valued habitats and species. Paragraph 193 establishes the key decision-making principles: where significant harm cannot be avoided through alternative siting, adequately mitigated, or as a last resort compensated for, planning permission should be refused; development on land within or outside a Site of Special Scientific Interest (SSSI), and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted; and development resulting in the loss or deterioration of irreplaceable habitats should be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists. Paragraphs 193(b), 194 and 195 afford strong protection to SSSIs and habitats sites, with the presumption in favour of sustainable development disapplied where a plan or project is likely to have a significant effect on such a site.

2.3 Status of Non-Breeding Birds

International Level

2.3.1 Threatened bird species are listed on Annex 1 of the European Union (EU) Birds Directive (Directive 79/409/EEC) (Ref 6) if they are:

- 1) in danger of extinction;
- 2) vulnerable to specific changes in their habitat;
- 3) considered rare due to small populations or restricted local distribution; and
- 4) requiring particular attention because of the specific nature of habitat.

2.3.2 Some bird species are listed as features of European designated sites, notably SPAs and Ramsar sites. SPAs are classified in accordance with Article 4 of the EC Birds

Directive (2009/147/EC) (Ref 7). The provisions of the Birds Directive are implemented and transposed to United Kingdom (UK) legislation through the Wildlife and Countryside Act (WCA) (Ref 10), and the Conservation of Habitats and Species Regulations 2017 (Ref 8). The Conservation of Habitats and Species Regulations 2017 transposes EC Habitats Directive (92/43/EEC) on the conservation of natural habitats and of wild fauna and flora into UK national law. Ramsar sites are also afforded protection under the Ramsar Convention 1971 (Ref 9).

- 2.3.3 These designations are applied to areas that support nationally important numbers of birds, the conservation of which is necessary for the maintenance of the range of that species across Europe. A site may be designated as an SPA based on its importance to breeding, non-breeding, or migratory birds. In the UK, SPA designations are underpinned by national legislation which identifies them as SSSIs.

National Level

- 2.3.4 A network of nationally designated sites has been established through the designation of SSSIs under the WCA 1981 (as amended), Part II, Section 28 (Ref 10). Sites are designated if they are of special interest by reason of their flora, fauna (e.g. birds), or geological or physiographical features. The protection afforded by the WCA means it is an offence to carry out or permit to be carried out any operation listed within the notification without the consent of the Statutory Nature Conservation Organisation (Natural England). The protection afforded to SSSIs is used to underpin the designation of areas at a European Level.
- 2.3.5 All wild birds, their nests and their eggs are protected by the WCA (Ref 10), Part I, Section 1. Offences under the WCA include intentionally or recklessly:
- 1) killing injuring or taking any wild bird;
 - 2) taking, damaging or destroying the nest of any wild bird whilst it is in use or being built; and
 - 3) taking or destroying the egg of any wild bird.
- 2.3.6 Birds listed on Schedule 1 of the WCA (Part I, Section 5 (5)) have further protection, making it an offence to intentionally or recklessly disturb parent birds while they are nesting, or their dependent young. Schedule 1 birds are reported in this document for wider consideration only, noting that this status is associated only with breeding, and not non-breeding status.

Species of Principal Importance

- 2.3.7 Species of concern in England may also be identified on a list of species and habitats where Priority Action¹ is required. This list is published under the Natural Environment and Rural Communities (NERC) Act 2006 (Ref 11), which came into force on 1 October 2006. Section 41 (S41) of the Act requires the Secretary of State for England to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. These are known as Priority Habitats

¹ Priority actions are specifically identified management activities, mitigation or restoration measures to stop decline, increase populations or secure habitat supporting threatened, rare or declining species. Such actions may include land management planning to prevent further biodiversity loss and enhance populations. Priority actions are typically defined within legally mandated biodiversity strategies, such as Section 41 of the NERC Act in England.

and Priority Species. The list has been drawn up in consultation with Natural England, as required by the NERC Act. The S41 list is used to guide decision makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the Act, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Birds of Conservation Concern

- 2.3.8 Conservation importance is ascribed to certain species by their presence on the Red List and Amber List of Birds of Conservation Concern 5 (BoCC) in the UK (Ref 12). Under BoCC birds are classified into three lists as follows:
- 1) Red List: species that are globally threatened, whose population or range has declined rapidly in recent years, and those whose populations have declined historically and not exhibited any signs of recovery. Species that have experienced a population decline of >50%;
 - 2) Amber List: species with an unfavourable conservation status in Europe, whose populations have declined moderately in recent years, including species that show a historical decline but whose populations have shown a substantial increase, species that are rare, with localised populations and those species of international importance with UK populations and species that have experienced a population decline or breeding range decline of 25% to 50%; and,
 - 3) Green list: All regularly occurring species that do not qualify under any of the Red or Amber criteria are green listed. The Green list also includes those species listed as recovering from historical decline in the last review that have continued to recover and do not qualify under any of the other criteria.
- 2.3.9 Although the BoCC lists confer no legal status in themselves, they are useful in evaluating the importance of bird species and assemblages.

County level

Lincolnshire Biodiversity Action Plan (LBAP)

- 2.3.10 The LBAP (Ref 13) is a mechanism to enable national targets to be delivered at a local level. It sets out local priorities for biodiversity conservation specific to Lincolnshire, the area in which the Scheme is located.
- 2.3.11 Relevant priority species listed in the LBAP include: grey partridge *Perdix perdix*, lapwing *Vanellus vanellus*, yellow wagtail *Motacilla flava*, skylark *Alauda arvensis*, corn bunting *Emberiza calandra*, linnet *Linaria cannabina*, yellowhammer *Emberiza citronella*, reed bunting *Emberiza schoeniclus*, turtle dove *Streptopelia turtur*, bullfinch *Pyrrhula pyrrhula*, starling *Sturnus vulgaris*, tree sparrow *Passer montanus*, snipe *Gallinago gallinago*, curlew *Numenius arquata*, redshank *Tringa totanus*, and barn owl *Tyto alba*.

Greater Lincolnshire Nature Recovery Strategy (GLNRS)

- 2.3.12 The GLNRS (Ref 15) is a spatial strategy aiming to identify and prioritise areas for nature recovery. This strategy guides local planning policy. It is currently published in draft form.

2.3.13 The priority species group listed within the GLNRS relevant to this assessment is migratory wading birds.

3. Methodology

3.1 Desk Study

- 3.1.1 Information on designated sites was compiled from MAGIC (Multi-Agency Geographic Information for the Countryside) website (Ref 16). Data on non-statutory designated sites was obtained from Lincolnshire Environmental Records Centre (Ref 14).
- 3.1.2 Populations of waterbirds, as features of SPAs and Ramsar sites, were determined based upon data obtained from the British Trust for Ornithology's (BTO) Wetland Bird Survey Data (WeBS data) (Ref 17). These data were cross-referenced against species records from non-breeding bird surveys to identify the percentage of designated site populations present within 500 m of the Scheme Site Boundary (this area is termed the "Study Area"). This in turn allowed for analysis of potential functional connectivity between the Scheme and nearby designated sites.
- 3.1.3 The areas searched for desk study data are based on the zones representing the areas within which effects could reasonably occur as a result of the Scheme.
- 3.1.4 As outlined further below, the search areas are defined as:
- 1) 20 km of the Scheme Site Boundary for international and national statutory designated sites of nature conservation importance;
 - 2) 5 km of the Scheme Site Boundary for National Nature Reserves (NNR) and Local Nature Reserves (LNRs);
 - 3) 2 km of the Scheme Site Boundary for Sites of Importance for Nature Conservation (SINCs) and non-statutory designated sites; and
 - 4) 2 km of the Scheme Site Boundary for records of protected and notable bird species.

Designated sites

- 3.1.5 The MAGIC website was reviewed to identify international (SPAs and Ramsar sites) and national (SSSIs) statutory designated sites of nature conservation importance within 20 km of the Scheme Site Boundary. 20 km is defined in line with Natural England guidance (Ref 18). Other statutory designated sites, such as NNRs and LNRs, were searched out within 5 km.
- 3.1.6 In addition, information on non-statutory designated sites within 2 km of the Scheme Site Boundary was obtained from the Greater Lincolnshire Nature Partnership (GLNP), including SINCs.

Bird records

- 3.1.7 Records of protected and notable bird species within 2 km of the Scheme Site Boundary were obtained, including species of principal importance. Species records have been curtailed to the last ten years (2016 - 2026) and if a species has not been

recorded within that period, earlier records have been reviewed to provide further contextual information, where relevant.

3.2 Target Bird Species

- 3.2.1 The non-breeding bird survey target species for the Scheme include the following groups:
- 1) all waterbirds;
 - 2) all gulls;
 - 3) all raptors; and
 - 4) noteworthy aggregations of any species.
- 3.2.2 Given the legislation and policy at European, national and local levels (see **Section 2**), several bird species were targeted more specifically for further consideration during the proposed bird surveys. These target bird species are those listed as qualifying features of SPAs, Ramsar sites and SSSIs within 20 km, and include non-breeding, migratory, and breeding species. For inclusivity, all breeding species listed as qualifying features were included, despite many breeding species being permanently absent over the winter period. These species are considered in order to inform any design changes, mitigation required and/or future assessments.

Internationally designated sites

- 3.2.3 Qualifying species of the SPAs and Ramsar sites of interest within 20 km of the Scheme Site Boundary are provided in **Table 3.1**.

Table 3.1 Qualifying avian species of internationally designated sites within 20 km of the Scheme Site Boundary

Qualifying Feature	The Wash SPA (Ref 19)	The Wash Ramsar (Ref 20)
Bar-tailed godwit (<i>Limosa lapponica</i>), non-breeding	X	X
Bewick's swan (<i>Cygnus columbianus bewickii</i>), non-breeding	X	
Black-tailed godwit (<i>Limosa limosa islandica</i>), non-breeding	X	
Common scoter (<i>Melanitta nigra</i>), non-breeding	X	
Common tern (<i>Sterna hirundo</i>), breeding	X	
Curlew (<i>Numenius arquata</i>), non-breeding	X	X
Dark-bellied brent	X	X

Qualifying Feature	The Wash SPA (Ref 19)	The Wash Ramsar (Ref 20)
goose (<i>Branta bernicla bernicla</i>), non-breeding		
Dunlin (<i>Calidris alpina alpina</i>), non-breeding	X	X
Gadwall (<i>Mareca strepera</i>), non-breeding	X	
Goldeneye (<i>Bucephala clangula</i>), non-breeding	X	
Grey plover (<i>Pluvialis squatarola</i>), non-breeding	X	X
Knot (<i>Calidris canutus</i>), non-breeding	X	X
Little tern (<i>Sternula albifrons</i>), breeding	X	
Oystercatcher (<i>Haematopus ostralegus</i>), non-breeding	X	X
Pink-footed goose (<i>Anser brachyrhynchus</i>), non-breeding	X	X
Pintail (<i>Anas acuta</i>), non-breeding	X	X
Redshank (<i>Tringa totanus</i>), non-breeding	X	X
Sanderling (<i>Calidris alba</i>), non-breeding	X	X
Shelduck (<i>Tadorna tadorna</i>), non-breeding	X	X
Turnstone (<i>Arenaria interpres</i>), non-breeding	X	X
Wigeon (<i>Mareca penelope</i>), non-breeding	X	
Wintering waterbird assemblage, non-breeding	X	X

Nationally Designated Sites

3.2.4 One relevant SSSI (designated for interest to birds), The Wash SSSI, is located approximately 5.5 km north east of the Scheme Site Boundary (Ref 21). It is designated for the following:

- 1) aggregations of breeding birds: common tern, little tern, redshank.

- 2) aggregations of non-breeding birds: avocet *Recurvirostra avosetta*, bar-tailed godwit, Bewick's swan, black tailed godwit, dark-bellied brent goose, common scoter, curlew, dunlin, gadwall, golden plover *Pluvialis apricaria*, goldeneye, grey plover, knot, oystercatcher, pink-footed goose, pintail, redshank, ringed plover *Charadrius hiaticula*, sanderling, shelduck, turnstone, whooper swan *Cygnus cygnus*, and wigeon.
- 3) aggregations of non-breeding birds: variety of wintering species.

3.3 Field Survey

- 3.3.1 The non-breeding bird surveys involved a variety of methods accounting for the variability of habitats used by winter birds. The survey methods were derived from current best practice as described in Bird Monitoring Methods (Ref 22) and generally followed the recommendations of Bird Survey Guidelines (Ref 23), unless specified specifically below.
- 3.3.2 All surveys were led by experienced ornithologists. Survey results were captured using paper maps, which were subsequently digitised. Details of weather, species present, numbers of individuals and the birds' behaviour were all recorded.
- 3.3.3 Survey dates and weather conditions are given in **Appendix A**.

Study Area

- 3.3.4 A Study Area of 500 m around the Scheme Site Boundary was utilised in order to capture birds using the wider area that would be potentially impacted by the Scheme, either through disturbance effects or through the general mobility of birds using a wider area of the landscape. The Scheme Site Boundary is defined as the total area covered by the four consenting regimes, as described in **Table 1.1**.

Vantage Point Surveys

- 3.3.5 Over the winter of 2022/2023, one Vantage Point (VP) was used to record bird species utilising habitats within the Scheme Site Boundary and the surrounding area (**Figure 2**). The same VP location was used in 2024/2025.
- 3.3.6 This VP was surveyed once per month between November 2022 and March 2023 (inclusive), and between October 2024 and March 2025 (inclusive) for a six-hour period each visit (6 hours per month). Target species, as detailed within section 3.2, were recorded, as well as incidental records of non-target species. Each VP was visited by a pair of surveyors who stood back-to-back facing surveying in 180-degree arcs, and up to 2 km.
- 3.3.7 In 2022/2023, each arc was split into a total of four 500 m intervals labelled A to D (inner to outer) with each bird recorded assigned to an interval. Details on each observation, including abundance, sex (where identifiable), behaviour notes, and whether in flight, were recorded. Flight lines were not mapped during the winter of 2022/23, though point data were assigned to flight or on the ground, as well as flight direction.
- 3.3.8 During 2024/2025 surveys, flight height was also recorded for each bird and categorised into the following bands to reflect the dimensions of the existing and

proposed pylons and any collision risk. The existing 4ZM pylons crossing the River Nene are between 53.5 m and 62.5 m.

- 1) Band A: <20 m flight height recorded = no risk of collision;
- 2) Band B: 21 – 50 m flight height recorded = potential risk of collision; and
- 3) Band C: >51 m = no risk of collision.

3.3.9 A passage VP was also located on the River Welland (**Figure 2**). Surveys were undertaken in July 2024 to September 2024 inclusive, and between March 2025 – May 2025 inclusive, to capture flightlines of any passage species associated with the river. Flightlines were recorded to understand how the Scheme may impact movement of birds along the river, particularly with regards to collision risk. The passage VP method followed the same approach for the 2024/2025 winter period, although 12 hours of survey were conducted each month to account for potentially increased movements of birds.

Transect Surveys – Walked and Driven

3.3.10 A walked transect was completed monthly through December 2022 to March 2023 inclusive, and a similar transect from October 2024 to March 2025 inclusive, to the north of the Scheme Site Boundary (**Figure 3**). These transects were utilised to supplement VPs by surveying habitat for target species, predominantly at a distance to VPs. Suitable habitats within 500 m of the Scheme Site Boundary were surveyed. The 2022/2023 route and 2024/2025 routes were selected to give a representative sample of the habitats within the site boundaries and wider contexts.

Driven Transect

3.3.11 A driven transect was completed in January 2023 and March 2023, and monthly between October 2024 and March 2025 inclusive. In 2023, the route followed Carrington Road, east of the Scheme Site Boundary. In 2024/2025, the route was not mapped, though the driven transect followed publicly accessible roads, where possible. These surveys had the intention of picking up flocks of larger species, e.g. geese and swans, or significant aggregations of non-breeding birds that are easily viewable.

Nocturnal Surveys

3.3.12 Following consultation with Natural England in October 2022, nocturnal surveys were recommended, should there be overlap with Impact Risk Zones (IRZ) of internationally designated sites for golden plover and lapwing. Noting that guidance from Natural England states golden plover and lapwing can have an IRZ of up to 5 km, they may also forage up to 15 km (Ref 18). As such, nocturnal surveys were also undertaken each month of the 2024/2025 winter (October to March, inclusive), using thermal cameras in the 5 km IRZ closest to the Study Area. Details on the nocturnal transect route can be found in (**Figure 7**).

3.4 Reporting Methods

Peak Counts

- 3.4.1 Peak counts of birds are assessed as the maximum number of individual members of a species recorded during a single visit. Recording peak counts provides the most precautionary measure, avoiding double counting.

Birds in Flight

- 3.4.2 As per best practice guidance, observations of birds in flight, and not associating with the site itself, are not included in species counts of the site. They are summarised in section 4.2.
- 3.4.3 Average height data was taken as a mean calculation of all flight heights for an individual flight.
- 3.4.4 Bird seconds is calculated as the sum of the seconds that each individual bird of a species spent at risk height, as defined in **Section 3.3.8**. Numbers of individuals at risk height represents the numbers of transits recorded of birds within the viewshed.

3.5 Assumptions and Limitations

- 3.5.1 VPs and transects were designed to provide representative coverage of the site's ecological characteristics. Although the entire Site was not covered by these routes/points, the habitats within the surveyed areas were comparable to those elsewhere on Site. On this basis, it is considered likely that the findings from the surveyed areas are broadly representative of conditions in areas across the site not directly surveyed. This limitation is therefore not considered to be significant.
- 3.5.2 To aid with analyses of data, records that were given the count '100+' or '>10' were given a whole number, therefore over or under-estimations of counts may be possible.
- 3.5.3 Flight height data was only recorded during VP surveys (and only in the second winter). Records with a 'null' or empty flight height were assumed to be birds on the ground, thus omitted from flight height analyses. Flight information for Year 1 of the non-breeding bird survey was omitted given the absence of directional information. Consequently only Year 2 data were used in flight analysis calculations.
- 3.5.4 It is likely counts may have been affected by the limitations stated above. However, based upon surveyors' observations and records collected and the optimal survey periods in which surveys were carried out, the survey effort and coverage is considered sufficient to ensure that numbers and distribution of target species recorded across the site are representative.
- 3.5.5 The existing pylons crossing the River Welland are at a maximum height of 62.5 m, whilst the other pylons in the general area are around 50 m at their highest point. Birds were considered to be at risk of collision when flying at heights between 21 – 50 m, known as Band B (as described in **Section 3.3.8**). This assumption excludes flights potentially at collision risk between 50 m and 62.5m (maximum pylon height). Any omitted flights are not considered to be a significant risk to the robustness of the assessment, given the dip of the lines with distance from the pylons (meaning that the majority of the line area falls below or close to 50 m). Consequently, focusing on

flights within Band B is considered a proportionate response to assessing collision risk, with accepted limitations. The findings presented in this study represent those at the time of survey and reporting, and data collected from available sources. Ecological surveys are limited by factors which affect the presence of species, such as weather conditions, migration patterns and behaviour.

- 3.5.6 Nevertheless, these surveys were conducted at the optimal survey periods. Every effort has been made to ensure that the findings of the study present as accurate an interpretation as possible of the status of non-breeding birds within the Site.

4. Results

4.1 Desk Study

4.1.1 The desk study identified a number of internationally, nationally and locally designated sites within the search areas. Only those sites are reported with reference to birds as a feature.

Internationally and Nationally Designated Sites

4.1.2 The Wash SPA, situated approximately 5.5 km north east of the Scheme Site Boundary, is recognised for its wintering and breeding waterbird species, which are of international importance. The Wash Ramsar site, also about 5.5 km north east of the Scheme Site Boundary (shown in **Figure 4**), is designated for its wintering bird features, as detailed in **Table 4.1**.

4.1.3 One nationally designated site relevant to birds, The Wash SSSI, is present within 20 km. The Wash SSSI is designated in part for its aggregations of non-breeding birds, as detailed in **Table 4.2**.

4.1.4 One LNR with relevance to breeding birds is present within 5 km of the Scheme Site Boundary: Vernatts LNR. This LNR is a council and volunteer run nature reserve transformed from wasteland. The area now has a woodland walk with bluebells and is a small haven for wildlife.

Table 4.1 Internationally designated sites with avian features within 20 km of the Scheme Site Boundary

Designated Site and description and/or evidence criteria (avian only)
The Wash SPA (~5.5 km north east of the Scheme Site Boundary)
Annex I species qualifying under Article 4.1 of Birds Directive:
<ul style="list-style-type: none">• Bar-tailed godwit <i>Limosa lapponica</i> (wintering)• Bewick's swan <i>Cygnus columbianus bewickii</i> (wintering)• Black-tailed godwit <i>Limosa limosa islandica</i> (wintering)• Common scoter <i>Melanitta nigra</i> (wintering)• Common tern <i>Sterna hirundo</i> (breeding)• Curlew <i>Numenius arquata</i> (wintering)• Dark-bellied brent goose <i>Branta bernicla bernicla</i> (wintering)• Dunlin <i>Calidris alpina</i> (wintering)• Gadwall <i>Anas strepera</i> (wintering)• Goldeneye <i>Bucephala clangula</i> (wintering)• Grey plover <i>Pluvialis squatarola</i> (wintering)• Knot <i>Calidris canutus</i> (wintering)

Designated Site and description and/or evidence criteria (avian only)

- Little tern *Sternula albifrons* (breeding)
- Oystercatcher *Haematopus ostralegus* (wintering)
- Pink-footed goose *Anser brachyrhynchus* (wintering)
- Pintail *Anas acuta* (wintering)
- Redshank *Tringa totanus* (wintering)
- Sanderling *Calidris alba* (wintering)
- Shelduck *Tadorna tadorna* (wintering)
- Turnstone *Arenaria interpres* (wintering)
- Wigeon *Mareca penelope* (wintering)

Under Article 4.2, The Wash qualifies as an internationally important wetland by supporting a wintering assemblage of over 20,000 waterbirds.

The Wash Ramsar (~5.5 km north east of the Scheme Site Boundary)

Ramsar criterion 5: Assemblages of international importance:

Species with peak counts in winter: 292,541 waterfowl (5-year peak mean 1998/99-2002/2003)

Ramsar criterion 6: species/populations occurring at levels of international importance.
Qualifying Species/populations:

- Eurasian oystercatcher *Haematopus ostralegus* (wintering)
 - Grey plover *Pluvialis squatarola* (wintering)
 - Red knot *Calidris canutus islandica* (wintering)
 - Sanderling *Calidris alba* (wintering)
 - Eurasian curlew *Numenius arquata* (wintering)
 - Common redshank *Tringa totanus* (wintering)
 - Turnstone *Arenaria interpres* (passage)
 - Pink-footed goose *Anser brachyrhynchus* (wintering)
 - Dark-bellied brent goose *Branta bernicla bernicla* (wintering)
 - Common shelduck *Tadorna tadorna* (wintering)
 - Northern pintail *Anas acuta* (wintering)
 - Bar-tailed godwit *Limosa lapponica lapponica* (wintering)
 - Dunlin *Calidris alpina alpina* (wintering)
-

4.1.5 **Table 4.2** lists statutory sites nationally designated within 20 km of the Scheme Site Boundary.

Table 4.2 Statutory nationally designated sites within 20 km of the Scheme Site Boundary

Designated Site and description and/or evidence criteria (avian only)

The Wash SSSI (~5.5 km north east of the Scheme Site Boundary)

Designated Site and description and/or evidence criteria (avian only)

It is designated for the following:

- aggregations of breeding birds: common tern, little tern, redshank.
- aggregations of non-breeding birds: avocet, bar-tailed godwit, Bewick's swan, black tailed godwit, dark-bellied brent goose, common scoter, curlew, dunlin, gadwall, golden plover, goldeneye, grey plover, knot, oystercatcher, pink-footed goose, pintail, redshank, ringed plover, sanderling, shelduck, turnstone, whooper swan, and wigeon.
- aggregations of non-breeding birds: variety of wintering species.

Vernatts LNR (4.3 km south west of Scheme Site Boundary)

This LNR is a council and volunteer run nature reserve transformed from wasteland. The area now has a woodland walk with bluebells and is a small haven for wildlife. Wildflower meadow that in summer is dazzling with bright flowers like yellow rattle and knapweed. These attract many colourful insects including damselflies and small copper butterflies. The other half of the reserve is a mixture of wetland habitats including reedbeds, marsh and a large pond. This is home for the elusive water vole, reed warblers and buzzes with insect life.

Non-statutory Designated Sites

4.1.6 Non-statutory designated sites, within 2 km of the Scheme Site Boundary, and which have avian features, are noted within **Table 4.3**.

Table 4.3 Non-statutory designated sites within 2 km of the Scheme Site Boundary

Site name	Distance & orientation from the Scheme Site Boundary	Description and/or evidence criteria (Avian only)
Risegate Eau Local Wildlife Site (LWS)	Within the Scheme Site Boundary, north	Species recorded include: reed warbler, kingfisher, common snipe, grey heron, moorhen, green sandpiper.
Vernatt's Drain LWS	130 m west	A good range of fauna, including breeding populations of reed and sedge warblers, reed bunting, and sand martin.
Moulton River LWS	2.1 km and 5.9 km north east	Species recorded include: mallard, reed bunting, sedge warbler, common snipe, little egret, swallow, skylark, linnet, and the declining corn bunting.
Spalding Cemetery LWS	4.6 km south west	Site is adjacent to the Vernatt's LNR and Vernatt's Drain wildlife corridor. No birds are listed on the citation.
Surfleet Seas End Saltmarsh LWS	120 m and 1 km west	The site habitats consist of tidal saltmarsh and calcareous grassland this stretch of river is known to be valuable for birds with regular visits from

waders, birds of prey, sand martins, and many others.

Bird Records

- 4.1.7 GLNP returned 80 records of 30 bird species out to 2 km from the Scheme Site Boundary. The conservation status of these species are:
- 1) 26 of these records belong to 13 species categorised as Schedule 1 species (as listed on the WCA (Ref 10));
 - 2) Eight species are listed as being on Annex I of the Birds Directive;
 - 3) 11 species are categorised as S41 species of principal importance in England;
 - 4) On the Red list (BoCC) 13 species were categorised; and
 - 5) On the Amber list (BoCC) 11 species were categorised.

4.2 Field Survey

- 4.2.1 A total of 26 target species were recorded utilising the Study Area during the non-breeding bird surveys, across the two-year survey programme. These comprise four species of wader, six species of Anseriformes (ducks, geese, and swans), five species of gull, four raptor species and seven other waterbird species. There were 23 other non-target species also recorded incidentally, with multiple species of conservation concern recorded. Of the individuals recorded during the two winter survey periods (transect and VPs), 67% were in flight. Records in flight are discussed in section 4.2.

Study Area Bird Distribution

- 4.2.2 Multiple discreet areas within the Study Area were identified as having particular interest for non-breeding birds. These areas are summarised below.
- 4.2.3 The banks of the River Welland in the north of the Study Area were found to have comparatively high activity levels across years, with waterfowl including mallard *Anas platyrhynchos*, wigeon, and teal *Anas crecca*, and gulls including common gull *Larus canus*, herring gull (*Larus argentatus*), and black-headed gull *Chroicocephalus ridibundus* identified in this area on multiple visits. Other waterfowl including little grebe *Tachybaptus ruficollis*, mute swan *Cygnus olor*, goosander *Mergus merganser*, grey heron *Ardea cinerea*, and moorhen *Gallinula chloropus* were also identified in this area on at least one visit.
- 4.2.4 In the south of the site, along the unmarked lane running east off of Stone Gate, there was also a cluster of activity. This was in part within trees surrounding farmland buildings, but was largely within the agricultural fields to the north and south of this lane. Species recorded within this area include kestrel *Falco tinnunculus*, woodpigeon *Columba palumbus*, meadow pipit *Anthus pratensis*, redwing *Turdus iliacus*, black-headed gull, herring gull, common gull, and buzzard *Buteo buteo*.
- 4.2.5 The wider landscape, comprised of monoculture fields, supported a general assemblage with lower activity. Details on spatial variation can be found in **Figure 5**.

Substation Works

- 4.2.6 Within the Substation Works Site Boundary (including the temporary construction compound), bird activity was generally limited to gull species including black-headed gull, common gull and herring gull, and raptor activity including kestrel, buzzard, and peregrine *Falco peregrinus* (**Figure 5**).
- 4.2.7 In January and March 2023, December 2024, and March 2025, no birds were recorded within the Substation Works Site Boundary.

Exempt Overhead Line Works

- 4.2.8 The Exempt Overhead Line Works (see **Figure 1**) in the north west of the Scheme Site Boundary is the sole component that will directly interact with the River Welland. This north western extent, specifically along the banks of the river, had higher concentrations of wader, gull and Anseriformes species than the rest of the site, with consistent observations of mallard, wigeon, teal, black-headed gull, and herring gull, as well as intermittent occurrences of wader and other waterbird species.

S37 Overhead Line Works

- 4.2.9 Activity within the S37 Overhead Line Works Site Boundary was limited. The linear element of the boundary extending south had very low numbers of birds recorded, with one black-headed gull recorded in January 2025. The northern extent of this boundary, which intersects with and overlaps the Substation Works Site Boundary (see section 4.2), target species activity was also limited (**Figure 5**).

Yearly Variation

Transect, Drive-over and VP surveys

- 4.2.10 The following results summarise the records of birds on the ground from the 2022/2023 VP, transect, and drive-over surveys, from the Study Area.
- 4.2.11 A total of ten target species were observed between November 2022 and March 2023, inclusive.
- 4.2.12 A total of 26 target species were observed between October 2024 and March 2025 inclusive.
- 4.2.13 Survey effort in the second winter (2024/2025) was higher, with a full season of surveys completed October to March, inclusive. As such, the two years cannot be totally compared. Nevertheless, diversity in 2022/2023 was generally lower, with species diversity in all surveyed months found to be lower than in the same month in 2024/2025 (**Table 4.4**).

Table 4.4 Total species diversity by month across the two survey periods

Month	Species richness	
	2022-2023	2024-2025
October	n/a	13
November	n/a	10

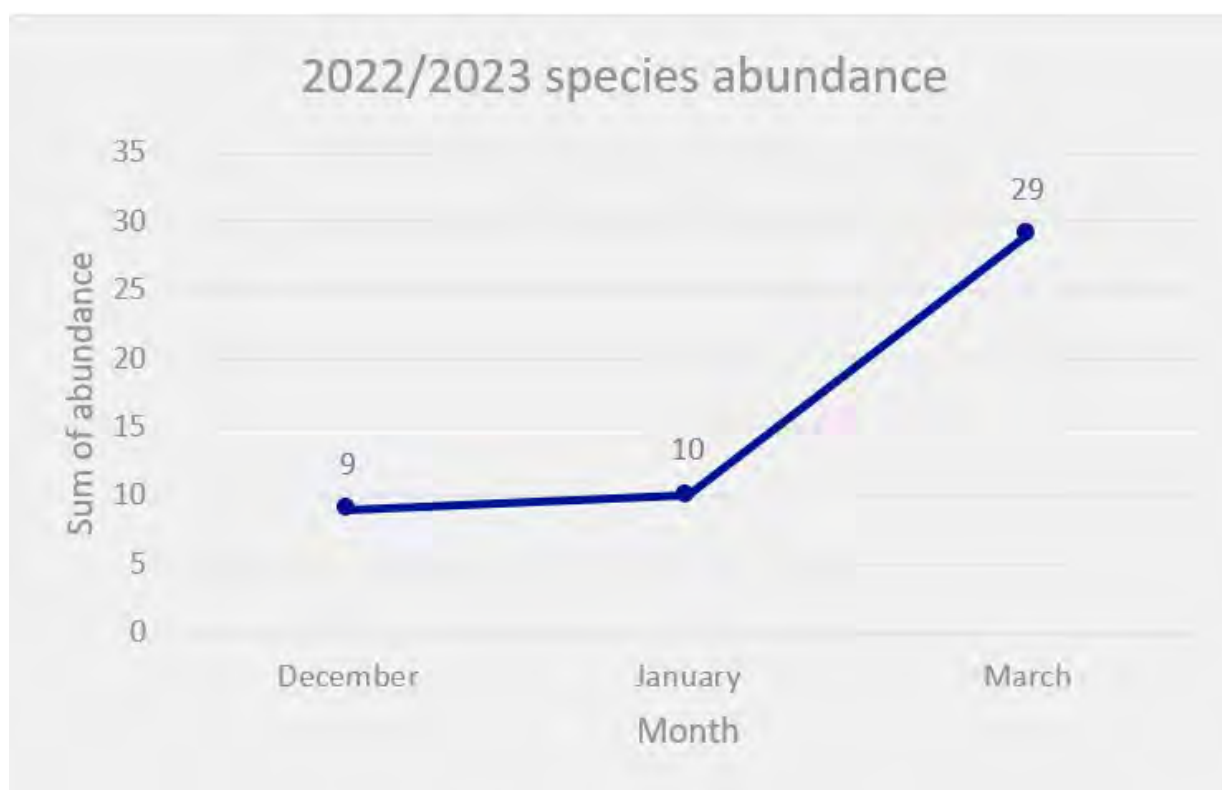
Month	Species richness	
	2022-2023	2024-2025
December	5	8
January	5	15
February	n/a	4
March	8	12

Monthly variation

2022/2023

- 4.2.14 The number of target species identified per survey was consistent in December and January, with an increase in species recorded in March (see **Image 4.1**), from the Study Area (as defined in **Section 3.3**).
- 4.2.15 The highest total number of target birds was recorded in March, with 133 individuals recorded. The most commonly occurring species in 2022/2023 was mallard, which was observed during all visits, with a peak count of 112 in March. The peak count of redshank over both survey periods was observed in December 2022 (peak count ten). Multiple species were observed in only one of the three survey months, with no clear pattern of attendance. These species included teal and wigeon, redshank, and kestrel.

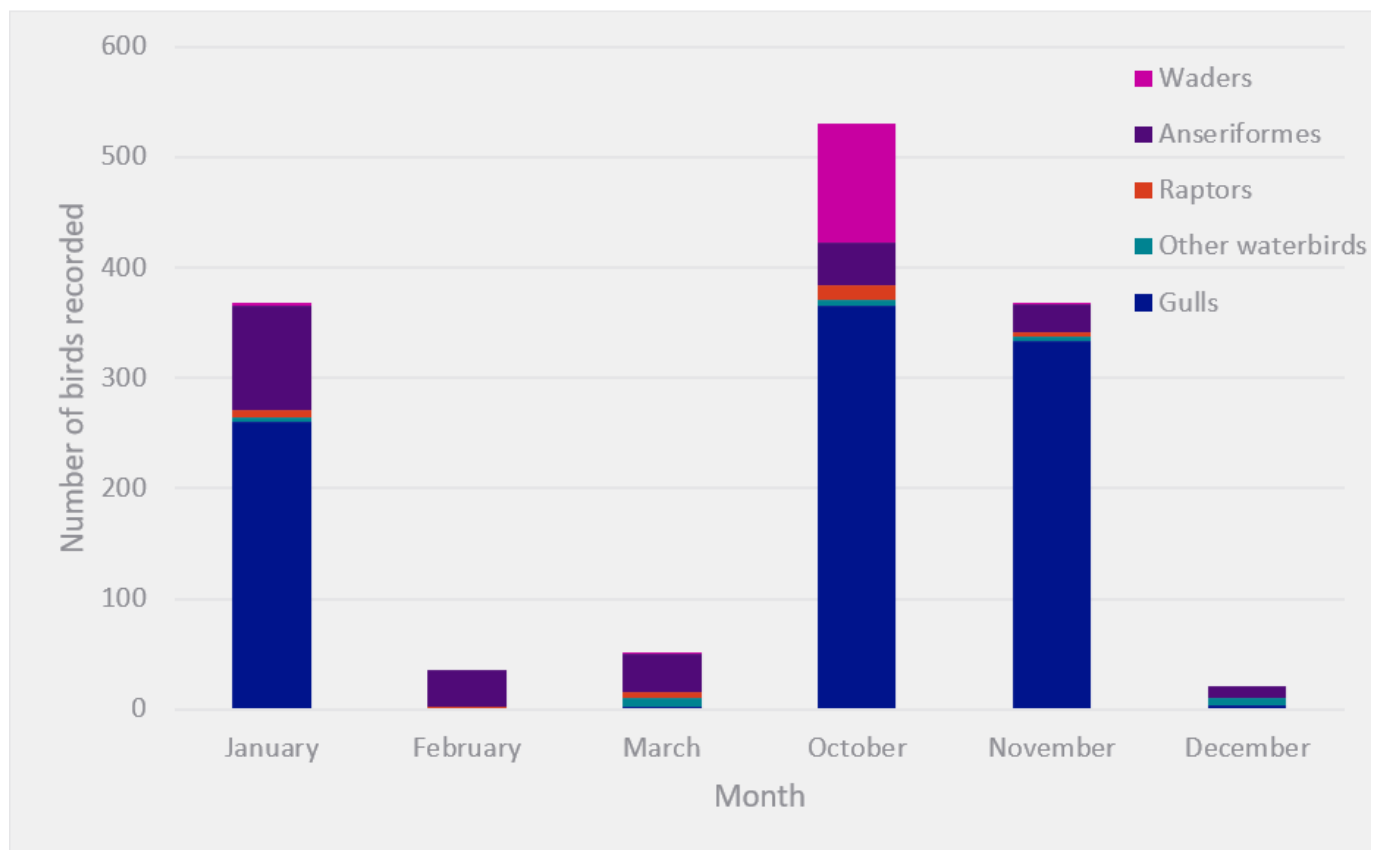
Image 4.1 Species abundance across surveyed months in 2022/2023. Data use VP, transect and drive-over data of birds on the ground.



2024/2025

- 4.2.16 The greatest total count of target birds was recorded in October 2024, with 531 individuals recorded (target species only).
- 4.2.17 Gull activity was relatively uniform across months, with common gull recorded in all months but February, and black-headed gull observed in large aggregations in October, November, and January, with a peak count of 343 in October.
- 4.2.18 Anseriformes activity was varied, with teal observed in December and January only (peak count 16), and wigeon observed in November, January and February (peak count 32). Mallard were observed during every month in the 2024/2025 wintering bird survey period, with a peak count of 43 in January.
- 4.2.19 Wader activity was limited, with lapwing observed only in October (peak count 37, with one group of 25 adjacent to the Scheme Site Boundary on the east and a group of 12 located approximately 100 m north of the Scheme Site Boundary), a single oystercatcher *Haematopus ostralegus* recorded in March (approximately 250 m east of the Substation Works Site Boundary on the bank of the River Welland) and redshank observed only in January (outside of the Scheme Site Boundary on the bank of the River Welland, peak count two). Golden plover was observed within the southern half of the Scheme Site Boundary in October with a count of 71 and an individual was recorded in November, approximately 100 m north of the Scheme Site Boundary. **Image 4.2** shows the abundance of species groups across the 2024/2025 survey period. The location of these species records can be seen in (**Figure 5**).

Image 4.2 Species abundance of non-breeding bird surveys by month across 2024/2025 (VP, transect and drive-over data of birds on the ground).



- 4.2.20 Several species were observed only in flight over the Study Area, from transect and drive-over data across 2022/2023 and 2024/2025, comprising:

- 1) brent goose *Branta bernicla* - observed only in December 2022 (one flight, peak count of 2000);
- 2) greylag goose *Anser anser* - observed only in December 2024 (peak count of four);
- 3) marsh harrier *Circus aeruginosus* - observed only in February 2025 (peak count of one);
- 4) barn owl *Tyto alba* – observed only in March 2025 (peak count of one);
- 5) pink-footed goose - observed in November (four flights, peak count of 50) and December 2024 (two flights, peak count of 1208);
- 6) shelduck - observed only in March 2023 (peak count of four);
- 7) snipe - observed in December 2022 and December 2024 (peak count of 42);
- 8) sparrowhawk *Accipiter nisus* - observed only in November 2024 (peak count of two);
- 9) turnstone - observed only in December 2024 (peak count of three);
- 10) whooper swan – observed only in January 2025 (one flight, peak count of eight); and
- 11) woodcock *Scolopax rusticola* - observed only in February 2023 (peak count of one).

Vantage Point Flight Data

Winter

- 4.2.21 **Table C.1** within **Appendix C** shows the species identified during the 2024 winter passage surveys (October 2024 to March 2025) with data presented on flight information, including height and numbers of individuals at risk height. There were 12 species recorded during the winter VP surveys. All species recorded were found to be flying at collision risk height (Band B) as specified in **Section 3.3.8**. Notably, pink-footed goose and lapwing were recorded as flying at collision height for the largest amount of time. Numerous species spent over 1000 seconds at collision risk height. The most recorded numbers of flights were from pink-footed goose, then lapwing, and then black-headed gull. All other species had less than 25 flights across the 36 hours of observation. Winter VP flight data can be found in **Figure 6**.

Passage

Spring passage

- 4.2.22 **Table C.2** within **Appendix C** shows the species identified during the 2024 spring passage surveys with data presented on flight information, including height and numbers of individuals at risk height. There were 15 species recorded during the spring passage VP surveys. All records were of species flying at collision risk height (Band B). The highest bird seconds at collision height was black-headed gull. Other gull species were also identified to spend significant time at collision height. Wigeon also spent 5100 seconds at collision risk height, and marsh harrier spent 2965 seconds. The most recorded numbers of flights were from black-headed gull, then

herring gull, and then wigeon. All other species had less than 156 flights across the 36 hours of observation (over three months). Spring passage flight data can be found in **Figure 6**.

Autumn passage

- 4.2.23 **Table C.3** within **Appendix C** shows the species identified during the 2024 autumn passage surveys with data presented on flight information, including height and numbers of individuals at risk height. There were 30 target species recorded, of which 16 species had flights recorded at collision risk height. The highest bird seconds at collision height was black-headed gull. Whooper swan was recorded for 3,430 seconds at collision risk height. Teal was recorded for 3,840 seconds at collision risk height. The most recorded numbers of flights were from black-headed gull. All other species had less than 14 flights across the 36 hours of observation (over three months). Autumn passage flight data can be found in **Figure 6**.
- 4.2.24 **Table C.4** within **Appendix C** summarises the species observed during the spring and autumn passage surveys, and their average flight heights.

Nocturnal surveys

- 4.2.25 Low activity was recorded during nocturnal surveys. Various species, comprising lapwing, mallard teal, wigeon, mute swan, golden plover and barn owl, were observed in low numbers. These occurrences were observed north east of the Scheme Site Boundary in grassland/cropland fields. **Table 4.5** summarises these occurrences. Nocturnal survey results can be found in **Figure 7**.

Table 4.5 Nocturnal occurrences of species during the non-breeding bird surveys.

Species	Month and Year	Abundance
Golden plover	November 2024	1
Lapwing	October 2024	12
Teal	January 2025	11
Wigeon	January 2025	4
Golden plover	March 2025	1
Wigeon	March 2025	2
Mallard	March 2025	14
Mute swan	March 2025	2
Barn owl	March 2025	1

Bird counts in relation to internationally and nationally designated sites

4.2.26 In addition to the qualifying species listed below, these internationally and nationally designated sites are designated for their assemblages of non-breeding birds and waterbirds.

The Wash SPA and Ramsar

4.2.27 Four qualifying species for The Wash SPA were recorded on the ground during the non-breeding bird surveys (observed from transect, VP and/or drive-over surveys): gadwall, redshank, oystercatcher and wigeon. **Table D.1** within **Appendix D** shows the qualifying and assemblage species identified during the non-breeding bird surveys, and the percentage of these species compared to the designated site population. None of these species have an IRZ overlapping with the Study Area (**Table 4.6**).

4.2.28 Three qualifying species for The Wash Ramsar were identified from non-breeding bird surveys: redshank, oystercatcher and wigeon. **Table D.1** within **Appendix D** shows the qualifying species identified during the non-breeding bird surveys, and the percentage of these species compared to the designated site population. None of these species have an IRZ overlapping with the Study Area.

4.2.29 A qualifying feature for both of these designations is their non-breeding waterbird assemblage. A breakdown of non-breeding waterbirds recorded during the survey programme, and details pertaining to their relationship to these designating sites, can be found in **Table D.1** within **Appendix D**. None of these species have a stated IRZ overlapping with the Study Area.

4.2.30 There were six species recorded in flight in the area, which are either qualifying features (pink-footed goose and brent goose) and/or an assemblage feature (whooper swan, greylag goose, lapwing and golden plover), with overlapping IRZs. Apart from lapwing and golden plover, the numbers of flights of these species were relatively small with only one flight each for pink-footed goose, brent goose, whooper swan, and greylag goose. Flights for lapwing and golden plover were relatively modest in both wintering periods, with birds seen most months in flight (**Table B.1** within **Appendix B**).

Table 4.6 Qualifying species of The Wash SPA and Ramsar recorded during the non-breeding bird surveys on the ground.

Qualifying species	IRZ (m)	Peak count	Percentage of designated site population (%)	Number of months recorded	Closest distance to designated site (m)
The Wash SPA					
Gadwall	500	4	1.90	2	6,982
Wigeon	2,000	32	0.29	5	5,504
Redshank	2,000	10	0.18	2	6,446
Oystercatcher	2,000	1	0.01	1	5,546

The Wash Ramsar					
Redshank	2,000	10	0.18	2	6,446
Wigeon	2,000	32	0.29	5	5,504
Oystercatcher	2,000	1	0.01	1	5,546

The Wash SSSI

- 4.2.31 All waterbirds recorded from transect, VP and/or drive-over data are shown in **Table B.1** within **Appendix B**. None of these species have a stated IRZ overlapping with the Study Area.

Birds of Conservation Concern

- 4.2.32 The following species were recorded on the ground during the transect, VP, and/or drive-over surveys. Further detail on occurrences can be found in **Appendix B**.

BoCC Red List

- 4.2.33 On the BoCC Red List (Ref 12), 13 species were recorded during the non-breeding bird surveys. These comprise corn bunting, fieldfare *Turdus pilaris*, greenfinch *Chloris chloris*, grey partridge, herring gull, house sparrow *Passer domesticus*, lapwing, linnet, mistle thrush *Turdus viscivorus*, skylark, starling, whinchat *Saxicola rubetra*, and yellowhammer. Whinchat was recorded on one occasion in November 2024. This occurrence was likely a late migrating or over-wintering individual (**Appendix B**).

BoCC Amber List

- 4.2.34 On the BoCC Amber list (Ref 12), 21 species were recorded during the non-breeding bird surveys. These comprise black-headed gull, common gull, dunnock *Prunella modularis*, gadwall, great black-backed gull *Larus marinus*, kestrel, lesser black-backed gull, mallard, meadow pipit, moorhen, redshank, redwing, reed bunting, rook *Corvus frugilegus*, song thrush *Turdus philomelos*, stock dove *Columba oenas*, teal, wigeon, woodpigeon, oystercatcher, and wren *Troglodytes troglodytes* (**Appendix B**).

Annex 1

- 4.2.35 Six species listed under Annex 1 of the EU Birds Directive (Ref 6) were recorded during the non-breeding bird surveys. These comprise whooper swan, marsh harrier, little egret *Egretta garzetta*, peregrine falcon, golden plover and red kite *Milvus milvus* (**Appendix B**).

Section 41

- 4.2.36 Under Section 41 of the NERC (Ref 11), 12 species were identified during the non-breeding bird surveys. These comprise corn bunting, dunnock, grey partridge, herring gull, house sparrow, lapwing, linnet, reed bunting, skylark, song thrush, starling, and yellowhammer (**Appendix B**).

Schedule 1 WCA

- 4.2.37 Four species listed on Schedule 1 of the WCA (Ref 10) were recorded during the non-breeding bird surveys. These comprised fieldfare, peregrine falcon, red kite, and redwing (**Appendix B**).

Lincolnshire LBAP species

- 4.2.38 Ten species listed as priority species within the Lincolnshire LBAP (Ref 13) were identified the non-breeding bird surveys. These comprise corn bunting, grey partridge, lapwing, linnet, reed bunting, skylark, starling, yellowhammer, house sparrow, and song thrush.

GLNRS species

- 4.2.39 Four species that fit into the 'migratory wading birds' key species category within the GLNRS (Ref 15), including golden plover, oystercatcher, lapwing, and redshank, were identified during the non-breeding bird surveys.

5. Conclusion

- 5.1.1 A total of 26 target species were recorded on the ground during the non-breeding bird surveys, across the two-year survey programme. These comprise four species of wader, seven species of Anseriformes (ducks, geese, and swans), five species of gull, four raptor species, and five other waterbird species. The target species recorded included a total of 13 BoCC Red List species, 21 BoCC Amber List species, six Annex 1 species, 12 Section 41 species, four Schedule 1 species, and four GLNRS priority species.
- 5.1.2 Field surveys indicate that the site is utilised by a variety of target species, particularly species known to utilise arable land during winter including gulls and waders, and other waterfowl that use the habitats adjacent to/included within the River Welland.
- 5.1.3 Any impact from the Scheme on features of designated sites, e.g., non-breeding birds, have been evaluated as part of the **Ecological Impact Assessment and Habitats Regulations Assessment Report**, to support the planning application following appropriate guidelines. Data collected from the accompanying breeding bird surveys will be used in conjunction with the non-breeding bird survey results to provide a comprehensive view of the use of the site and surrounding habitat by notable and protected bird species.

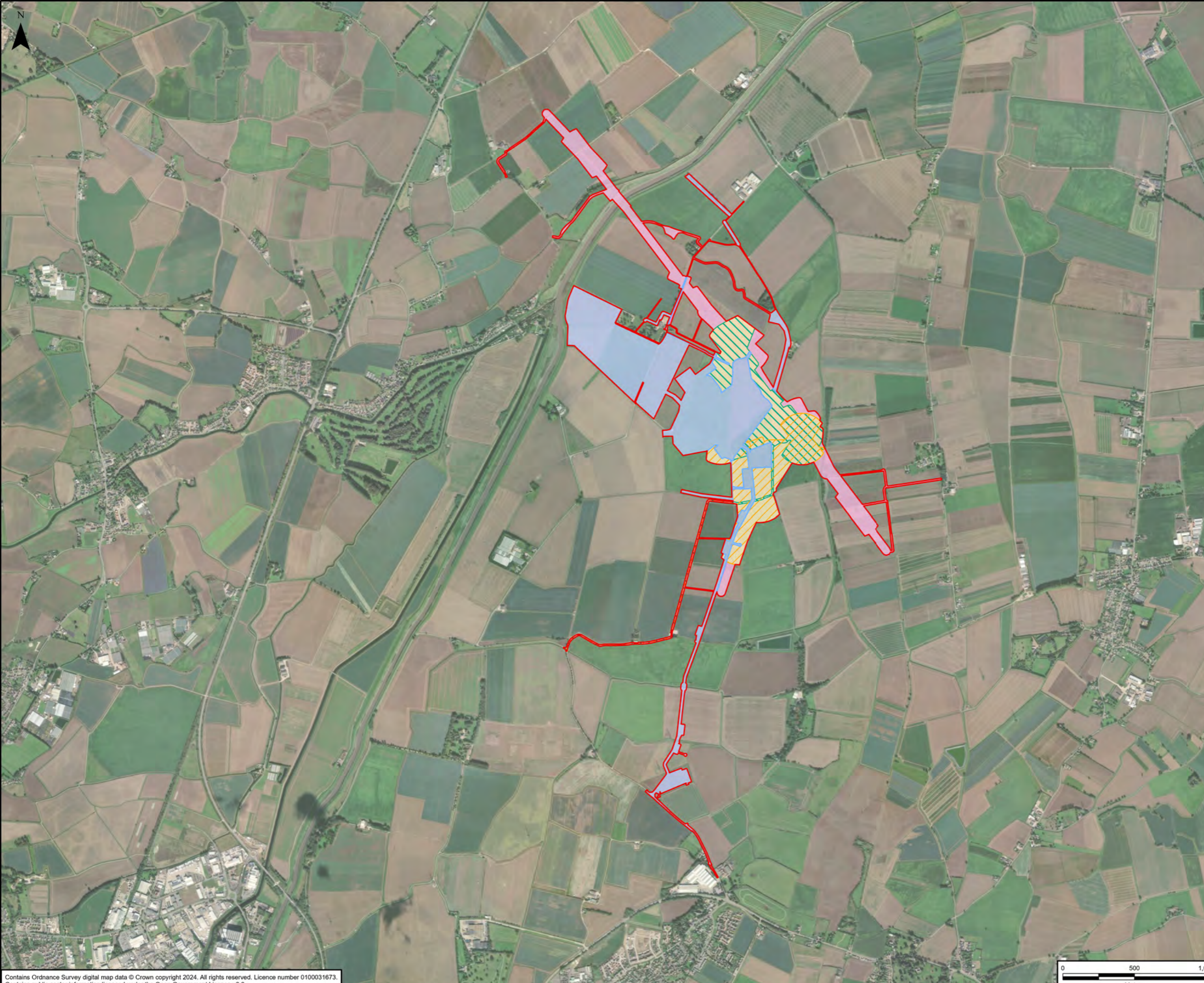
References

- Ref 1 Town and Country Planning Act 1990. Available online: https://www.legislation.gov.uk/ukpga/1990/8/pdfs/ukpga_19900008_en.pdf [Accessed 30 April 2026]
- Ref 2 Electricity Act 1989. Available online: <https://www.legislation.gov.uk/ukpga/1989/29/contents> [Accessed 30 April 2026]
- Ref 3 The Town and Country Planning (General Permitted Development) (England) Order 2015. Available online: <https://www.legislation.gov.uk/uksi/2015/596/contents> [Accessed 30 April 2026]
- Ref 4 The Overhead Lines (Exemption) (England and Wales) Regulations 2009. Available online: <https://www.legislation.gov.uk/uksi/2009/640/contents/made> [Accessed 30 April 2026]
- Ref 5 Ministry of Housing, Communities and Local Government (2024). National Planning Policy Framework. Available online: https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf [Accessed 31 March 2026].
- Ref 6 European Commission. (2022) Wild Birds: Threatened bird species in Annex 1. Available online: https://ec.europa.eu/environment/nature/conservation/wildbirds/threatened/index_en.htm [Accessed 30 April 2026].
- Ref 7 European Union (2010), Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. Available online: https://environment.ec.europa.eu/topics/nature-and-biodiversity/birds-directive_en [Accessed 30 April 2026].
- Ref 8 UK Statutory Instruments (2017), The Conservation of Habitats and Species Regulations 2017. Available online: <https://www.legislation.gov.uk/uksi/2017/1012/contents/made> [Accessed 30 April 2026].
- Ref 9 Ramsar (1971), Convention on Wetlands of International Importance especially as Waterfowl Habitat. Available online: https://www.ramsar.org/sites/default/files/documents/library/current_convention_text_e.pdf [Accessed 30 April 2026].
- Ref 10 UK Public General Acts (2025), Wildlife and Countryside Act 1981 (as amended), Available online: <https://www.legislation.gov.uk/ukpga/1981/69> [Accessed 30 April 2026].
- Ref 11 UK Government General Acts, (2006). Natural Environment and Rural Communities Act 2006 Chapter 16. Available online: https://www.legislation.gov.uk/ukpga/2006/16/pdfs/ukpga_20060016_en.pdf [Accessed 30 April 2026].

- Ref 12 Royal Society for the Protection of Birds et al., (2021), [online]. Birds of Conservation Concern 5. Available online: <https://www.bto.org/sites/default/files/publications/bocc-5-a5-4pp-single-pages.pdf> [Accessed 30 April 2026].
- Ref 13 Lincolnshire County Council, (2011). Lincolnshire Biodiversity Action Plan. Available online: <https://www.nelincs.gov.uk/wp-content/uploads/2016/02/201110-LincolnshireBAP-3rd-edition.pdf> [Accessed 30 April 2026].
- Ref 14 Lincolnshire County Council, Greater Lincolnshire Local Nature Recovery Strategy. Available online: <https://www.glinclnrs.org.uk/> Accessed 03/02/2026.
- Ref 15 Greater Lincolnshire Nature Partnership (2026) Lincolnshire Environmental Records Centre. Available online: <https://glnp.org.uk/our-services/lincolnshire-environmental-records-centre> [Accessed 30 April 2026].
- Ref 16 Defra (2026), Magic Map. Available online: <https://magic.defra.gov.uk/MagicMap.aspx> [Accessed 30 April 2026].
- Ref 17 British Trust for Ornithology (BTO) (2026) Wetland Bird Survey Data. Available online: <https://www.bto.org/get-involved/volunteer/projects/wetland-bird-survey> [Accessed 30 April 2026].
- Ref 18 Natural England, (2019). Impact Risk Zones Guidance Summary Sites of Special Scientific Interest Notified for Birds. Version 1.1.
- Ref 19 Natural England (2026) Designated Sites View, The Wash SPA. Available online: <https://designatedsites.naturalengland.org.uk/SiteGeneralDetail.aspx?SiteCode=UK9008021&SiteName=the%20wash&countyCode=&responsiblePerson=&SeaArea=&IFCAAArea=> [Accessed 30 April 2026].
- Ref 20 Natural England (2026) Designated Sites View, The Wash Ramsar. Available online: <https://designatedsites.naturalengland.org.uk/SiteGeneralDetail.aspx?SiteCode=UK11072&SiteName=the%20wash&countyCode=&responsiblePerson=&SeaArea=&IFCAAArea=> [Accessed 09/02/2026]
- Ref 21 Natural England (1983) The Wash. Available online: <https://designatedsites.naturalengland.org.uk/PDFsForWeb/Citation/1002591.pdf> [Accessed 30 April 2026].
- Ref 22 Gilbert, G., Gibbons, D.W., & Evans, J. (1998) *Bird Monitoring Methods: A Manual of Techniques for UK Key Species*. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.
- Ref 23 Bird Survey & Assessment Steering Group. (2025). Bird Survey Guidelines for assessing ecological impacts. Available at: <https://birdsurveyguidelines.org> [Accessed 30 April 2026].

Figures

Figure 1 Scheme Site Boundary



- Scheme Site Boundary
- Substation Works Site Boundary
- S37 4ZM/2WS Overhead Line Works Site Boundary
- Exempt Overhead Line Works Site Boundary
- S37 - 4ZM - OHL Works Site Boundary
- S37 - 2WS - OHL Works Site Boundary

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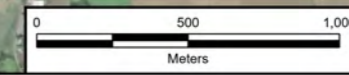
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Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

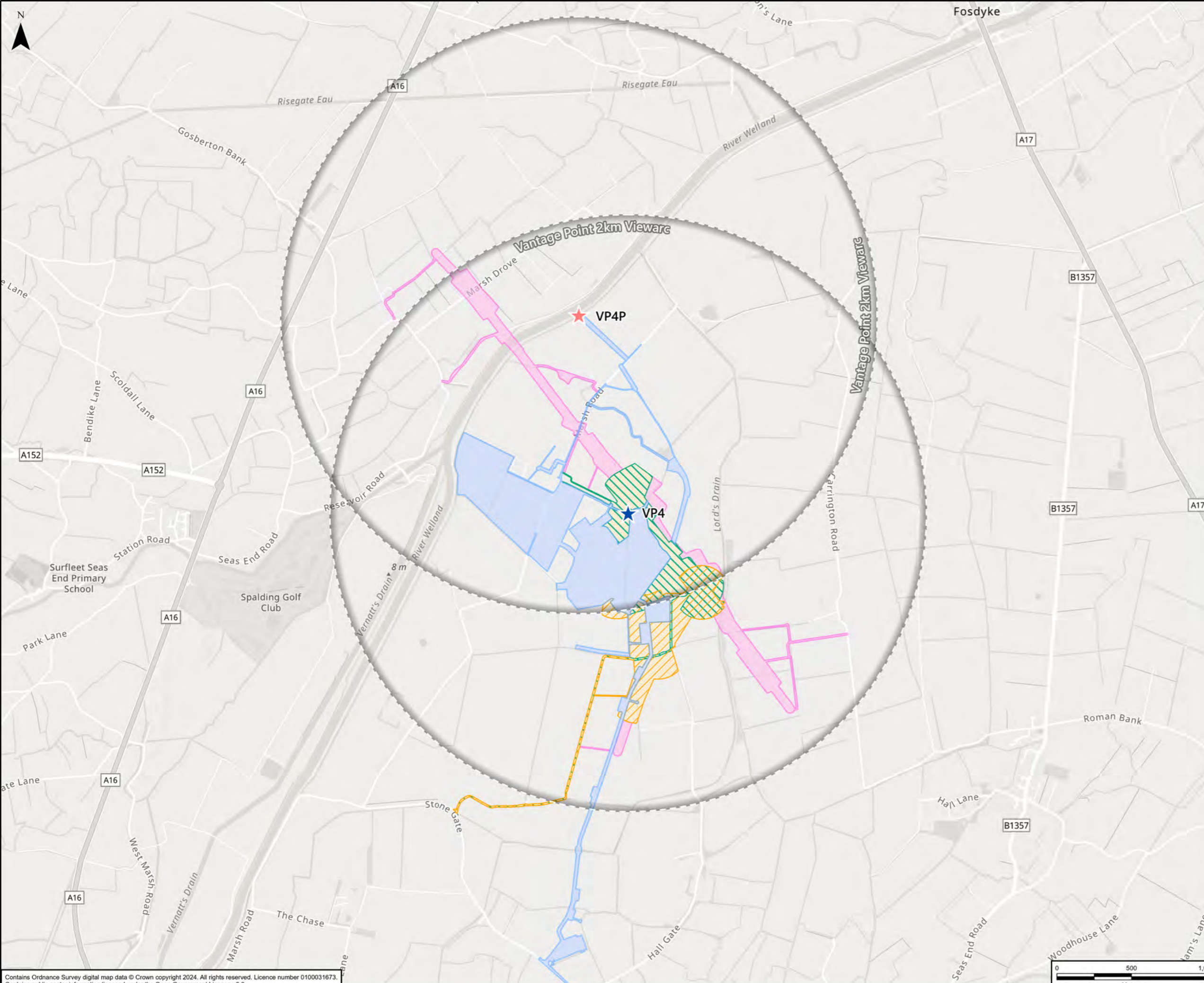
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**Figure 2 Vantage point locations for
2022/2023 survey period and
2024/2025 survey period (diurnal)**



- Legend**
- Substation Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
 - Exempt Overhead Line Works Site Boundary
 - S37 - 2WS - OHL Works Site Boundary
 - S37 - 4ZM - OHL Works Site Boundary
 - ★ Vantage Points Winter 2024/2025
 - ★ Vantage Points Winter 2022/2023

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NON-BREEDING BIRD VANTAGE POINT LOCATIONS**

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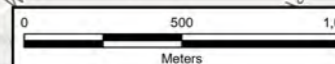
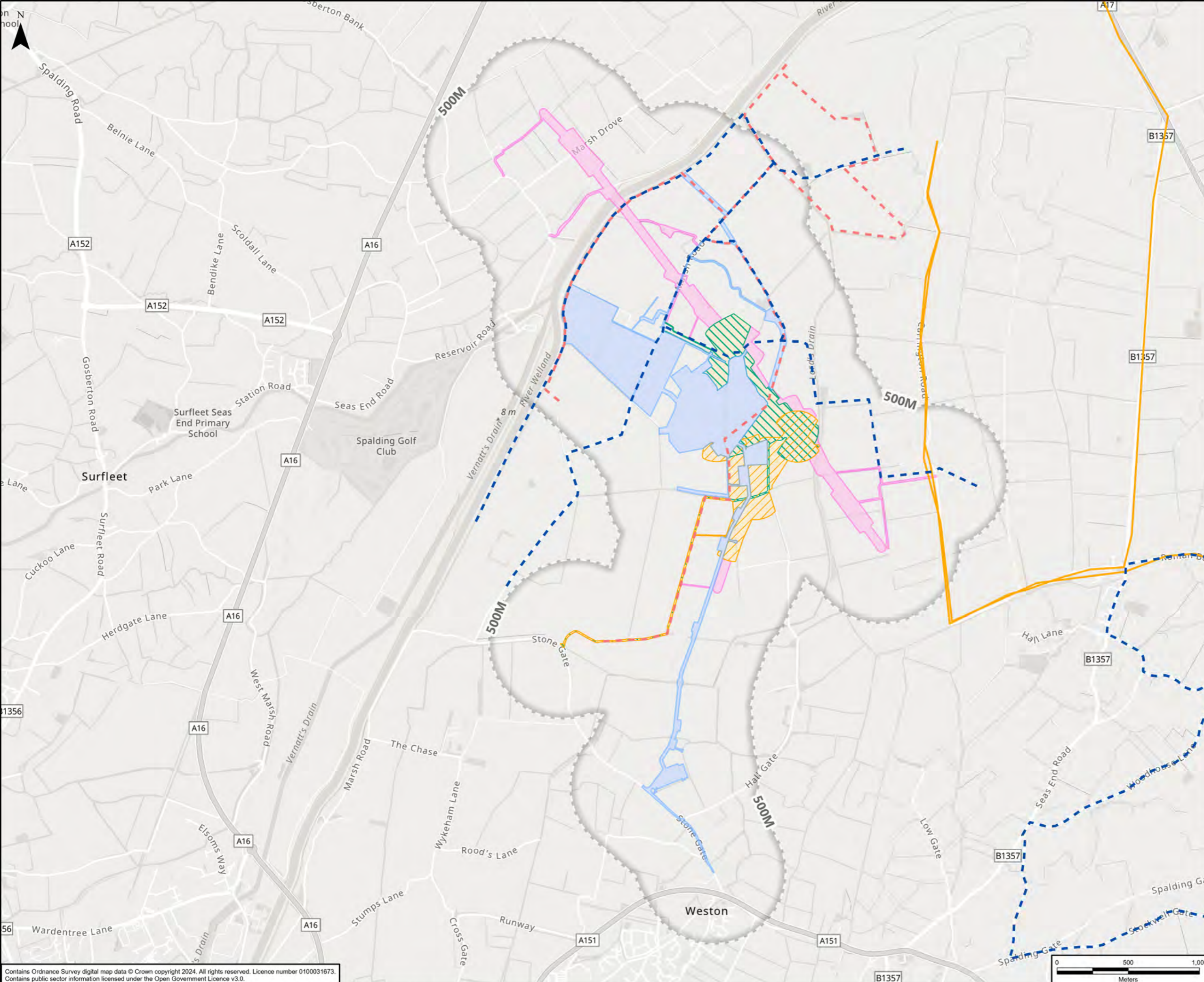


Figure 3 Transect locations for 2022/2023 survey period and 2024/2025 survey period



- Legend**
- Substation Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
 - Exempt Overhead Line Works Site Boundary
 - S37 - 2WS - OHL Works Site Boundary
 - S37 - 4ZM - OHL Works Site Boundary
 - Scheme Site Boundary 500m Buffer
 - Driveover Route Winter 2022/2023
 - Transect Route Winter 2022/2023
 - Transect Route Winter 2024/2025
 - Driveover Route Winter 2024/2025 Not Shown

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Document Title: **FIGURE 3 NON-BREEDING BIRD TRANSECT ROUTES**

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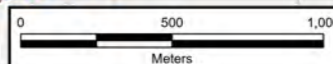
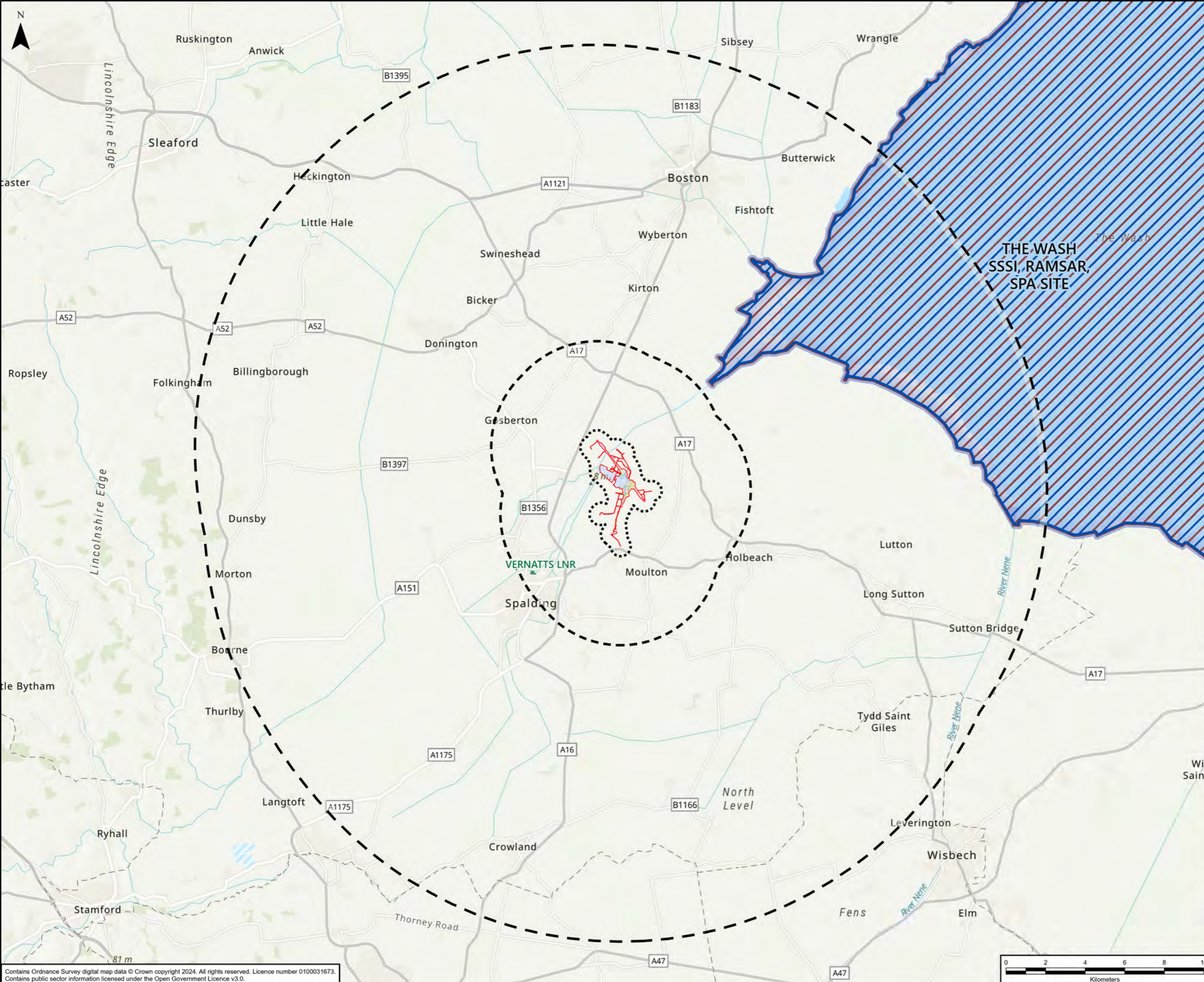


Figure 4 Designated sites within 20km of the site boundary



- Legend**
- Scheme Site Boundary
 - Substation Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
 - Exempt Overhead Line Works Site Boundary
 - S37 - 2WS - OHL Works Site Boundary
 - S37 - 4ZM - OHL Works Site Boundary
 - Scheme Site Boundary 500m Buffer
 - Scheme Site Boundary 5km Buffer
 - Scheme Site Boundary 20km Buffer
 - Local Nature Reserves (Within 5Km)
 - The Wash SSSI
 - RAMSAR
 - Special Protection Areas

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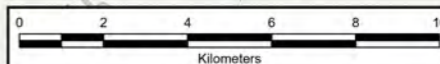
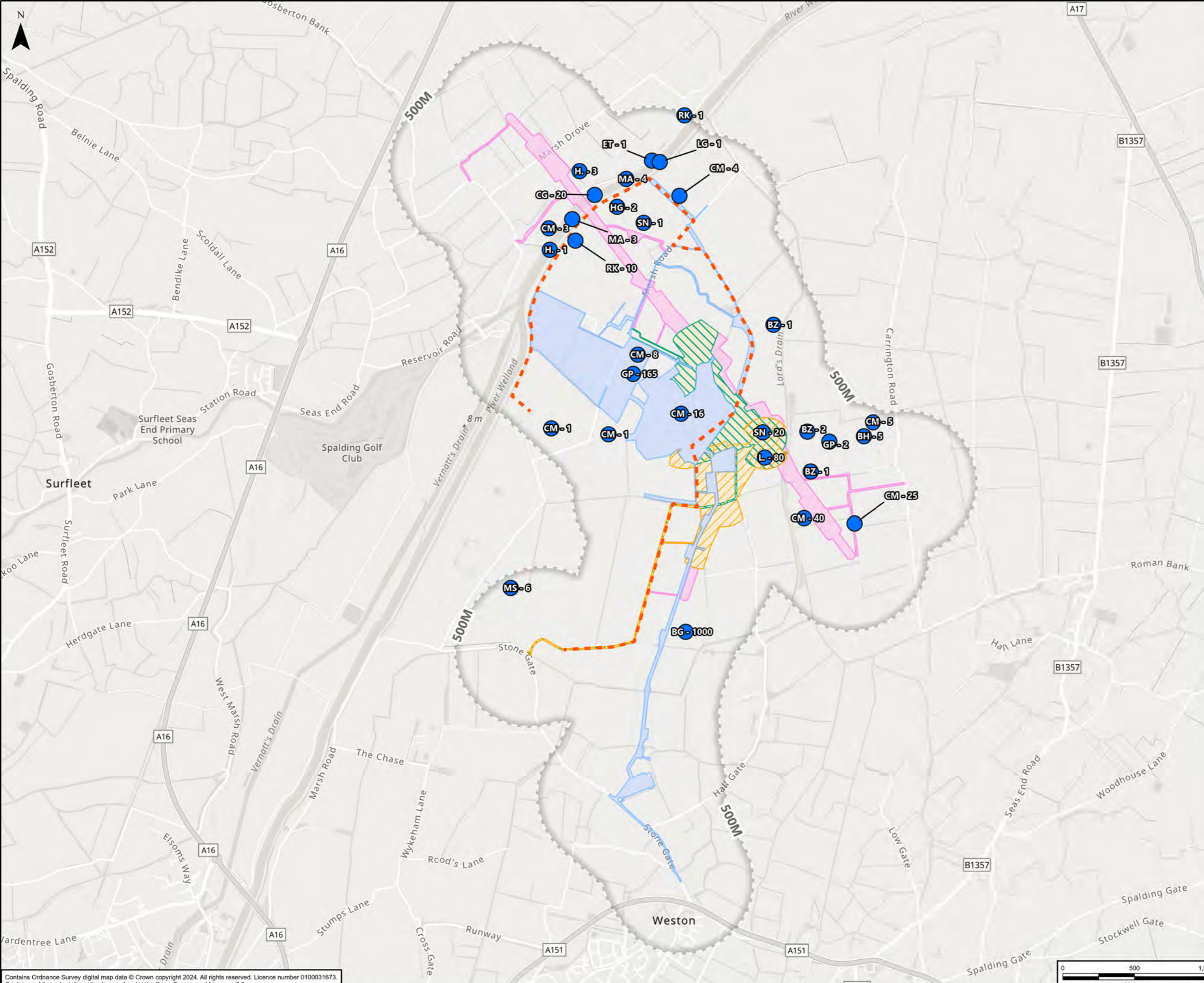


Figure 5 Diurnal bird data by month for 2022/2023 survey period and 2024/2025 survey period



- Legend**
- Exempt Overhead Line Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
 - Substation Works Site Boundary
 - S37 - 4ZM - OHL Works Site Boundary
 - S37 - 2WS - OHL Works Site Boundary
 - Scheme Site Boundary 500m Buffer
 - Diurnal Transect Winter 2024/2025
- BG - BRENT GOOSE
 - BH - BLACK-HEADED GULL
 - BZ - BUZZARD
 - CA - CORMORANT
 - CG - CANADA GOOSE
 - CM - COMMON GULL
 - ET - LITTLE EGRET
 - GA - GADWALL
 - GB - GREAT BLACK-BACKED GULL
 - GD - GOOSANDER
 - GJ - GREYLAG GOOSE
 - GP - GOLDEN PLOVER
 - H - GREY HERON
 - HG - HERRING GULL
 - K - KESTREL
 - KT - RED KITE
 - L - LAPWING
 - LB - LESSER BLACK-BACKED GULL
 - LG - LITTLE GREBE
 - MA - MALLARD
 - MH - MOORHEN
 - MR - MARSH HARRIER
 - MS - MUTE SWAN
 - PE - PEREGRINE
 - PG - PINK-FOOTED GOOSE
 - RK - REDSHANK
 - SN - SNIPE
 - SU - SHELDUCK
 - T - TEAL
 - WK - WOODCOCK
 - WN - WIGEON
 - WS - WHOOPER SWAN

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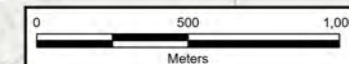
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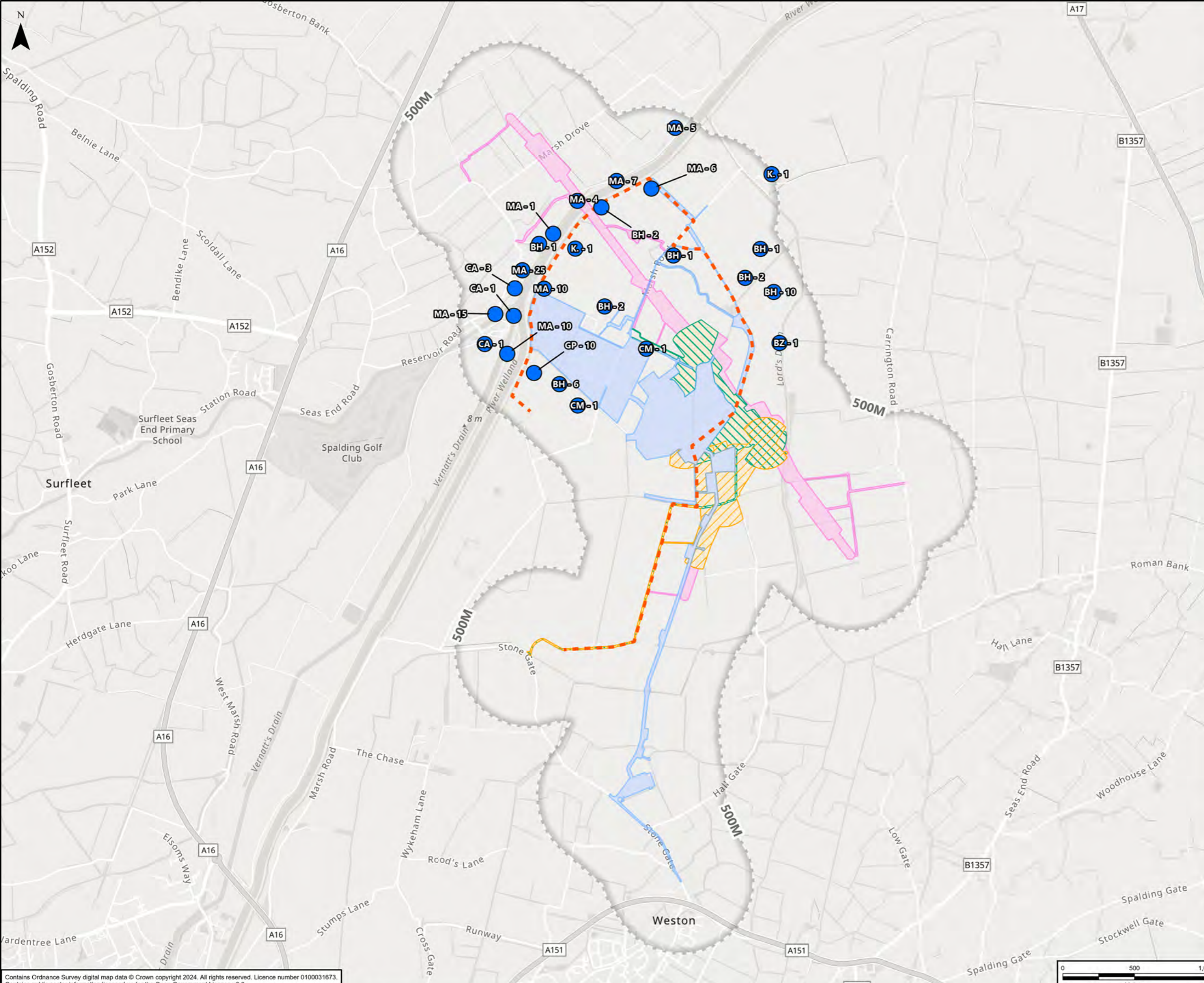
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Legend

- Exempt Overhead Line Works Site Boundary
- S37 4ZM/2WS Overhead Line Works Site Boundary
- Substation Works Site Boundary
- S37 - 4ZM - OHL Works Site Boundary
- S37 - 2WS - OHL Works Site Boundary
- Scheme Site Boundary 500m Buffer
- Diurnal Transect Winter 2024/2025

BG - BRENT GOOSE
BH - BLACK-HEADED GULL
BZ - BUZZARD
CA - CORMORANT
CG - CANADA GOOSE
CM - COMMON GULL
ET - LITTLE EGRET
GA - GADWALL
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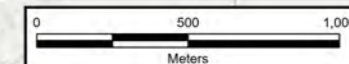
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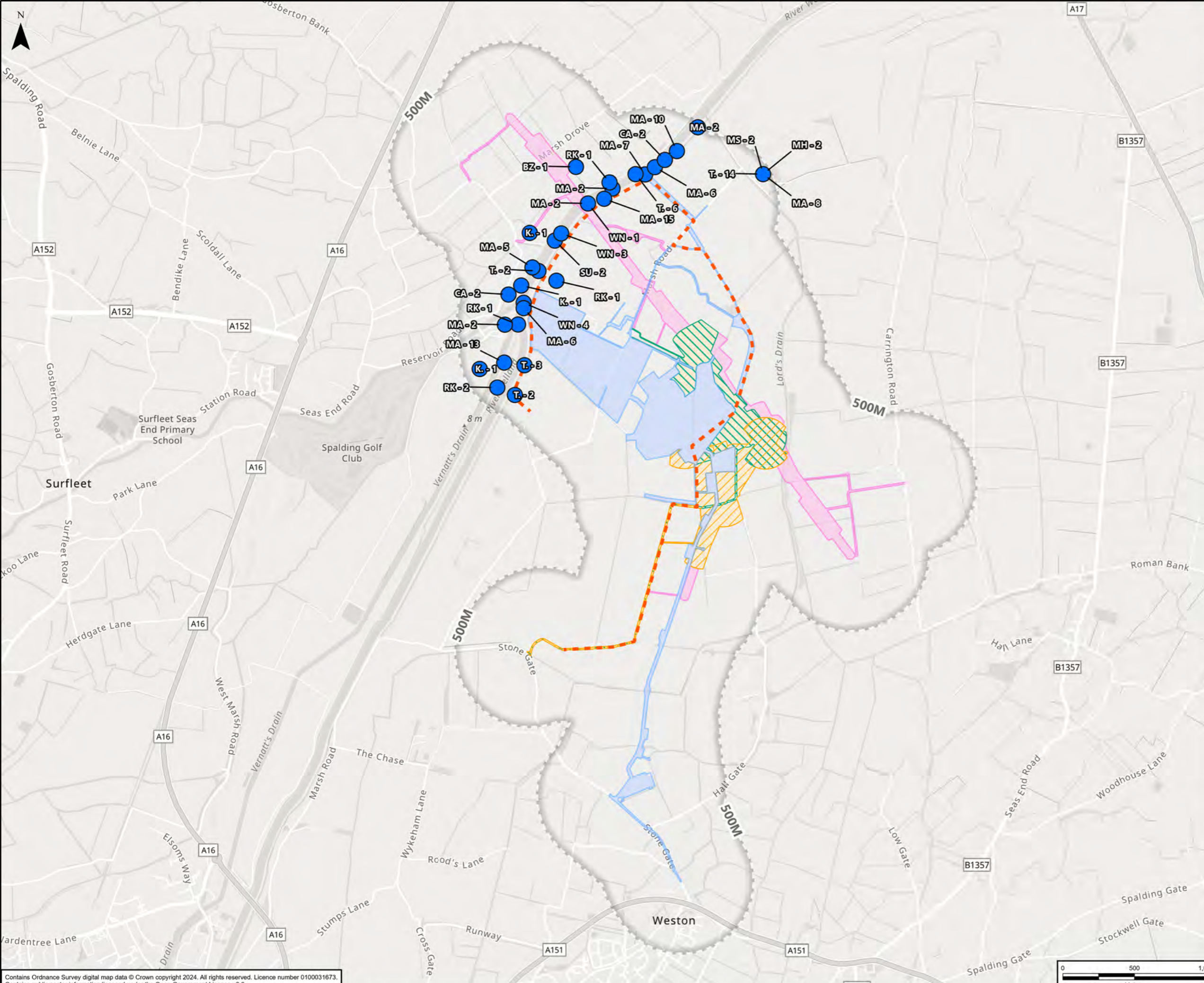
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- Exempt Overhead Line Works Site Boundary
- S37 4ZM/2WS Overhead Line Works Site Boundary
- Substation Works Site Boundary
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- S37 - 2WS - OHL Works Site Boundary
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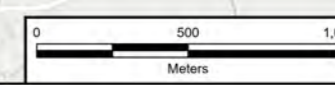
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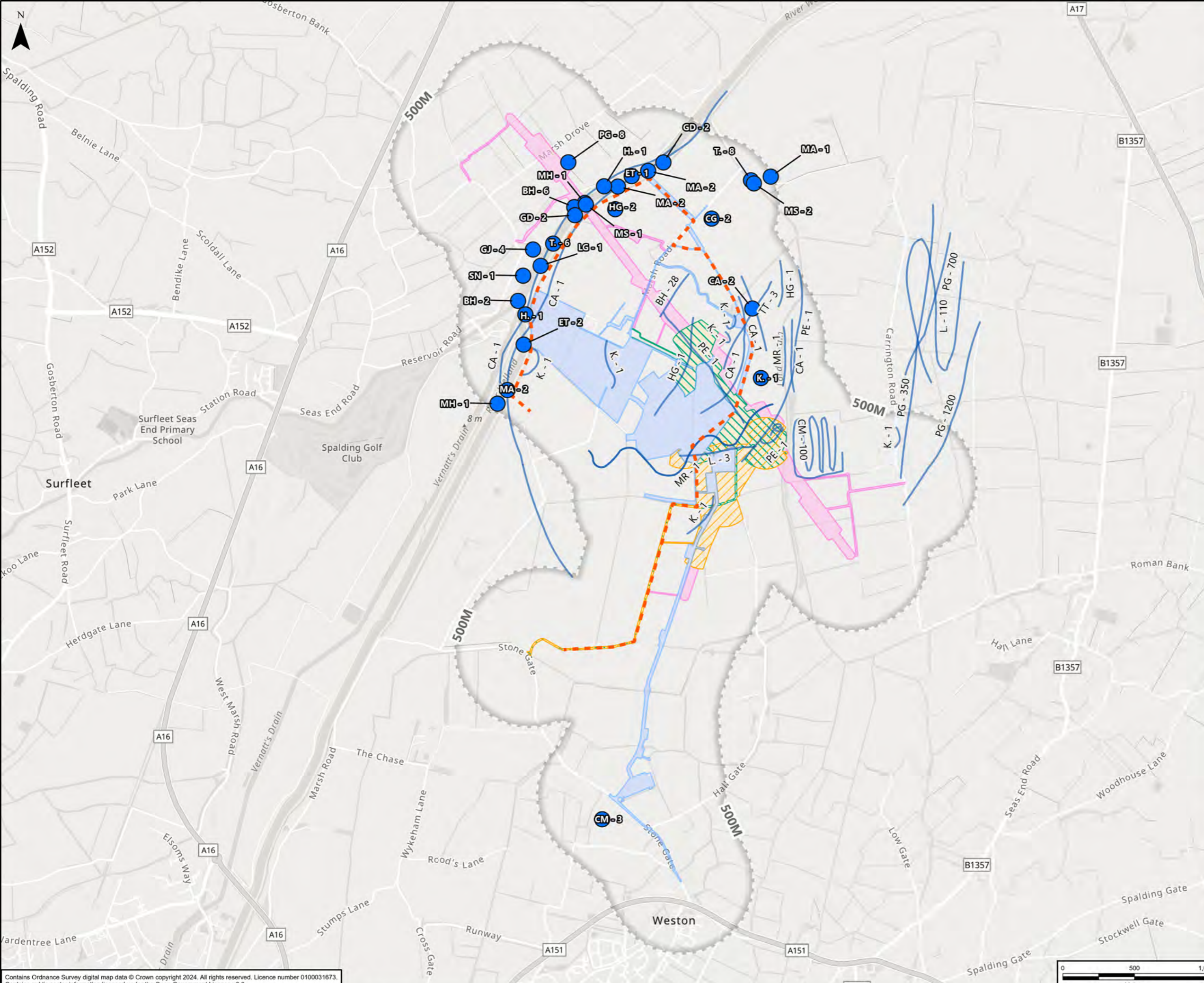
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- S37 4ZM/2WS Overhead Line Works Site Boundary
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- S37 - 4ZM - OHL Works Site Boundary
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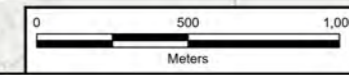
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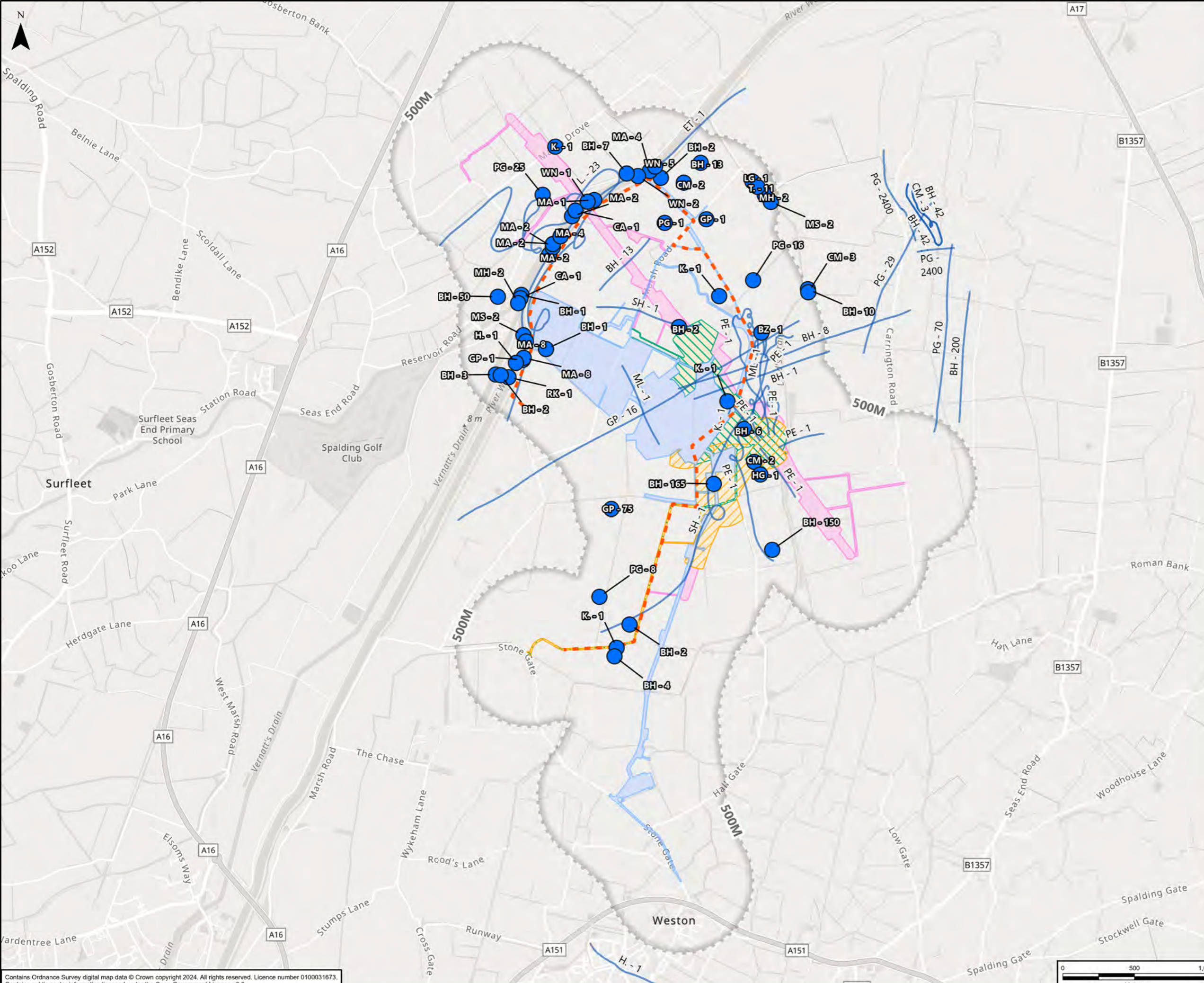
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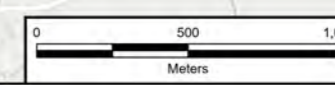
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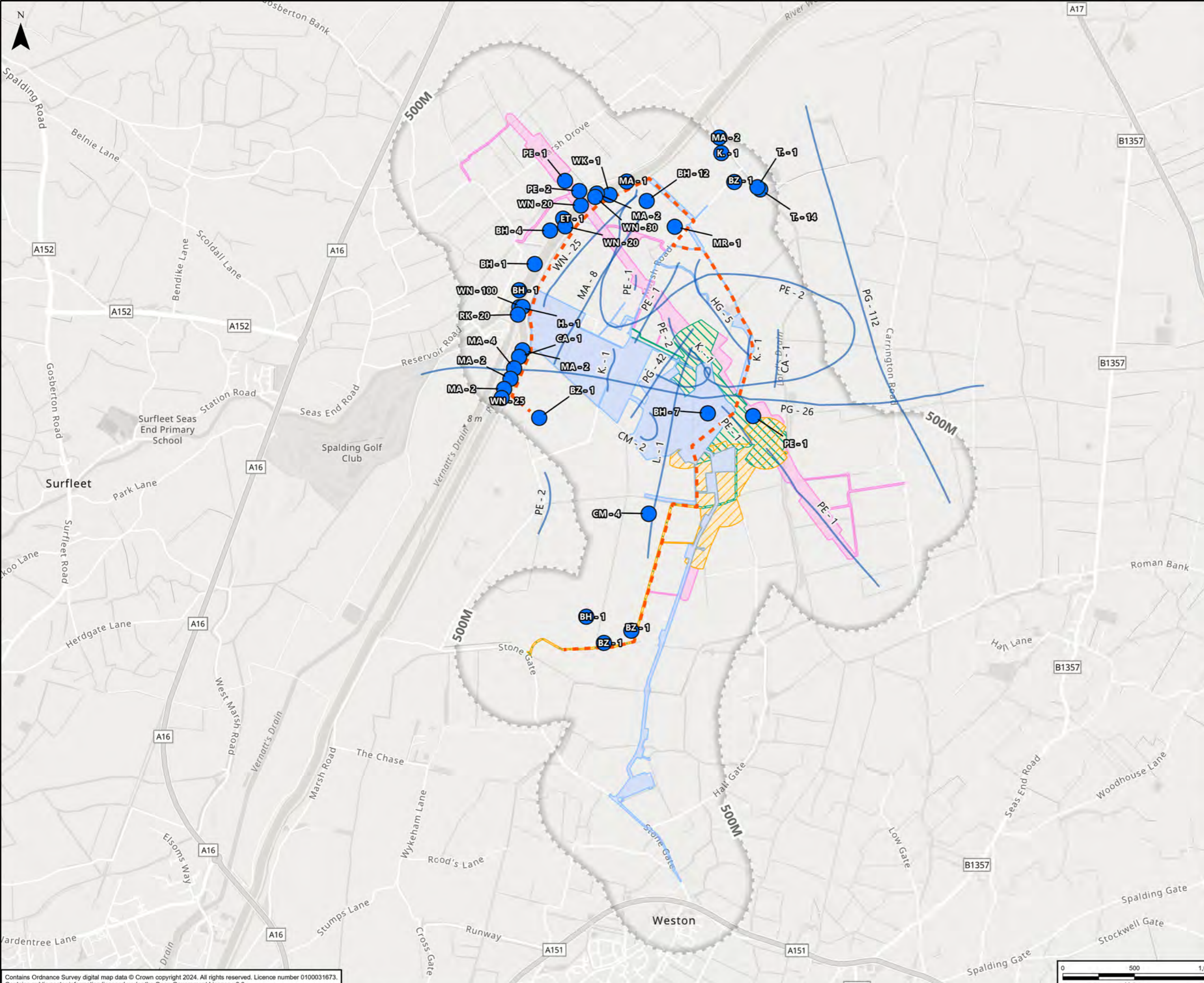
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- S37 - 4ZM - OHL Works Site Boundary
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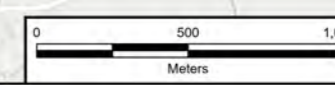
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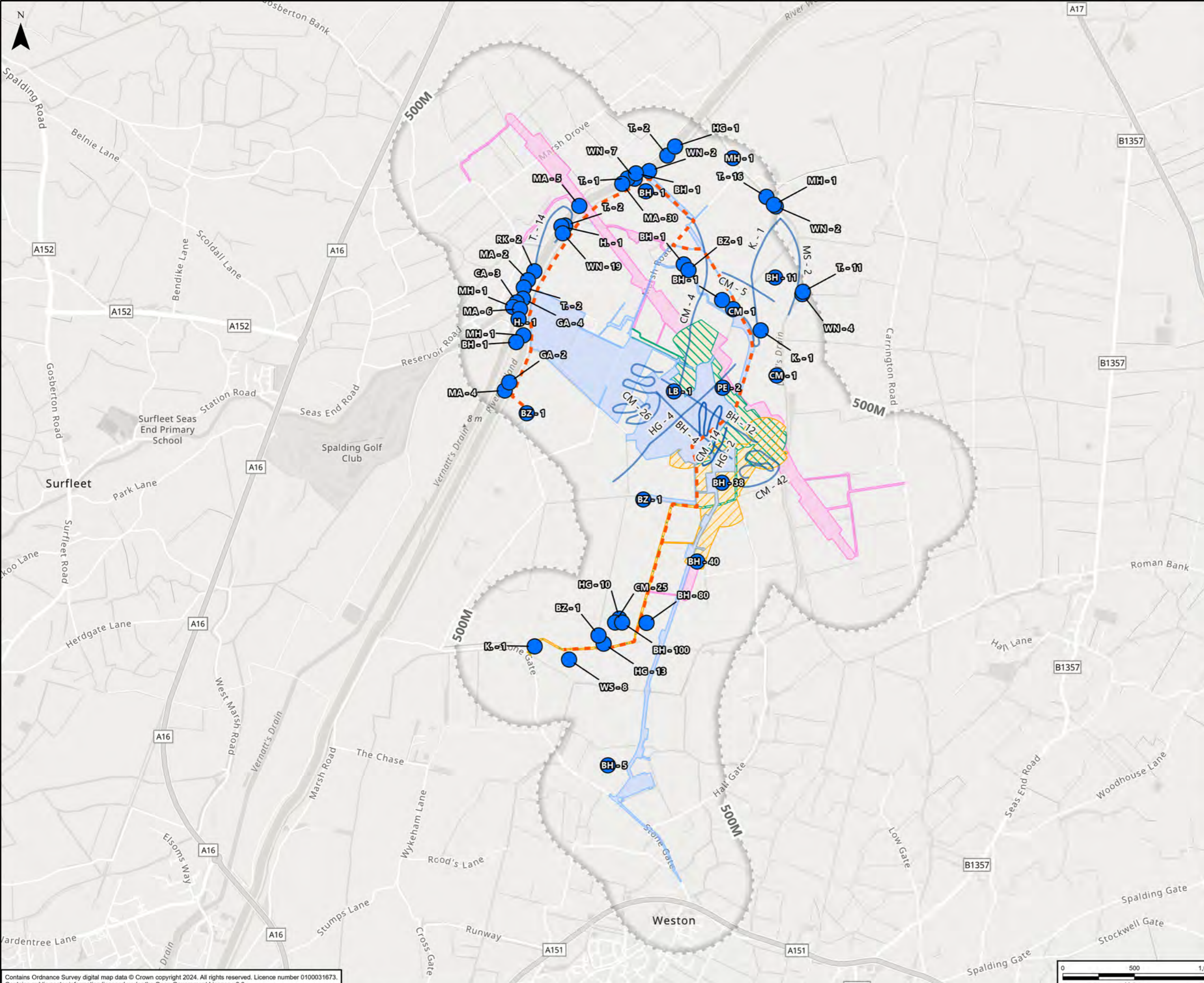
Purpose: NON-BREEDING BIRDS SURVEY REPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: **FIGURE 5 WESTON MARSH NON-BREEDING BIRD SPECIES - DIURNAL - 2025 FEBRUARY**

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026
Document Type:	Scale:	Format:	Sheets:	Rev:	
FIGURE	1:25,000	A3	7 OF 9	NH	





- Legend**
- Exempt Overhead Line Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
 - Substation Works Site Boundary
 - S37 - 4ZM - OHL Works Site Boundary
 - S37 - 2WS - OHL Works Site Boundary
 - Scheme Site Boundary 500m Buffer
 - Diurnal Transect Winter 2024/2025
 - Flightlines Winter 2024/2025
- BG - BRENT GOOSE
 - BH - BLACK-HEADED GULL
 - BZ - BUZZARD
 - CA - CORMORANT
 - CG - CANADA GOOSE
 - CM - COMMON GULL
 - ET - LITTLE EGRET
 - GA - GADWALL
 - GB - GREAT BLACK-BACKED GULL
 - GD - GOOSANDER
 - GJ - GREYLAG GOOSE
 - GP - GOLDEN PLOVER
 - H - GREY HERON
 - HG - HERRING GULL
 - K - KESTREL
 - KT - RED KITE
 - L - LAPWING
 - LB - LESSER BLACK-BACKED GULL
 - LG - LITTLE GREBE
 - MA - MALLARD
 - MH - MOORHEN
 - MR - MARSH HARRIER
 - MS - MUTE SWAN
 - PE - PEREGRINE
 - PG - PINK-FOOTED GOOSE
 - RK - REDSHANK
 - SN - SNIPE
 - SU - SHELDUCK
 - T - TEAL
 - WK - WOODCOCK
 - WN - WIGEON
 - WS - WHOOPER SWAN

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A	06/05/2026	First Issue	AF	AC	NH
Rev	Date	Description	GIS	Chk	App

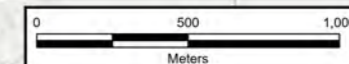
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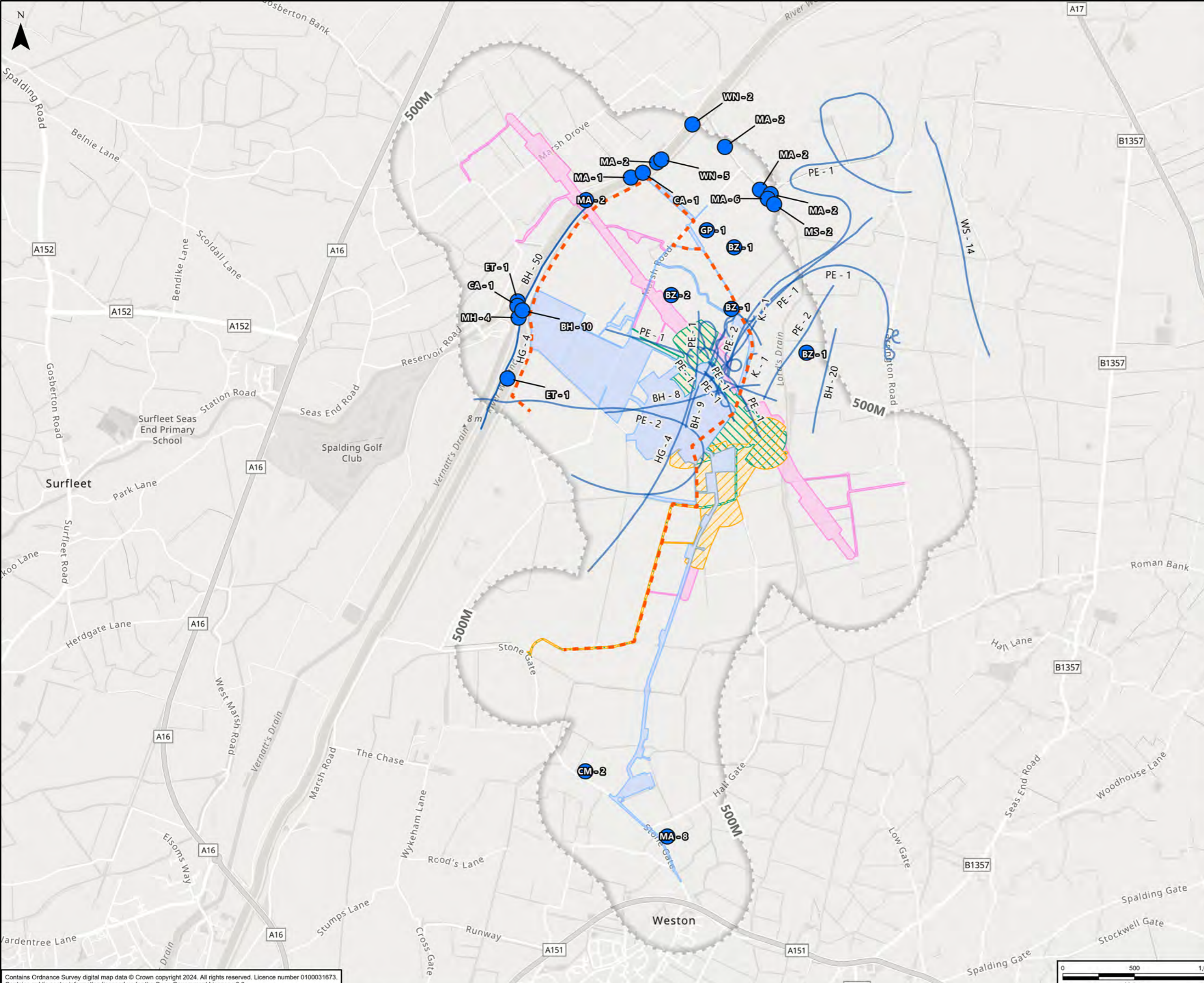
Purpose: NON-BREEDING BIRDS SURVEY REPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: **FIGURE 5 WESTON MARSH NON-BREEDING BIRD SPECIES - DIURNAL - 2025 JANUARY**

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026
Document Type:	Scale:	Format:	Sheets:	Rev:	
FIGURE	1:25,000	A3	8 OF 9	NH	





Legend

- Exempt Overhead Line Works Site Boundary
- S37 4ZM/2WS Overhead Line Works Site Boundary
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- S37 - 4ZM - OHL Works Site Boundary
- S37 - 2WS - OHL Works Site Boundary
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- Diurnal Transect Winter 2024/2025
- Flightlines Winter 2024/2025

Bird Species Legend:

- BG - BRENT GOOSE
- BH - BLACK-HEADED GULL
- BZ - BUZZARD
- CA - CORMORANT
- CG - CANADA GOOSE
- CM - COMMON GULL
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- HG - HERRING GULL
- K - KESTREL
- KT - RED KITE
- L - LAPWING
- LB - LESSER BLACK-BACKED GULL
- LG - LITTLE GREBE
- MA - MALLARD
- MH - MOORHEN
- MR - MARSH HARRIER
- MS - MUTE SWAN
- PE - PEREGRINE
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- RK - REDSHANK
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Purpose: NON-BREEDING BIRDS SURVEY REPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: **FIGURE 5 WESTON MARSH NON-BREEDING BIRD SPECIES - DIURNAL - 2025 MARCH**

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026
Document Type:	Scale:	Format:	Sheets:	Rev:	
FIGURE	1:25,000	A3	9 OF 9	NH	

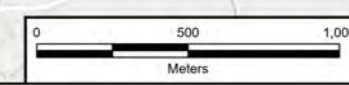
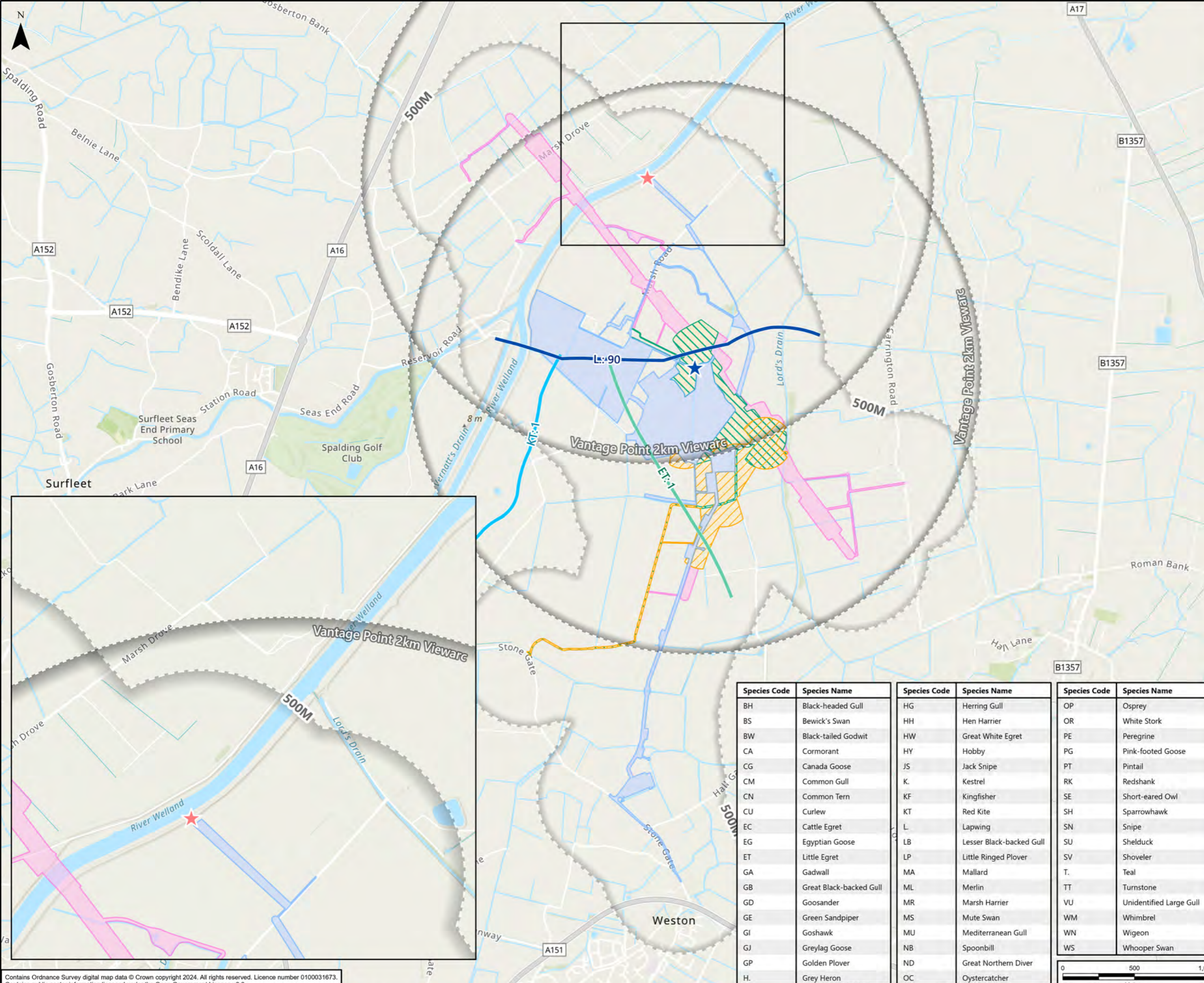


Figure 6 Vantage Point survey flight lines: VP4 and VP5



Species Code	Species Name	Species Code	Species Name	Species Code	Species Name
BH	Black-headed Gull	HG	Herring Gull	OP	Osprey
BS	Bewick's Swan	HH	Hen Harrier	OR	White Stork
BW	Black-tailed Godwit	HW	Great White Egret	PE	Peregrine
CA	Cormorant	HY	Hobby	PG	Pink-footed Goose
CG	Canada Goose	JS	Jack Snipe	PT	Pintail
CM	Common Gull	K.	Kestrel	RK	Redshank
CN	Common Tern	KF	Kingfisher	SE	Short-eared Owl
CU	Curlew	KT	Red Kite	SH	Sparrowhawk
EC	Cattle Egret	L.	Lapwing	SN	Snipe
EG	Egyptian Goose	LB	Lesser Black-backed Gull	SU	Shelduck
ET	Little Egret	LP	Little Ringed Plover	SV	Shoveler
GA	Gadwall	MA	Mallard	T.	Teal
GB	Great Black-backed Gull	ML	Merlin	TT	Turnstone
GD	Goosander	MR	Marsh Harrier	VU	Unidentified Large Gull
GE	Green Sandpiper	MS	Mute Swan	WM	Whimbrel
GI	Goshawk	MU	Mediterranean Gull	WN	Wigeon
GJ	Greylag Goose	NB	Spoonbill	WS	Whooper Swan
GP	Golden Plover	ND	Great Northern Diver		
H.	Grey Heron	OC	Oystercatcher		

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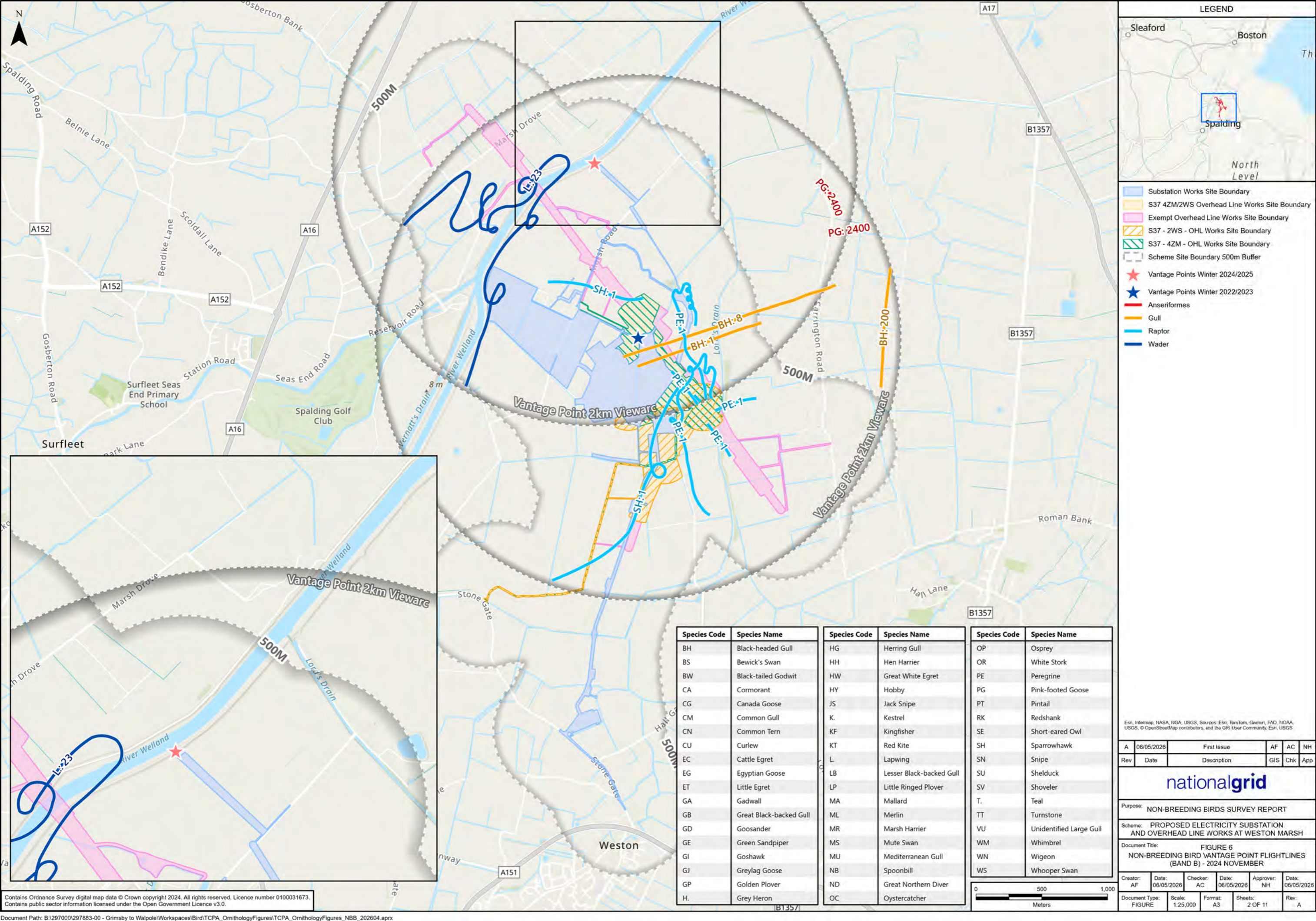
Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 6
NON-BREEDING BIRD VANTAGE POINT FLIGHTLINES (BAND B) - 2024 OCTOBER

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:25,000	A3	1 OF 11	A

0 500 1,000
Meters



- LEGEND**
- Substation Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
 - Exempt Overhead Line Works Site Boundary
 - S37 - 2WS - OHL Works Site Boundary
 - S37 - 4ZM - OHL Works Site Boundary
 - Scheme Site Boundary 500m Buffer
 - ★ Vantage Points Winter 2024/2025
 - ★ Vantage Points Winter 2022/2023
 - Anseriformes
 - Gull
 - Raptor
 - Wader

Species Code	Species Name	Species Code	Species Name	Species Code	Species Name
BH	Black-headed Gull	HG	Herring Gull	OP	Osprey
BS	Bewick's Swan	HH	Hen Harrier	OR	White Stork
BW	Black-tailed Godwit	HW	Great White Egret	PE	Peregrine
CA	Cormorant	HY	Hobby	PG	Pink-footed Goose
CG	Canada Goose	JS	Jack Snipe	PT	Pintail
CM	Common Gull	K.	Kestrel	RK	Redshank
CN	Common Tern	KF	Kingfisher	SE	Short-eared Owl
CU	Curler	KT	Red Kite	SH	Sparrowhawk
EC	Cattle Egret	L.	Lapwing	SN	Snipe
EG	Egyptian Goose	LB	Lesser Black-backed Gull	SU	Shelduck
ET	Little Egret	LP	Little Ringed Plover	SV	Shoveler
GA	Gadwall	MA	Mallard	T.	Teal
GB	Great Black-backed Gull	ML	Merlin	TT	Turnstone
GD	Goosander	MR	Marsh Harrier	VU	Unidentified Large Gull
GE	Green Sandpiper	MS	Mute Swan	WM	Whimbrel
GI	Goshawk	MU	Mediterranean Gull	WN	Wigeon
GJ	Greylag Goose	NB	Spoonbill	WS	Whooper Swan
GP	Golden Plover	ND	Great Northern Diver		
H.	Grey Heron	OC	Oystercatcher		

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Rev	Date	Description	GIS	Chk	App

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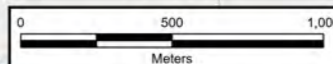
Purpose: NON-BREEDING BIRDS SURVEY REPORT

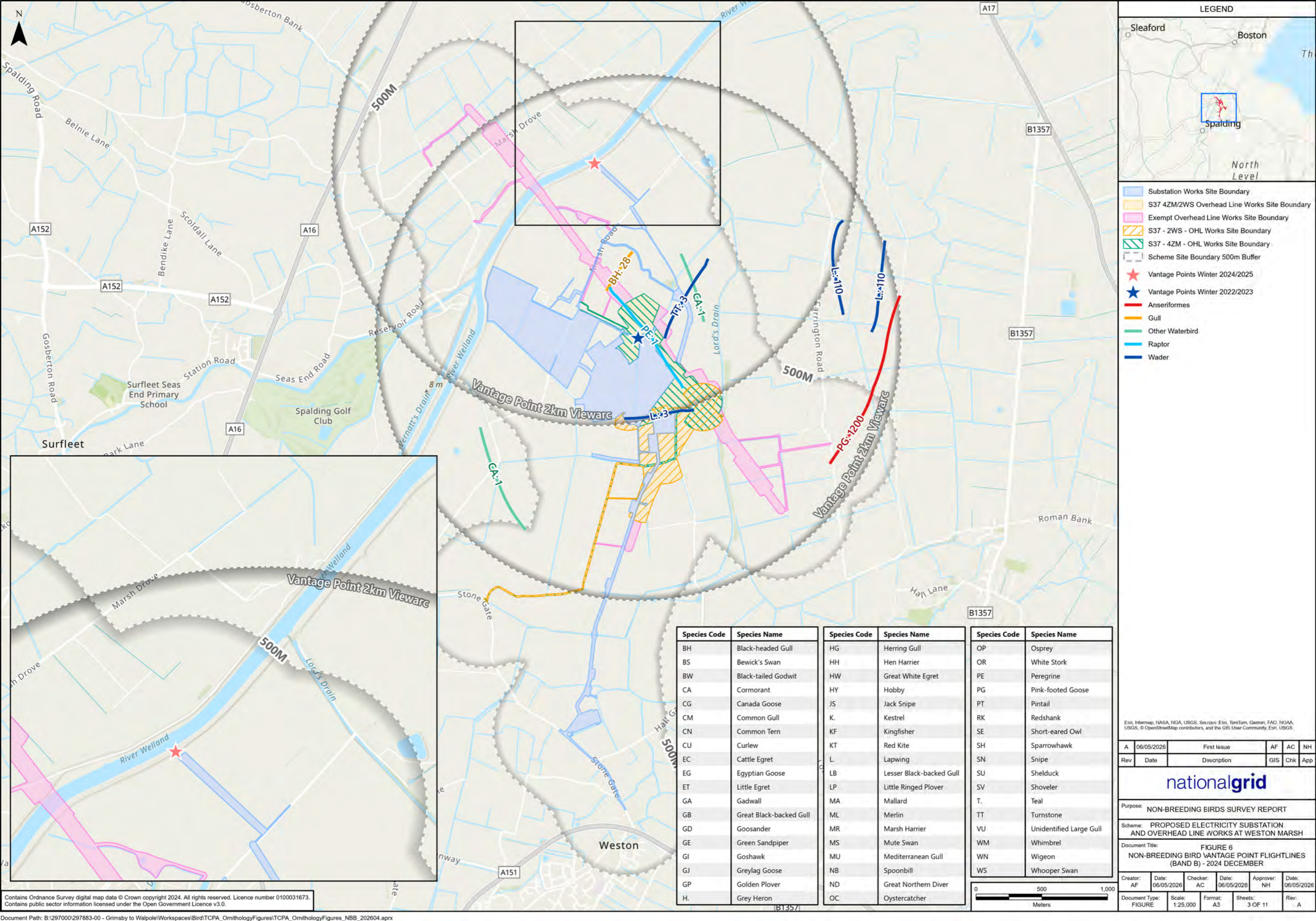
Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 6
NON-BREEDING BIRD VANTAGE POINT FLIGHTLINES (BAND B) - 2024 NOVEMBER

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:25,000	A3	2 OF 11	A





- LEGEND**
- Substation Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
 - Exempt Overhead Line Works Site Boundary
 - S37 - 2WS - OHL Works Site Boundary
 - S37 - 4ZM - OHL Works Site Boundary
 - Scheme Site Boundary 500m Buffer
 - ★ Vantage Points Winter 2024/2025
 - ★ Vantage Points Winter 2022/2023
 - Anseriformes
 - Gull
 - Other Waterbird
 - Raptor
 - Wader

Species Code	Species Name	Species Code	Species Name	Species Code	Species Name
BH	Black-headed Gull	HG	Herring Gull	OP	Osprey
BS	Bewick's Swan	HH	Hen Harrier	OR	White Stork
BW	Black-tailed Godwit	HW	Great White Egret	PE	Peregrine
CA	Cormorant	HY	Hobby	PG	Pink-footed Goose
CG	Canada Goose	JS	Jack Snipe	PT	Pintail
CM	Common Gull	K.	Kestrel	RK	Redshank
CN	Common Tern	KF	Kingfisher	SE	Short-eared Owl
CU	Curlow	KT	Red Kite	SH	Sparrowhawk
EC	Cattle Egret	L.	Lapwing	SN	Snipe
EG	Egyptian Goose	LB	Lesser Black-backed Gull	SU	Shelduck
ET	Little Egret	LP	Little Ringed Plover	SV	Shoveler
GA	Gadwall	MA	Mallard	T.	Teal
GB	Great Black-backed Gull	ML	Merlin	TT	Turnstone
GD	Goosander	MR	Marsh Harrier	VU	Unidentified Large Gull
GE	Green Sandpiper	MS	Mute Swan	WM	Whimbrel
GI	Goshawk	MU	Mediterranean Gull	WN	Wigeon
GJ	Greylag Goose	NB	Spoonbill	WS	Whooper Swan
GP	Golden Plover	ND	Great Northern Diver		
H.	Grey Heron	OC	Oystercatcher		

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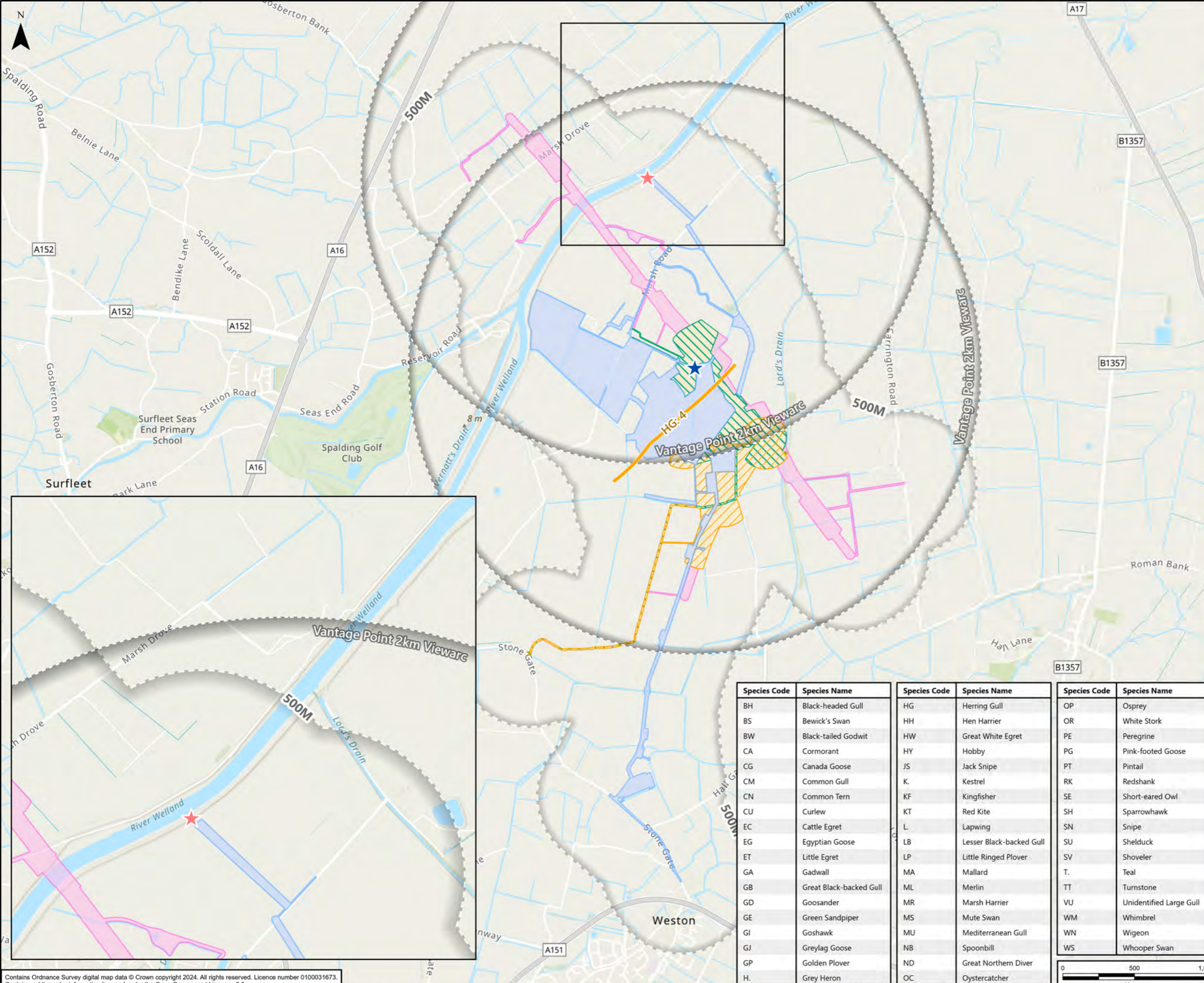
Purpose: NON-BREEDING BIRDS SURVEY REPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: **FIGURE 6**
NON-BREEDING BIRD VANTAGE POINT FLIGHTLINES (BAND B) - 2024 DECEMBER

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:25,000	A3	3 OF 11	A



Species Code	Species Name	Species Code	Species Name	Species Code	Species Name
BH	Black-headed Gull	HG	Herring Gull	OP	Osprey
BS	Bewick's Swan	HH	Hen Harrier	OR	White Stork
BW	Black-tailed Godwit	HW	Great White Egret	PE	Peregrine
CA	Cormorant	HY	Hobby	PG	Pink-footed Goose
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CM	Common Gull	K.	Kestrel	RK	Redshank
CN	Common Tern	KF	Kingfisher	SE	Short-eared Owl
CU	Curlw	KT	Red Kite	SH	Sparrowhawk
EC	Cattle Egret	L.	Lapwing	SN	Snipe
EG	Egyptian Goose	LB	Lesser Black-backed Gull	SU	Shelduck
ET	Little Egret	LP	Little Ringed Plover	SV	Shoveler
GA	Gadwall	MA	Mallard	T.	Teal
GB	Great Black-backed Gull	ML	Merlin	TT	Turnstone
GD	Goosander	MR	Marsh Harrier	VU	Unidentified Large Gull
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GI	Goshawk	MU	Mediterranean Gull	WN	Wigeon
GJ	Greylag Goose	NB	Spoonbill	WS	Whooper Swan
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H.	Grey Heron	OC	Oystercatcher		

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Rev	Date	Description	GIS	Chk	App

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Purpose: NON-BREEDING BIRDS SURVEY REPORT

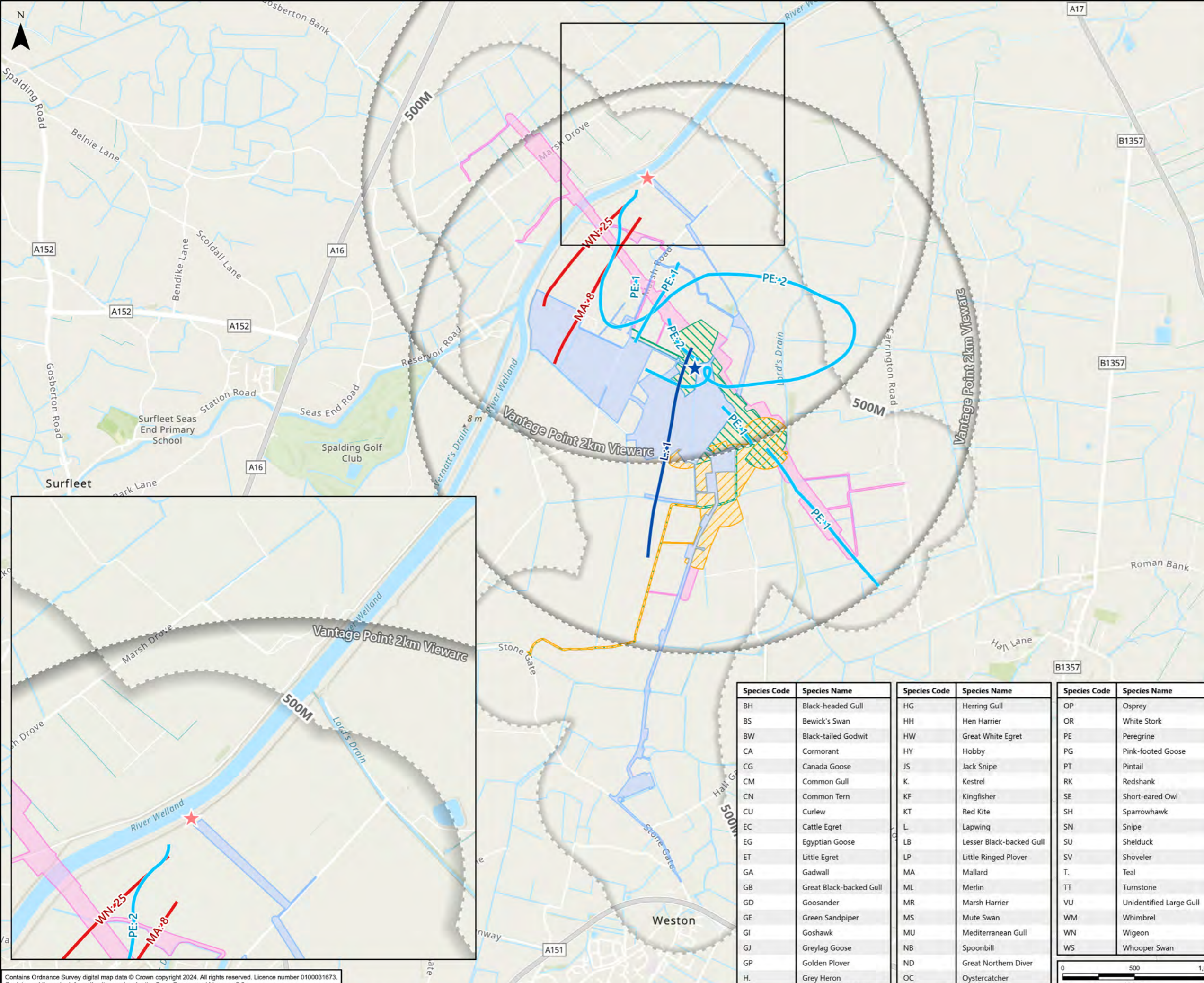
Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 6
NON-BREEDING BIRD VANTAGE POINT FLIGHTLINES (BAND B) - 2025 JANUARY

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:25,000	A3	4 OF 11	A

0 500 1,000
Meters



- Substation Works Site Boundary
- S37 4ZM/2WS Overhead Line Works Site Boundary
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- S37 - 2WS - OHL Works Site Boundary
- S37 - 4ZM - OHL Works Site Boundary
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Purpose: NON-BREEDING BIRDS SURVEY REPORT

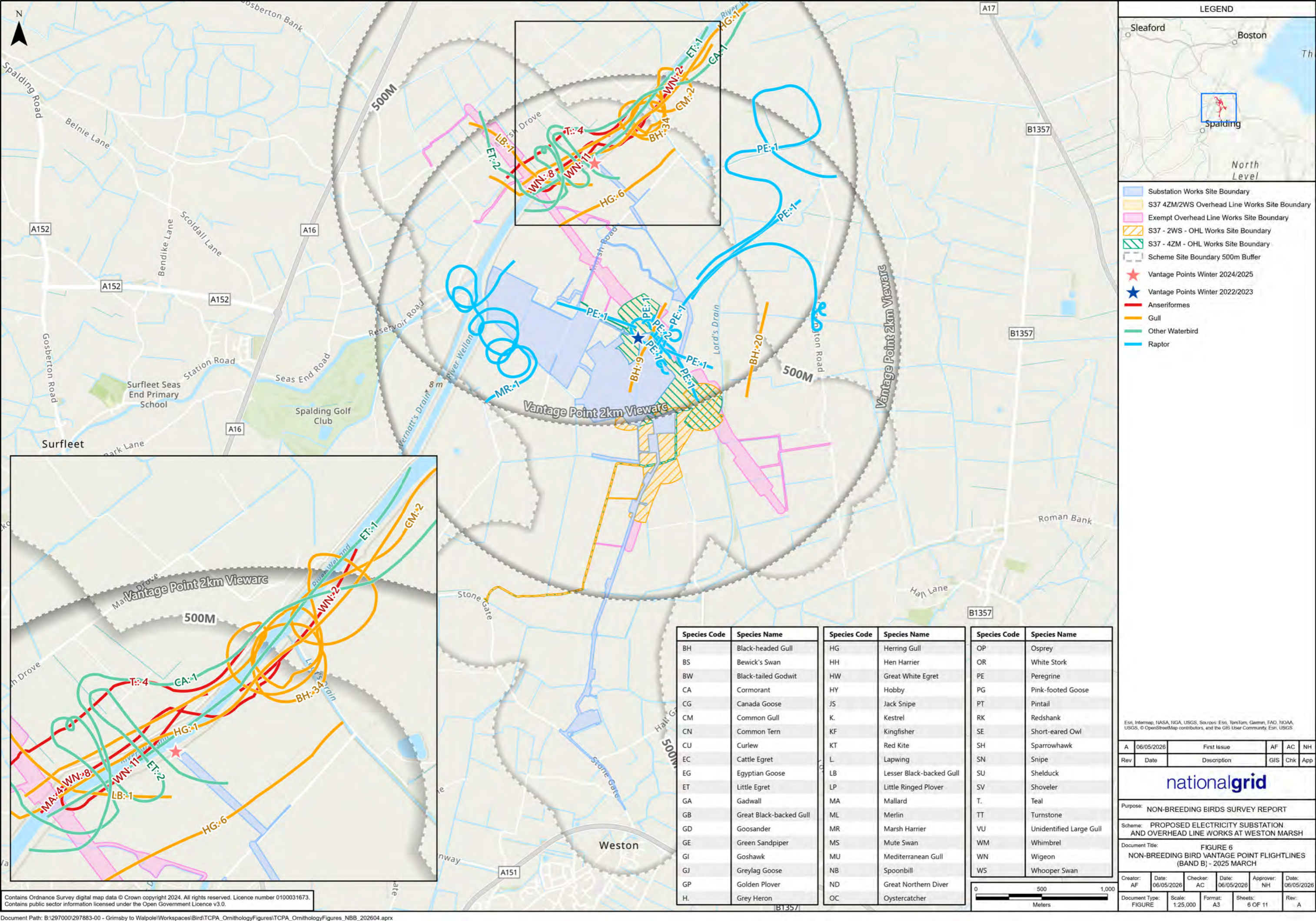
Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: **FIGURE 6**
NON-BREEDING BIRD VANTAGE POINT FLIGHTLINES (BAND B) - 2025 FEBRUARY

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026

Document Type: FIGURE Scale: 1:25,000 Format: A3 Sheets: 5 OF 11 Rev: A

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- LEGEND**
- Substation Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
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 - S37 - 4ZM - OHL Works Site Boundary
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A	06/05/2026	First Issue	AF	AC	NH
Rev	Date	Description	GIS	Chk	App

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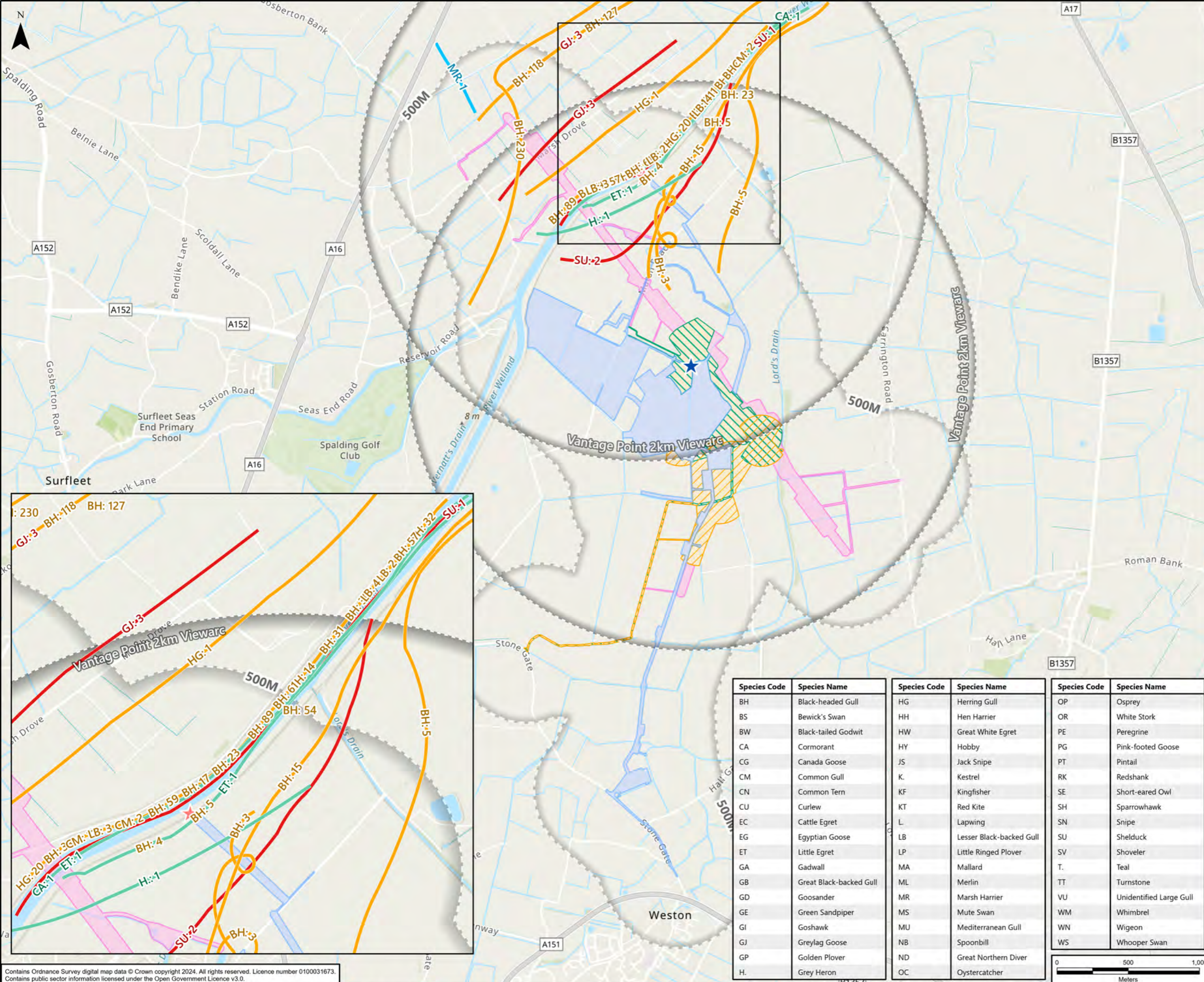
Purpose: NON-BREEDING BIRDS SURVEY REPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 6
NON-BREEDING BIRD VANTAGE POINT FLIGHTLINES (BAND B) - 2025 MARCH

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:25,000	A3	6 OF 11	A



Species Code	Species Name	Species Code	Species Name	Species Code	Species Name
BH	Black-headed Gull	HG	Herring Gull	OP	Osprey
BS	Bewick's Swan	HH	Hen Harrier	OR	White Stork
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Rev	Date	Description	GIS	Chk	App
A	06/05/2026	First Issue	AF	AC	NH

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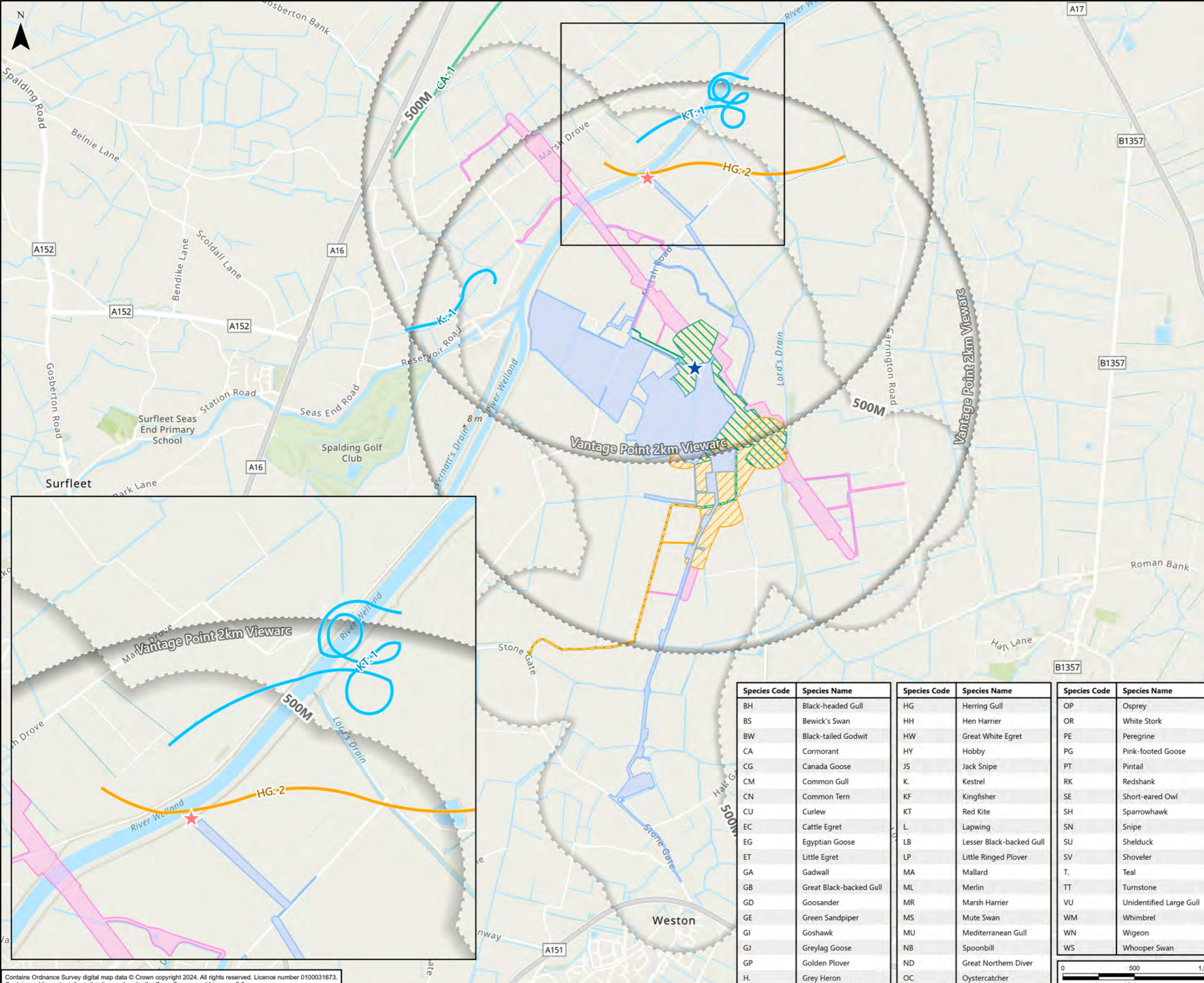
Purpose: NON-BREEDING BIRDS SURVEY REPORT

Scheme: PROPOSED ELECTRICITY SUBSTATION AND OVERHEAD LINE WORKS AT WESTON MARSH

Document Title: FIGURE 6
NON-BREEDING BIRD VANTAGE POINT FLIGHTLINES (BAND B) - 2025 APRIL

Creator:	Date:	Checker:	Date:	Approver:	Date:
AF	06/05/2026	AC	06/05/2026	NH	06/05/2026

Document Type:	Scale:	Format:	Sheets:	Rev:
FIGURE	1:25,000	A3	7 OF 11	A



Species Code	Species Name	Species Code	Species Name	Species Code	Species Name
BH	Black-headed Gull	HG	Herring Gull	OP	Osprey
BS	Bewick's Swan	HH	Hen Harrier	OR	White Stork
BW	Black-tailed Godwit	HW	Great White Egret	PE	Peregrine
CA	Cormorant	HY	Hobby	PG	Pink-footed Goose
CG	Canada Goose	JS	Jack Snipe	PT	Pintail
CM	Common Gull	K.	Kestrel	RK	Redshank
CN	Common Tern	KF	Kingfisher	SE	Short-eared Owl
CU	Curlew	KT	Red Kite	SH	Sparrowhawk
EC	Cattle Egret	L.	Lapwing	SN	Snipe
EG	Egyptian Goose	LB	Lesser Black-backed Gull	SU	Shelduck
ET	Little Egret	LP	Little Ringed Plover	SV	Shoveler
GA	Gadwall	MA	Mallard	T.	Teal
GB	Great Black-backed Gull	ML	Merlin	TT	Turnstone
GD	Goosander	MR	Marsh Harrier	VU	Unidentified Large Gull
GE	Green Sandpiper	MS	Mute Swan	WM	Whimbrel
GI	Goshawk	MU	Mediterranean Gull	WN	Wigeon
GJ	Greylag Goose	NB	Spoonbill	WS	Whooper Swan
GP	Golden Plover	ND	Great Northern Diver		
H.	Grey Heron	OC	Oystercatcher		

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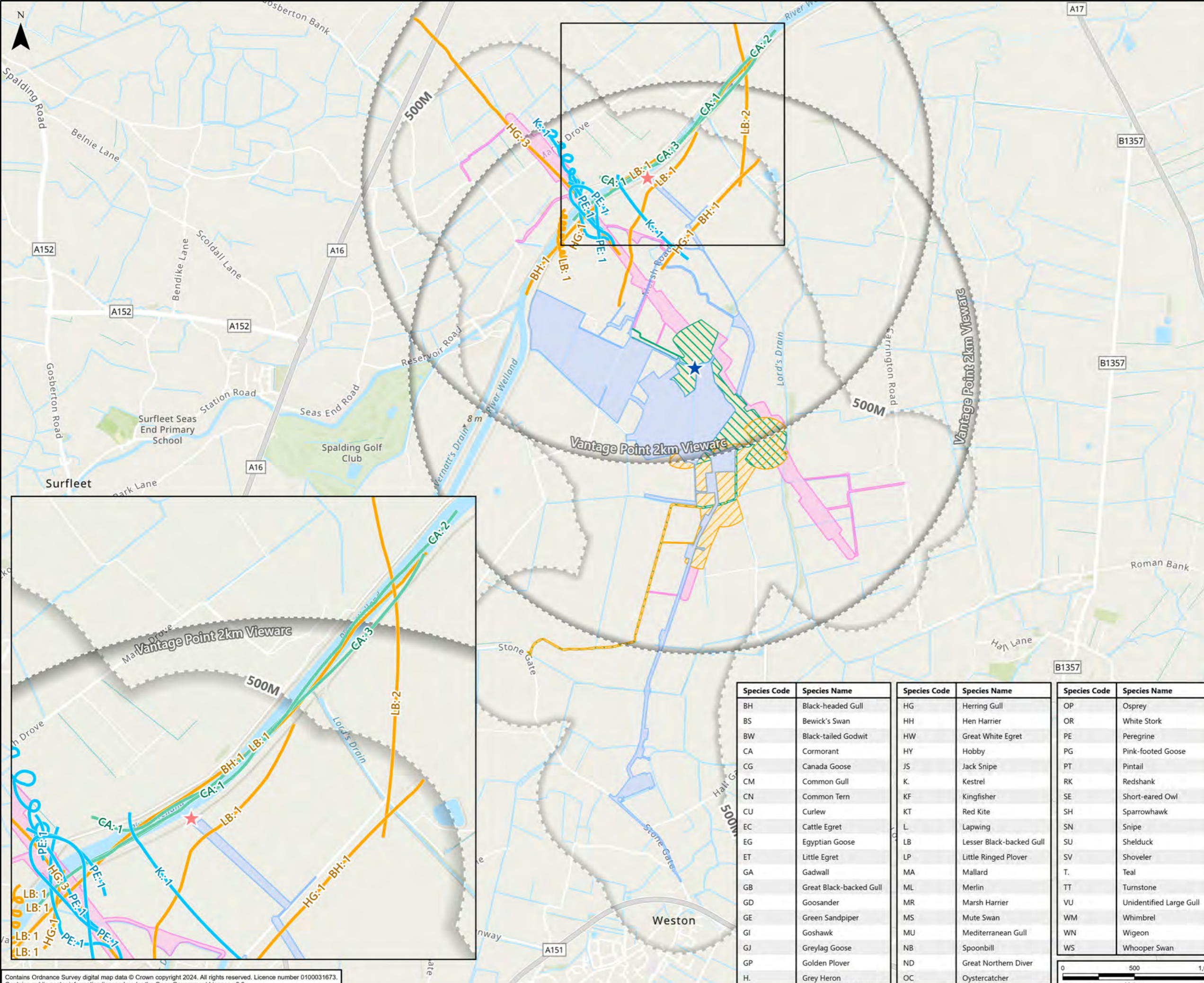
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Meters



- LEGEND**
- Substation Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
 - Exempt Overhead Line Works Site Boundary
 - S37 - 2WS - OHL Works Site Boundary
 - S37 - 4ZM - OHL Works Site Boundary
 - Scheme Site Boundary 500m Buffer
 - ★ Vantage Points Winter 2024/2025
 - ★ Vantage Points Winter 2022/2023
 - Gull
 - Other Waterbird
 - Raptor

Species Code	Species Name	Species Code	Species Name	Species Code	Species Name
BH	Black-headed Gull	HG	Herring Gull	OP	Osprey
BS	Bewick's Swan	HH	Hen Harrier	OR	White Stork
BW	Black-tailed Godwit	HW	Great White Egret	PE	Peregrine
CA	Cormorant	HY	Hobby	PG	Pink-footed Goose
CG	Canada Goose	JS	Jack Snipe	PT	Pintail
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GE	Green Sandpiper	MS	Mute Swan	WM	Whimbrel
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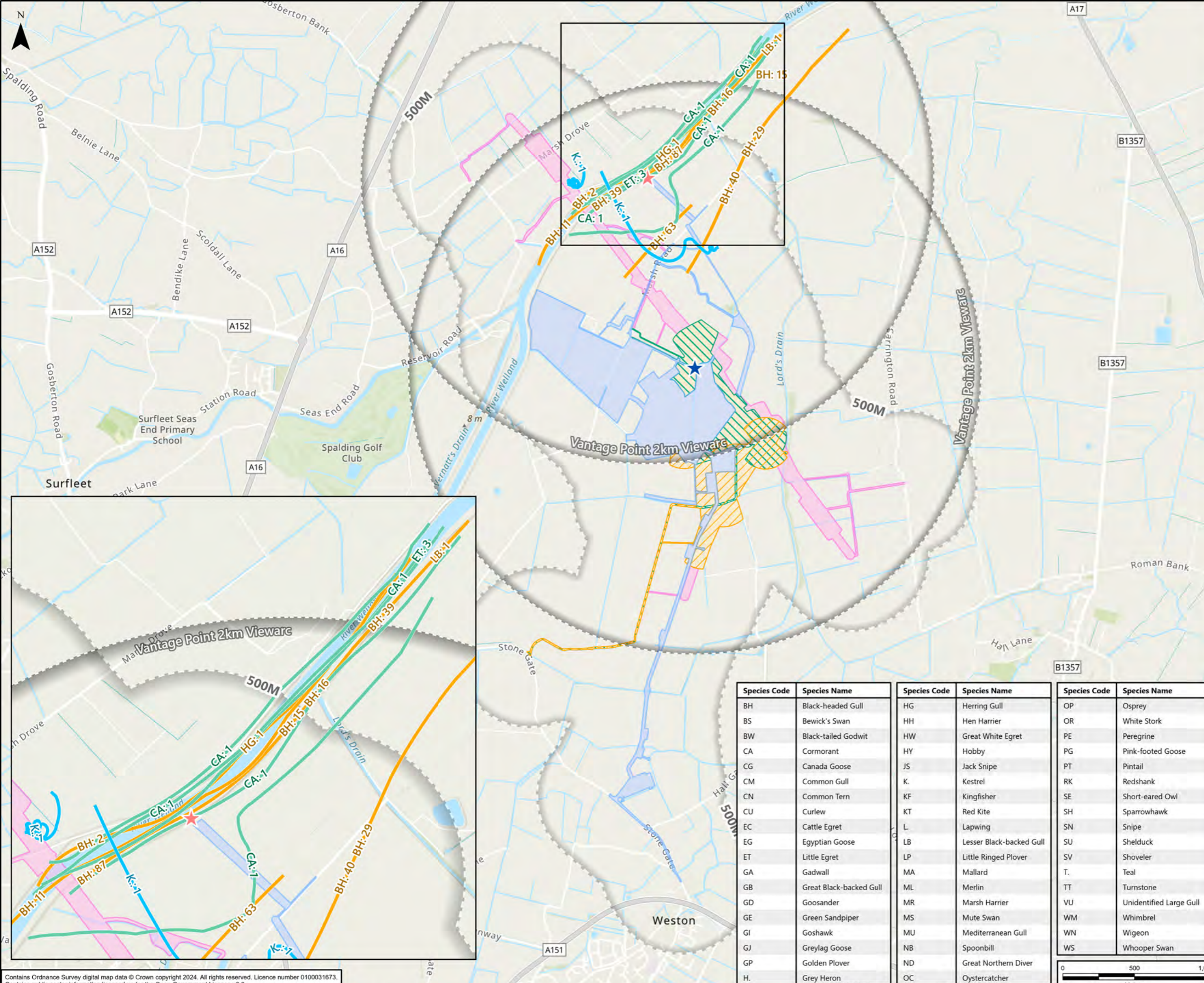
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Species Code	Species Name	Species Code	Species Name	Species Code	Species Name
BH	Black-headed Gull	HG	Herring Gull	OP	Osprey
BS	Bewick's Swan	HH	Hen Harrier	OR	White Stork
BW	Black-tailed Godwit	HW	Great White Egret	PE	Peregrine
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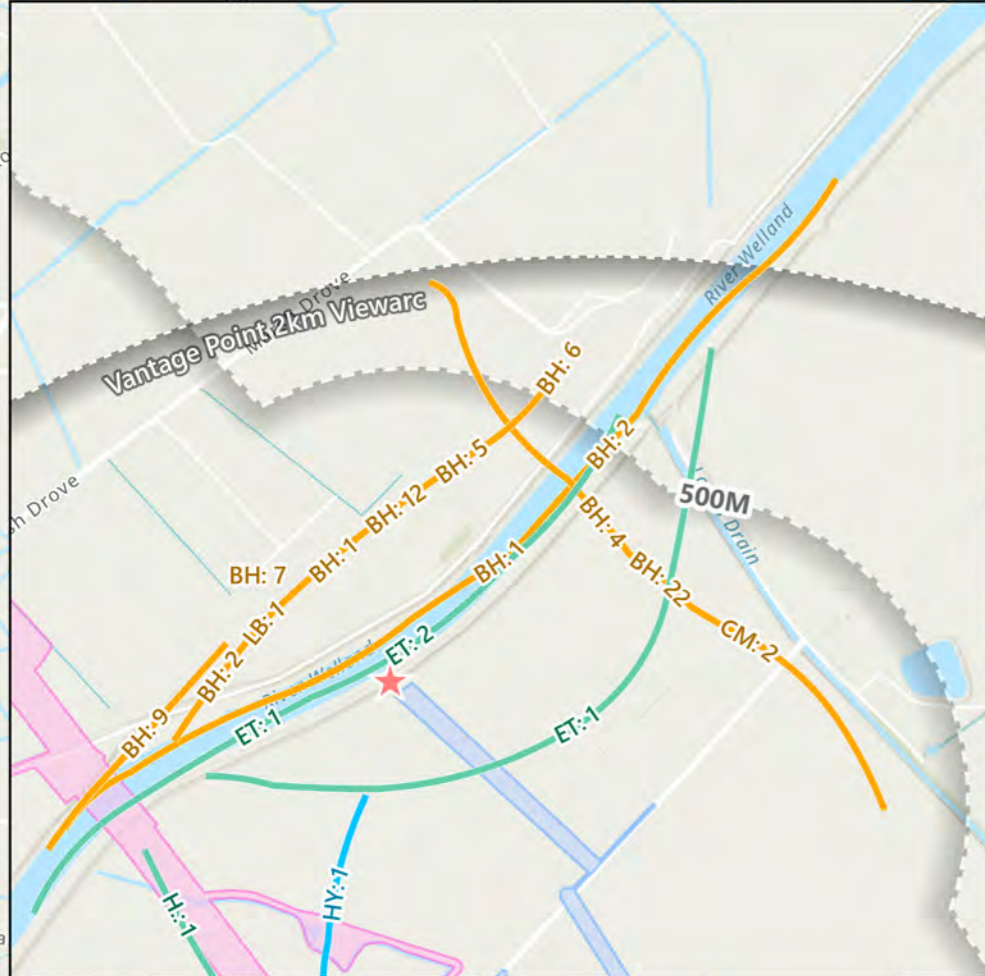
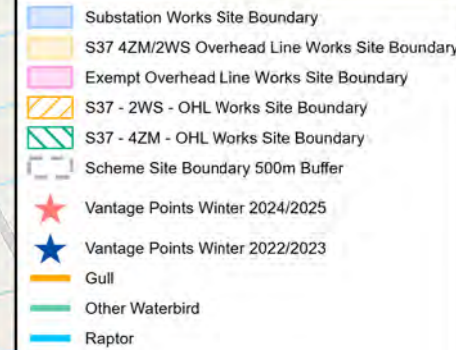
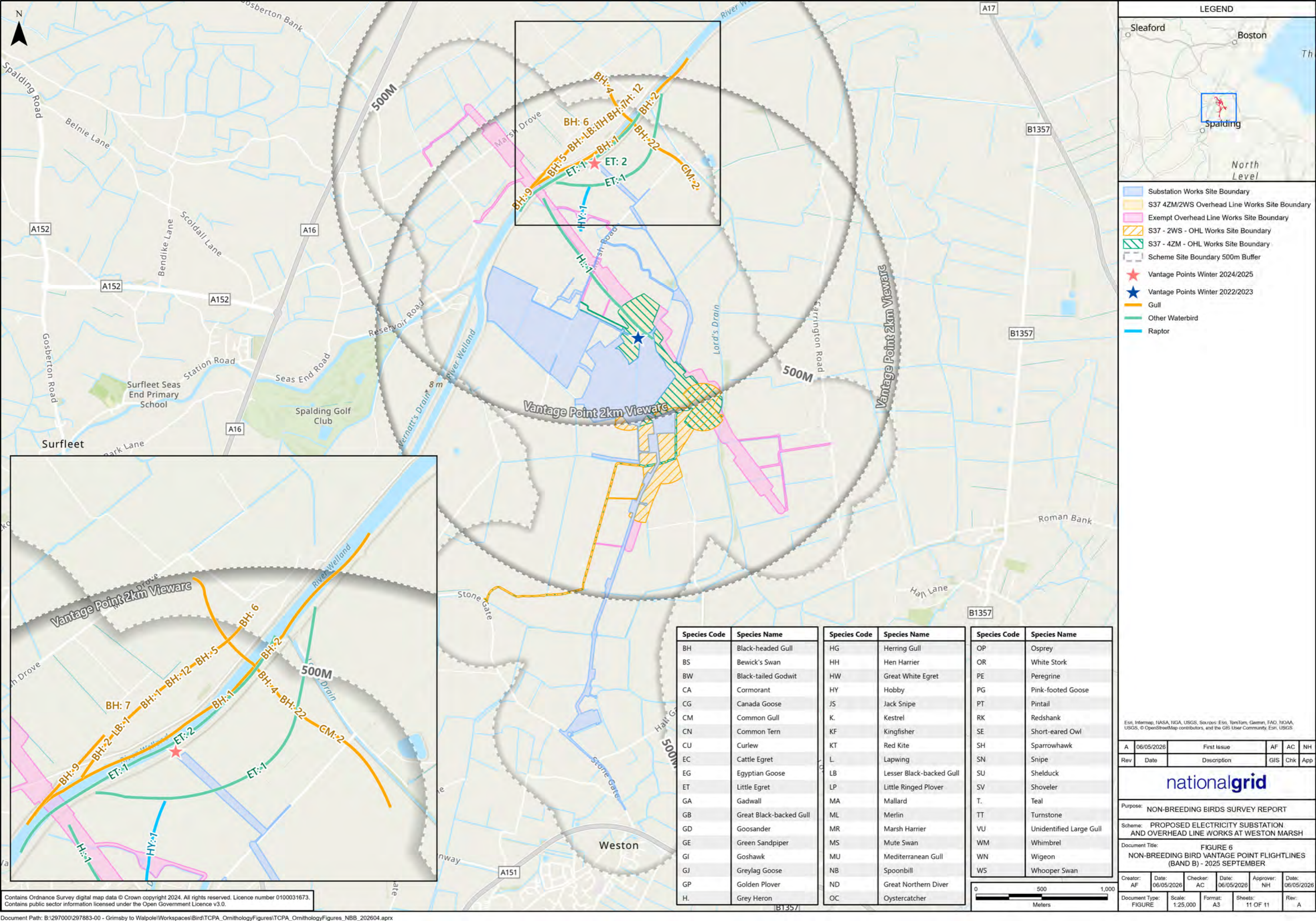
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Species Code	Species Name	Species Code	Species Name	Species Code	Species Name
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BS	Bewick's Swan	HH	Hen Harrier	OR	White Stork
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H.	Grey Heron	OC	Oystercatcher		

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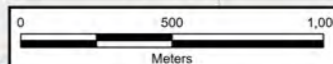
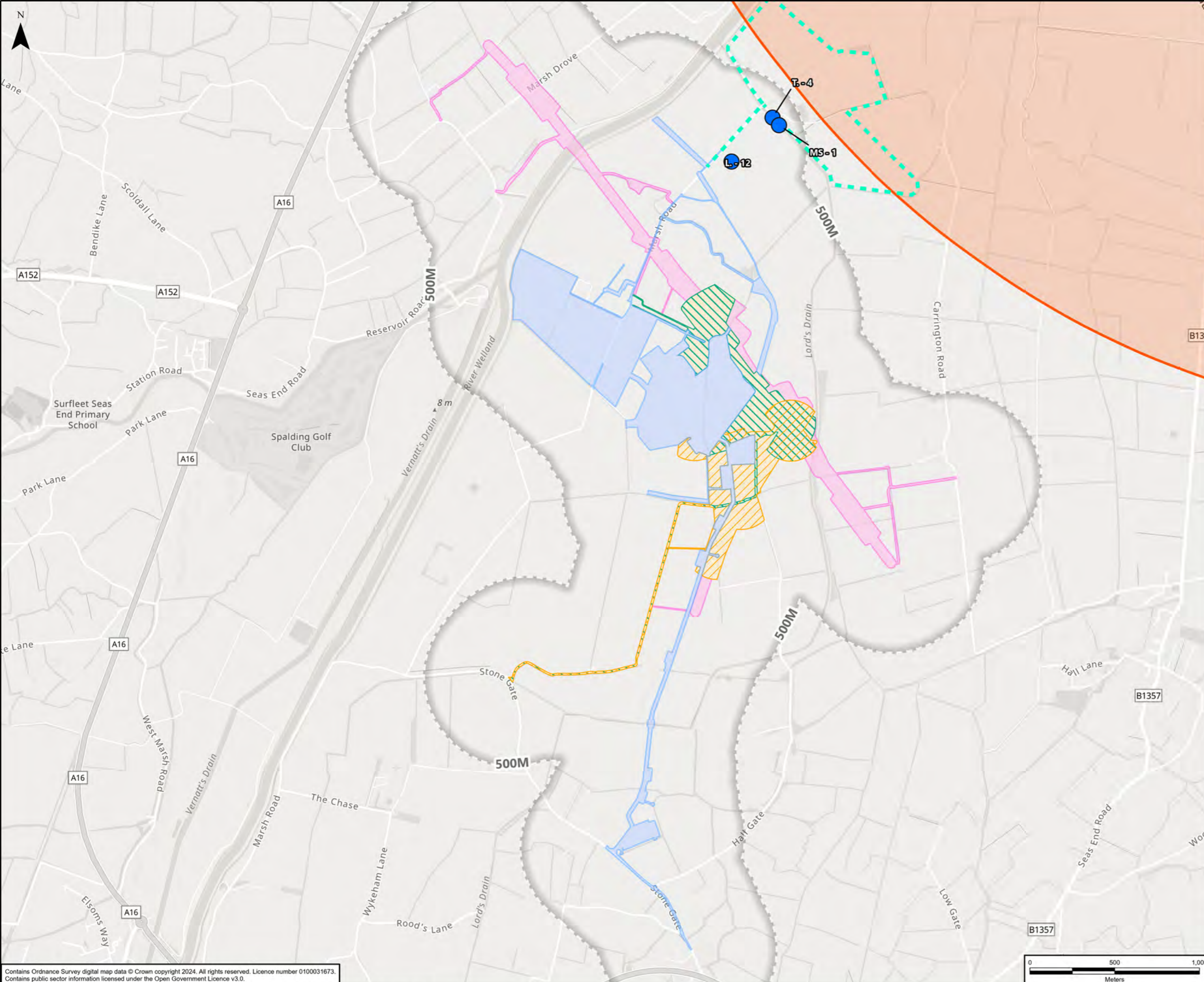


Figure 7 Nocturnal bird data by month (2024/2025)



Legend

- Substation Works Site Boundary
- S37 4ZM/2WS Overhead Line Works Site Boundary
- Exempt Overhead Line Works Site Boundary
- S37 - 2WS - OHL Works Site Boundary
- S37 - 4ZM - OHL Works Site Boundary
- Scheme Site Boundary 500m Buffer
- 5Km Impact Risk Zone (IRZ)
- Nocturnal Transect Winter 2024/2025
- GP - GOLDEN PLOVER
- L - LAPWING
- LG - LITTLE GREBE
- MA - MALLARD
- MH - MOORHEN
- MS - MUTE SWAN
- T - TEAL
- WN - WIGEON

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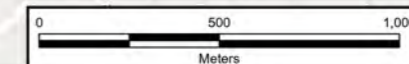
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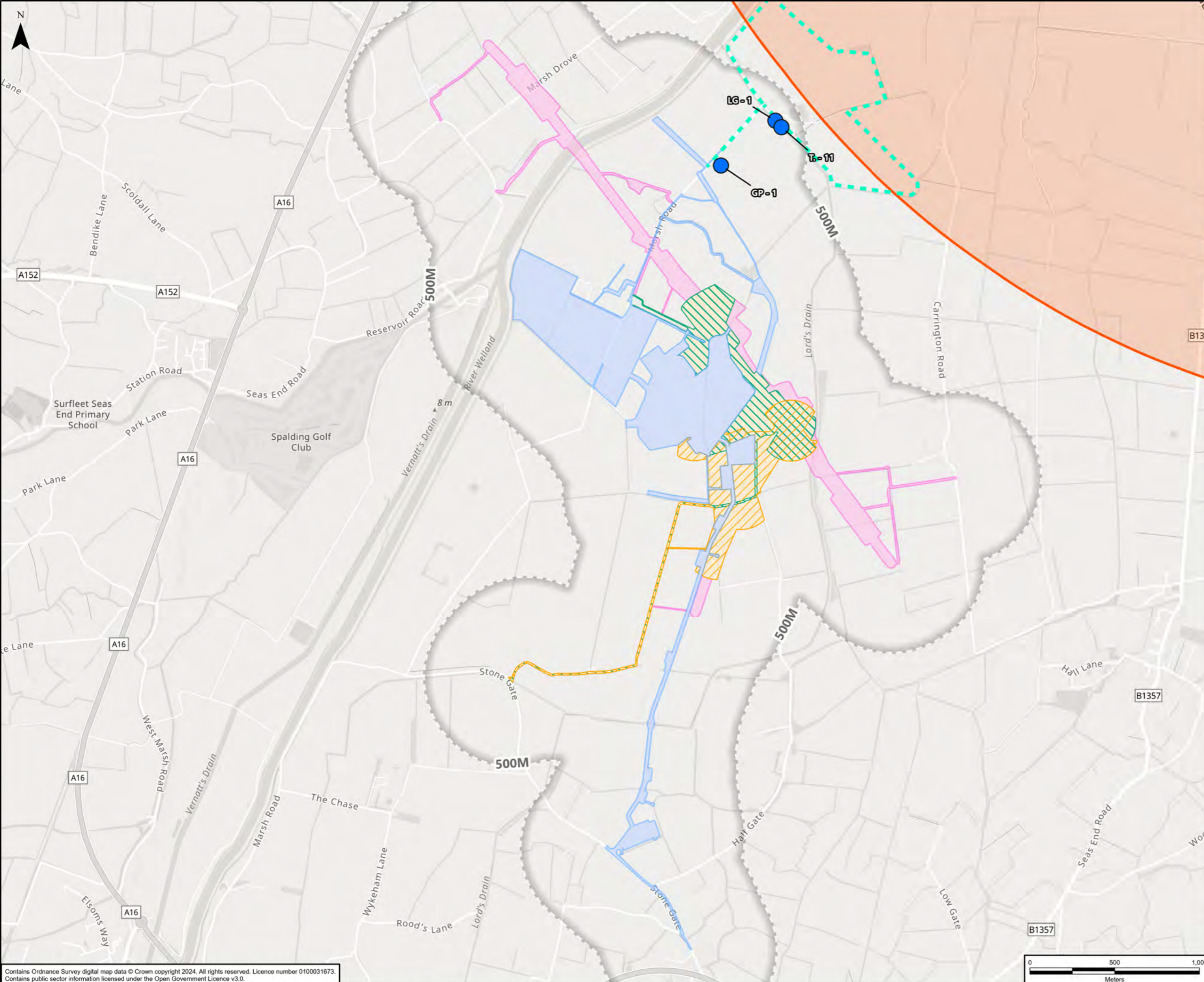
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- Legend**
- Substation Works Site Boundary
 - S37 4ZM/2WS Overhead Line Works Site Boundary
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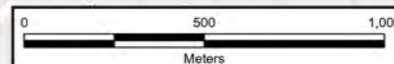
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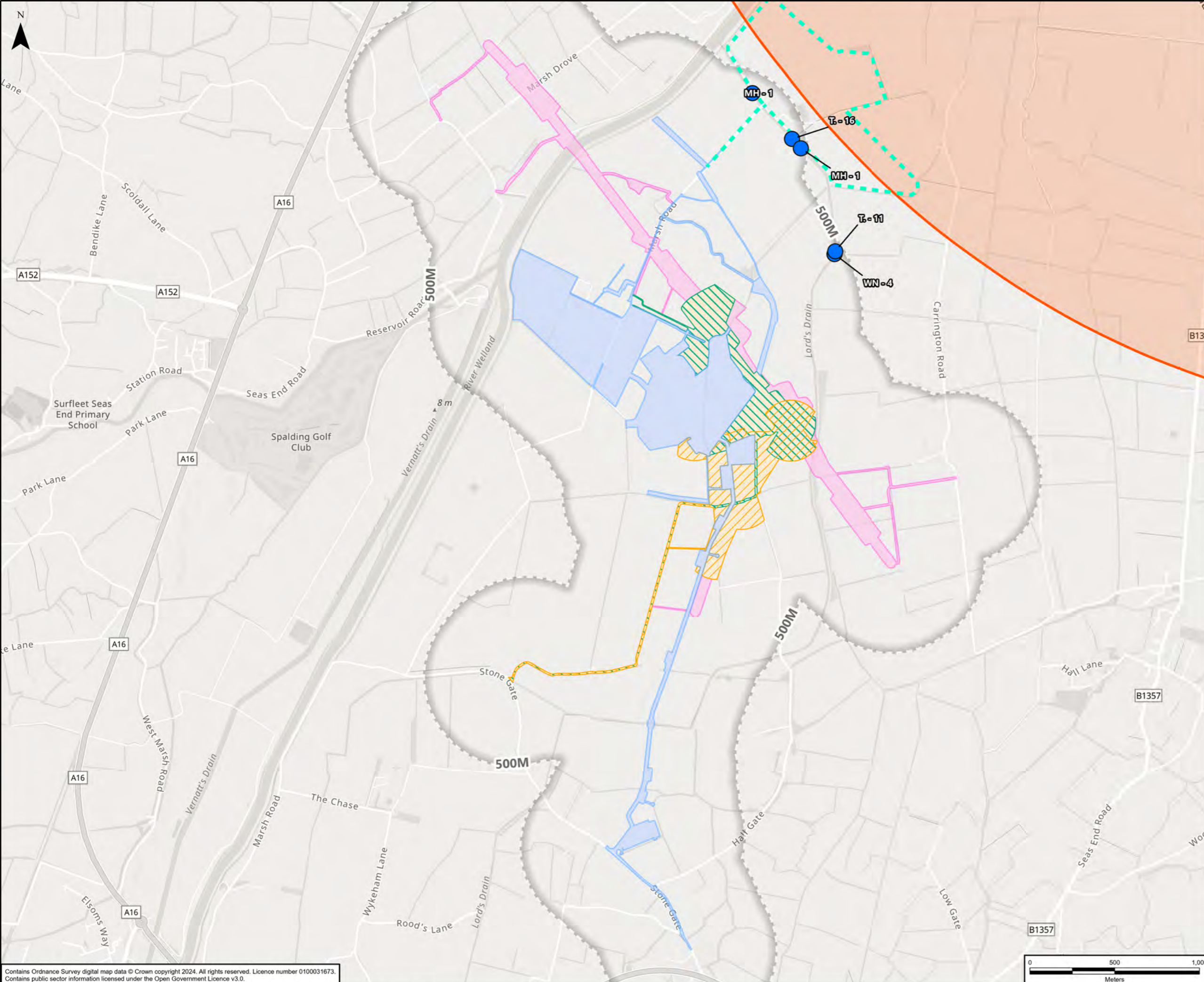
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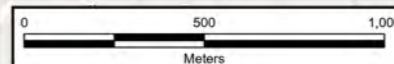
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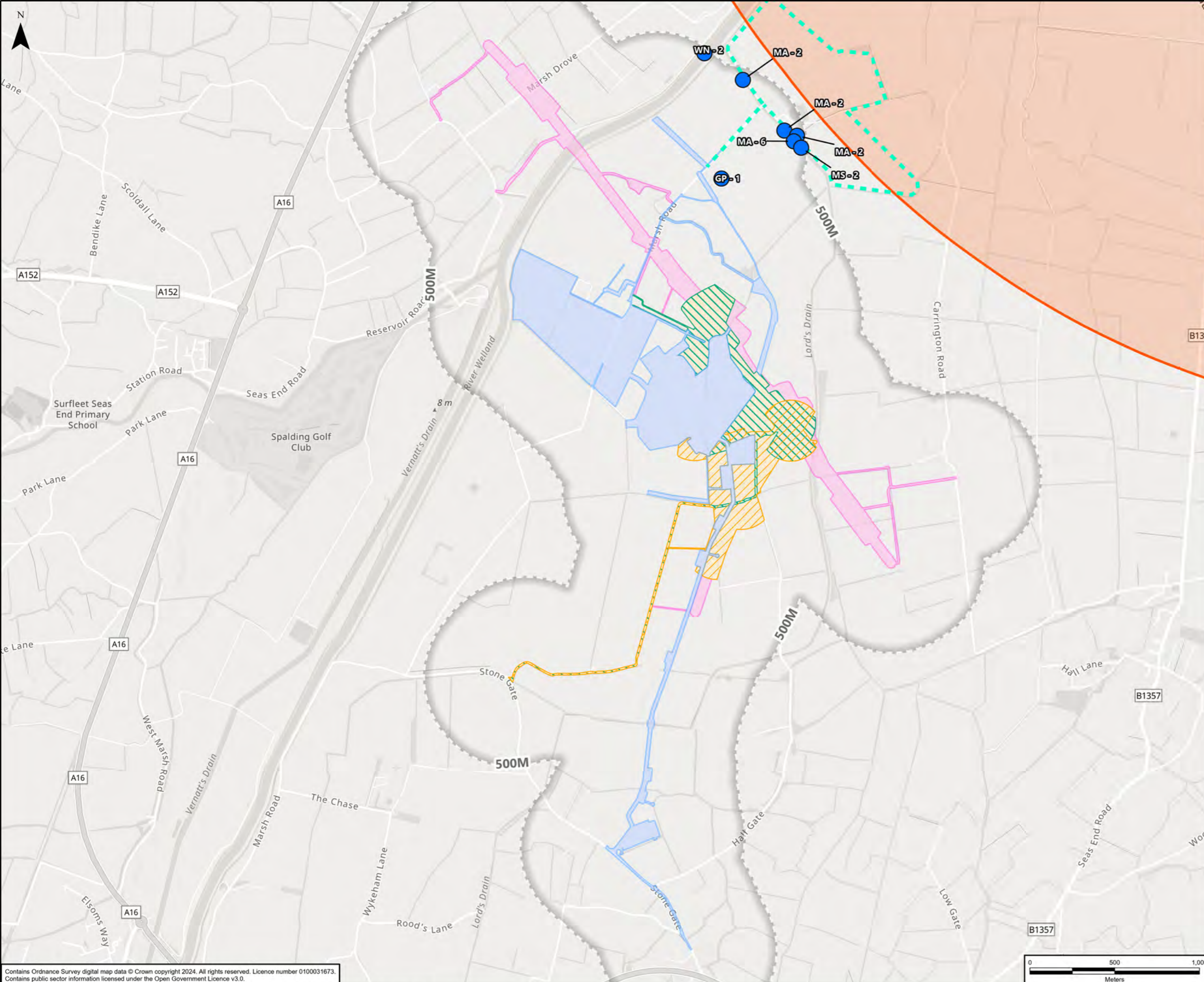
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- Legend**
- Substation Works Site Boundary
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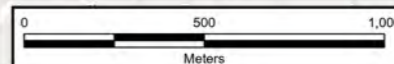
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Appendices

Appendix A Survey Timings and Weather Conditions

Wind levels were measured using the Beaufort scale of 0 to 12, with 0 indicating calm, and 12 indicating hurricane. Cloud cover was recorded on a scale of 0 to 8, with 0 indicating no cloud cover, and 8 indicating completely overcast. Precipitation was measured on a scale of 0 to 5, with 0 indicating dry and 5 indicating very heavy rain.

A.1. Transect Surveys

Table A.1 Diurnal 2022/2023 transects dates, times and weather conditions

Date	Start time	End time	Temperature (°C)	Windspeed (0-12)	Precipitation (0-5)	Cloud cover (0-8)
08/12/2022	08:20	11:05	-1 to 1	1 to 3	0	0
12/01/2023	11:50	14:00	12	4	0	8
06/03/2023	13:00	16:00	6-7	3	0	8
08/03/2023	09:30	12:30	1-3	1	0	8

Table A.2 Diurnal 2024/2025 transects dates, timings, and weather conditions

Date	Start time	End time	Temperature (°C)	Windspeed (0-12)	Precipitation (0-5)	Cloud cover (0-8)
10/10/2024	08:30	12:00	9 to 10	2 to 3	0	3 to 6
07/11/2024	08:20	12:00	10 to 11	0 to 1	0	8
02/12/2024	08:00	12:00	5 to 7	4	0	6 to 7
23/01/2025	09:05	12:05	3 to 6	3	0	6 to 8
12/02/2025	08:45	12:00	4 to 5	2	0 to 2	7 to 8
12/03/2025	09:50	13:15	7	3 to 4	0	4 to 6

Table A.3 Nocturnal 2024/2025 transects dates, timings and weather conditions

Date	Start time	End time	Temperature (°C)	Windspeed (0-12)	Precipitation (0-5)	Cloud cover (0-8)	Visibility
15/10/2024	20:00	23:00	13	3	0	1 to 5	2
25/11/2024	17:00	20:00	8	2	0	5	3
21/01/2025	17:15	21:30	4	2	0	6 to 7	2
18/03/2025	19:00	21:10	3 to 5	3 to 4	0	0	2

A.2. Drive-over surveys

Table A.4 2022/2023 drive-over survey dates and weather conditions

Date	Start time	End time	Temperature (°C)	Windspeed (0-12)	Precipitation (0-5)	Cloud cover (0-8)	Visibility
24/01/2023	09:50	13:18	-1 to 3	1	0	2 to 3	2
25/01/2023	09:35	14:55	4 to 7	1 to 2	0	7 to 8	2
01/03/2023	08:40	16:00	5 to 6	3	0 to 2	5 to 8	2
02/03/2023	08:30	10:30	5 to 6	2	0	7 to 8	2
29/03/2023	08:35	12:35	10 to 12	2	0 to 2	8	2

Table A.5 2024/2025 drive-over survey dates and weather conditions

Date	Start time	End time	Temperature (°C)	Windspeed (0-12)	Precipitation (0-5)	Cloud cover (0-8)
07/10/2024	08:10	19:07	12 to 18	2 to 4	0-2	3 to 8
18/11/2024	11:00	16:30	2 to 4	1	0	2 to 8
16/12/2024	10:00	16:00	11 to 12	2 to 3	0	6 to 8
13/01/2025	11:00	16:00	3 to 5	3	0	3 to 5

A.3. Vantage Point Surveys

Table A.6 Vantage Point surveys: 2022/2023 date and weather conditions (VP5)

Date	Start time	End time	Temperature (°C)	Windspeed (0-12)	Precipitation (0-5)	Cloud cover (0-8)
08/12/2022	08:45	15:15	-1 to 2	2	0	0
18/01/2023	13:10	16:10	3 to 4	2	0	2
08/02/2023	09:35	12:35	2 to 6	3 to 4	0	2 to 3
22/03/2023	08:20	12:20	12 to 13	5	0	4 to 7

Table A.7 Vantage Point surveys: 2024/2025 dates, timings, and weather conditions (VP5).

Date	Start time	End time	Temperature (°C)	Windspeed (0-12)	Precipitation (0-5)	Cloud cover (0-8)
16/10/2024	09:30	12:30	13	2	0	8
18/11/2024	08:58	11:58	0	1 to 2	0	0
25/11/2024	13:23	16:23	9 to 11	3	0	0
09/12/2024	12:00	15:00	3 to 4	3 to 4	0 to 1	8
16/12/2024	09:10	12:10	9	3	0	8
28/01/2025	09:00	12:00	8 to 9	3 to 4	0 to 1	0
06/02/2025	09:25	12:25	2 to 7	0 to 3	0	0
21/02/2025	08:25	11:25	13	5 to 6	0	0
06/03/2025	06:10	09:10	3 to 8	0 to 2	0	1
12/03/2025	09:35	12:35	6 to 8	2 to 3	0	0

Table A.8 Vantage Point surveys: 2025 spring passage survey dates and weather conditions (VP4P)

Date	Start time	End time	Temperature (°C)	Windspeed (0-12)	Precipitation (0-5)	Cloud cover (0-8)	Visibility
20/03/2025	09:00	12:00	10 to 14	1	0	1	3
25/03/2025	13:15	16:15	11 to 14	0	0	0	3
02/04/2025	06:00	09:00	6 to 11	2 to 3	0	0	3
09/04/2025	17:19	20:19	7 to 12	3	0	0	3
15/04/2025	12:25	15:25	12	3	0	0	3
24/04/2025	05:10	08:10	7 to 8	2	0	8	3
09/05/2025	09:30	12:30	12 to 18	2	0	0	3

Table A.9 Vantage Point surveys: 2024 autumn passage survey dates and weather conditions (VP4P)

Date	Start time	End time	Temperature (°C)	Windspeed (0-12)	Precipitation (0-5)	Cloud cover (0-8)	Visibility
03/07/2024	10:00	13:00	19 to 21	1 to 2	0	3 to 7	3
09/07/2024	18:53	21:53	22 to 24	2 to 3	0	3 to 4	3
17/07/2024	14:30	17:30	22	3 to 4	0	7 to 8	3
24/07/2024	09:40	12:40	17	3 to 4	0	8	3
07/08/2024	09:15	12:15	18 to 19	3	0	8	3
14/08/2024	08:00	11:00	21 to 23	3	0	2 to 8	3
21/08/2024	17:43	20:43	14 to 16	2	0	8	3
29/08/2024	09:05	12:05	15 to 26	1 to 2	0	8	3
04/09/2024	13:00	16:00	17 to 18	2	0	8	3
18/09/2024	09:25	12:25	19 to 21	3 to 4	0	7 to 8	3
25/09/2024	10:55	13:55	17	3	0	3 to 4	3
02/10/2024	15:15	18:15	16 to 18	2 to 3	0	6 to 8	3
17/10/2024	09:20	12:20	11 to 12	1	0	8	3
21/10/2024	14:50	17:50	14	3 to 4	0	8	3

Appendix B Peak Counts of Species across the Survey Programme and their Conservation Status

Table B.1 Peak counts of species per month across the two survey periods (transects, VPs and drive-over surveys, on the ground) 2022/2023, 2024/2025 within the Study Area, as well as their conservation status. Numbers are tallied values across different survey approaches. Numbers in parentheses indicates numbers of birds in flight. S41 = Section 41 species listed on the NERC Act. BoCC = Birds of Conservation Concern 5 status. Annex I of the EU Birds Directive. Schedule 1 of the Wildlife and Countryside Act.

Species	BoCC Status	S41	Annex I	Schedule 1	2022-2023					2024-2025				
					Dec	Jan	Mar	Oct	Nov	Dec	Jan	Feb	Mar	
Brent goose <i>Branta bernicla</i>	Amber				(1000)									
Canada goose <i>Branta canadensis</i>	-				20						(2)			
Greylag goose <i>Anser anser</i>	Amber			Y							(4)			
Pink-footed goose <i>Anser brachyrhynchus</i>	Amber								(5)		(1208)			
Mute swan <i>Cygnus olor</i>	Green				(6)		2				1		2	
Whooper swan <i>Cygnus cygnus</i>	Amber		Y	Y								(8)		
Shelduck <i>Tadorna tadorna</i>	Amber						(2)							
Goosander <i>Mergus merganser</i>	Green										2			
Gadwall <i>Mareca strepera</i>	Amber							2				4		
Wigeon <i>Mareca penelope</i>	Amber						5 (3)		8			32	32 (190)	5
Mallard <i>Anas platyrhynchos</i>	Amber				7	39 (14)	112 (18)	37	17	4 (1)	43	2 (9)	23	
Teal <i>Anas crecca</i>	Amber						25 (2)				6	16		
Grey partridge <i>Perdix perdix</i>	Red	Y				(8)					2		1	
Little grebe <i>Tachybaptus ruficollis</i>	Green						1				1			
Oystercatcher <i>Haematopus ostralegus</i>	Amber						2						1	
Woodpigeon <i>Columba palumbus</i>	Amber							44	41 (3)	22 (13)	866 (2)	25 (90)	32 (113)	
Stock dove <i>Columba oenas</i>	Amber								9		18			
Moorhen <i>Gallinula chloropus</i>	Amber						2		2	2	1		4	
Golden plover <i>Pluvialis apricaria</i>	Green		Y		(167)	(10)		71 (287)	1 (75)				(1)	
Lapwing <i>Vanellus vanellus</i>	Red	Y			(240)			37 (90)	(23)	(3)		(1)		
Turnstone <i>Arenaria interpres</i>	Amber										(3)			

Species	BoCC Status	S41	Annex I	Schedule 1	2022-2023					2024-2025			
					Dec	Jan	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Woodcock <i>Scolopax rusticola</i>	Red												(1)
Snipe <i>Gallinago gallinago</i>	Amber				(21)						(1)		
Black-headed gull <i>Chroicocephalus ridibundus</i>	Amber				(5)	13 (12)	(5)	343	326 (83)	(36)	224 (54)	(26)	(39)
Redshank <i>Tringa totanus</i>	Amber						(2)				2		
Common gull <i>Larus canus</i>	Amber				45 (65)	1 (1)		21	7	3	25 (2)	(4)	2
Herring gull <i>Larus argentatus</i>	Red	Y			(2)			1	1	(2)	10 (17)		
Great black-backed gull <i>Larus marinus</i>	Amber							1					
Lesser black-backed gull <i>Larus fuscus</i>	Amber										1		
Cormorant <i>Phalacrocorax carbo</i>	Green					3	6 (1)	4	2	2 (2)	3		2
Little egret <i>Egretta garzetta</i>	Green		Y				1	(1)		(1)		(1)	2
Grey heron <i>Ardea cinerea</i>	Green				1 (3)			1		(1)	1	1	
Sparrowhawk <i>Accipiter nisus</i>	Amber								(2)s				
Marsh Harrier <i>Circus aeruginosus</i>	Amber		Y	Y								(1)	
Red kite <i>Milvus milvus</i>	Green		Y	Y				1 (1)					
Buzzard <i>Buteo buteo</i>	Green				(5)	(12)	(5)	4	1		2 (2)	1 (2)	5
Barn owl <i>Tyto alba</i>	Green			Y									(1)
Kestrel <i>Falco tinnunculus</i>	Amber					1	(4)	8	3 (1)	(1)	2		
Peregrine falcon <i>Falco peregrinus</i>	Green		Y	Y					(6)	(1)	2	(12)	(16)
Jackdaw <i>Corvus monedula</i>	Green									200			
Rook <i>Corvus frugilegus</i>	Amber						3		1	1000 (2)	366 (2)	2	
Skylark <i>Alauda arvensis</i>	Red	Y			(1810)			13	2	10	3	2	3
Chiffchaff <i>Phylloscopus collybita</i>	Green						2						
Starling <i>Sturnus vulgaris</i>	Red	Y							140 (103)	1 (3)	40		
Wren <i>Troglodytes troglodytes</i>	Amber								8	5	5	3	
Mistle thrush <i>Turdus viscivorus</i>	Red								1		1		

Species	BoCC Status	S41	Annex I	Schedule 1	2022-2023				2024-2025				
					Dec	Jan	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Song thrush <i>Turdus philomelos</i>	Amber	Y							9		5		(1)
Whinchat <i>Saxicola rubetra</i>	Red								1				
Stonechat <i>Saxicola rubicola</i>	Green								1			1	
Fieldfare <i>Turdus pilaris</i>	Red			Y					(5)	3	(17)		
Redwing <i>Turdus iliacus</i>	Amber			Y					6	6 (6)			
Dunnock <i>Prunella modularis</i>	Amber	Y						1	2	1		1	
House sparrow <i>Passer domesticus</i>	Red	Y								1			
Meadow pipit <i>Anthus pratensis</i>	Amber							9	5 (29)	13	6 (1)	9 (3)	
Greenfinch <i>Chloris chloris</i>	Red								1	1			
Linnet <i>Linaria cannabina</i>	Red	Y							16	13 (38)		2 (40)	
Reed bunting <i>Emberiza schoeniclus</i>	Amber	Y							29	1	5	1 (1)	
Corn bunting <i>Emberiza calandra</i>	Red	Y								2			
Yellowhammer <i>Emberiza citronella</i>	Red	Y							4				
Grand Total		12	9	4	83	57	66	598	644	1302	1683	82	57

Appendix C Flight Data from Vantage Point Surveys

Table C.1 Winter flight data of target species across 2024/2025 non-breeding bird surveys (October 2024 to March 2025 inclusive)

Species	Total number of flights	Total number of individuals	Number of flights recorded during surveys at risk height (band B)	Flight seconds at collision height	Number of individuals at risk height	Bird seconds at collision height
Black-headed gull	5	66	5	265	66	46,139
Cormorant	2	2	2	80	2	1,406
Little egret	1	1	1	100	1	1,901
Herring gull	1	4	1	130	4	4,736
Red kite	1	1	1	180	1	1,508
Lapwing	4	117	4	690	117	355,867
Mallard	1	8	1	25	8	9,504
Peregrine falcon	27	31	27	1,030	31	31,109
Pink-footed goose	1	1200	1	175	1200	1,683,600
Sparrowhawk	2	2	2	210	2	2,971
Turnstone	1	3	1	35	3	2,085
Wigeon	1	25	1	50	25	25,525

Table C.2 Spring passage survey flight data of target species (2024)

Species	Total number of flights	Total number of individuals	Number of flights recorded during surveys at risk height (band B)	Flight seconds at collision height	Number of individuals at risk height	Bird seconds at collision height
Black-headed gull	212	12943	212	19325	12943	2,097,608
Cormorant	35	35	35	1568	35	1,568
Common gull	30	141	30	3294	141	11,772
Little egret	64	97	64	4142	97	6,848
Greylag goose	23	69	23	1540	69	4,620
Grey heron	18	18	18	882	18	882
Herring gull	50	282	50	3330	282	17,769
Kestrel	5	5	5	1800	5	1,800
Red kite	1	1	1	360	1	360
Lesser black-backed gull	42	96	42	2406	96	5,772
Mallard	3	12	3	60	12	240
Marsh harrier	36	36	36	3965	36	3,965
Shelduck	25	38	25	809	38	1,342
Teal	9	36	9	180	36	720

Species	Total number of flights	Total number of individuals	Number of flights recorded during surveys at risk height (band B)	Flight seconds at collision height	Number of individuals at risk height	Bird seconds at collision height
Wigeon	15	156	15	480	156	5100

Table C.3 Autumn flight for target species (2024)

Species	Total number of flights	Total number of individuals	Number of flights recorded during surveys at risk height (band B)	Flight seconds at collision height	Number of individuals at risk height	Bird seconds at collision height
Black-headed gull	113	8337	33	1935	1556	13,397,815
Cormorant	43	55	10	570	13	920
Common gull	17	333	1	120	2	480
Common tern	1	5	0	0	0	0
Common sandpiper	10	16	0	0	0	0
Little egret	46	105	6	283	9	758
Great black-backed gull	2	5	0	0	0	0
Green sandpiper	1	1	0	0	0	0
Grey heron	9	9	2	155	2	155
Herring gull	26	69	4	240	6	840
Hobby	5	5	1	30	1	30
Kestrel	15	19	4	400	4	400

Species	Total number of flights	Total number of individuals	Number of flights recorded during surveys at risk height (band B)	Flight seconds at collision height	Number of individuals at risk height	Bird seconds at collision height
Red kite	2	2	1	400	1	400
Lapwing	1	11	0	0	0	0
Lesser black-backed gull	40	69	7	325	7	725
Mallard	13	54	1	60	2	240
Merlin	1	1	0	0	0	0
Mute swan	1	1	0	0	0	0
Mediterranean gull	1	1	0	0	0	0
Oystercatcher	6	10	0	0	0	0
Peregrine falcon	5	5	5	220	5	220
Pintail	1	1	1	45	1	45
Quail	1	1	0	0	0	0
Ringed plover	1	1	0	0	0	0
Ruff	1	1	0	0	0	0
Sparrowhawk	2	2	0	0	0	0
Teal	2	9	1	60	8	3,840
Woodcock	1	2	0	0	0	0
Wigeon	3	6	1	50	3	450
Whooper swan	2	12	1	70	7	3,430

Table C.4 Autumn and spring passage 2024 average flight height summary data

Species	Peak count	Average height of flight (m)						
		July 2024	Aug 2024	Sept 2024	Oct 2024	Mar 2025	Apr 2025	May 2025
Black-headed gull	12535	14	15	13	19	45	30	
Cormorant	19	12	17	24	7	30	30	50
Common gull	215		10	10	10	45	20	
Common tern	6			6				
Common sandpiper	11	2	1	2				
Little egret	75	11	8	8	8	29	20	
Great black-backed gull	10			3	10			
Green sandpiper	3	3						
Greylag goose	69						31	
Grey heron	18	10	2	23	13		25	
Herring gull	191	22	13	10	10	27	26	40
Hobby	3	100		33	8			
Kestrel	9	35	18	9	10			30
Lapwing	11				15			
Lesser black-backed gull	81	12	12	9	19	30	20	

Species	Peak count	Average height of flight (m)						
		July 2024	Aug 2024	Sept 2024	Oct 2024	Mar 2025	Apr 2025	May 2025
Mallard	38		4	4	9	30		
Marsh harrier	31					40	30	
Mediterranean gull	1				10			
Merlin	1				5			
Mute swan	1				3			
Oystercatcher	10	2						
Peregrine falcon	5	34						
Pintail	1				25			
Quail	1	1						
Red Kite	2							40
Ringed plover	1		1					
Ruff	1	5						
Shelduck	38						25	
Sparrowhawk	1			1	5			
Teal	36		2		40	40		
Wigeon	156				10	30		

Species	Peak count	Average height of flight (m)						
		July 2024	Aug 2024	Sept 2024	Oct 2024	Mar 2025	Apr 2025	May 2025
Whooper swan	12				28			
Woodcock	2				10			

Appendix D The Wash SPA and Ramsar Qualifying Waterbirds Summary

Table D.1 Qualifying species of The Wash SPA, Ramsar and SSSI that were recorded during the non-breeding bird surveys on site, with peak count, percentage of designated site population, and distance of closest record to the designated site. Number of months is the sum of the total months from across the non-breeding surveys (transects 2022/2023 and 2024/2025, and the drive over survey in 2024/2025). IRZ = Impact Risk Zone

Qualifying species	IRZ (m)	Peak count	Percentage of designated site population	Number of months recorded	Closest distance to designated site (m)
Black-headed gull	NS	328	1.5	7	5421.4
Canada goose	NS	20	5.5	1	6,150.0
Common gull	NS	45	3.1	9	5466.3
Cormorant	NS	5	1.5	7	5786.3
Gadwall	500	6	2.1	2	6,982.0
Golden plover	15,000	60	0.3	3	5633.1
Goosander	500	4	66.7	1	5627.9
Great black-backed gull	NS	1	0.3	1	7,305.7
Grey heron	NS	2	9.5	6	6465.8
Herring gull	NS	10	0.2	3	6083.1
Lapwing	15,000	25	0.1	2	5570.1
Lesser black-backed gull	NS	1	0.1	1	6,612.5
Little egret	NS	2	0.2	2	5685.5
Little grebe	NS	1	2.4	1	5214.2
Mallard	500	69	7.7	14	5097.1

Qualifying species	IRZ (m)	Peak count	Percentage of designated site population	Number of months recorded	Closest distance to designated site (m)
Moorhen	NS	4	6.8	11	5127.3
Mute swan	500	2	2.1	6	5127.3
Oystercatcher	2,000	2	0.01	2	5,546.2
Redshank	2000	11	0.2	2	5319.0
Teal	500	27	0.9	9	5127.3
Wigeon	2000	30	0.3	8	5203.0

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