



Tween Bridge Solar Farm

A Nationally Significant Infrastructure Project in the Energy Sector

Preliminary Environmental Information Report

Technical Appendix 7.3 – Non-Breeding Bird Survey Report

October 2023



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Tween Bridge NSIP Solar Farm
on behalf of Pegasus Planning Ltd.

Technical Appendix 7.3: Non-Breeding Bird Survey Report –
2022/23



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CONTENTS

1	INTRODUCTION	1
1.1	Project Background.....	1
1.2	Draft Order Limits Overview	1
2	METHODOLOGY	2
2.1	Desk Study	2
2.2	Non-Breeding Bird Surveys	3
3	RESULTS	6
3.1	Desk Study Results.....	6
3.2	Non-Breeding Bird Surveys	6

FIGURES

Figure 1: Non-Breeding Bird Survey Field Plan - Overview

Figure 2: Non-Breeding Bird Survey Field Plans - 1

Figure 3: Non-Breeding Bird Survey Field Plans - 2

Figure 4: Non-Breeding Bird Survey Field Plans - 3

Figure 5: Non-Breeding Bird Survey Field Plans - 4

Figure 6: Non-Breeding Bird Survey Field Plans - 5

Figure 7: Non-Breeding Bird Survey Field Plans - 6

Figure 8: Non-Breeding Bird Survey Field Plans – 7

Figure 9: Non-Breeding SPA Bird Survey Results – Pink-Footed Goose

Figure 10: Non-Breeding SPA Bird Survey Results – Teal

Figure 11: Non-Breeding SPA Bird Survey Results – Lapwing

Figure 12: Non-Breeding SPA Bird Survey Results – Golden Plover, Grey Plover And Curlew

Figure 13: Non-Breeding SPA Bird Survey Results – Marsh Harrier And Hen Harrier.

ANNEXES

Annex 1: Bird Species Summary

Annex 2: Humber Estuary Waterbird Assemblage

Annex 3: Desk Study Records

Annex 4: Bird Survey Effort

Annex 5: Target Species Recorded Within the Draft Order Limits

Annex 6: Target Species Recorded Within the Wider Survey Area

Annex 7: Secondary Species Recorded Within the Draft Order Limits and Wider Survey Area

1 INTRODUCTION

1.1 Project Background

1.1.1 Avian Ecology Ltd. was commissioned by Pegasus Planning Ltd. to undertake non-breeding bird surveys in the 2022/2023 period in relation to 'The Scheme' of a renewable energy generating project; consisting of ground-mounted solar photovoltaic ('PV') arrays, together with on-site energy storage and associated infrastructure. The Scheme is located on land to the east of the town of Thorne and to the west of the town of Crowle (the 'Draft Order Limits').

1.1.2 The follow report presents the detailed methodologies and findings of surveys undertaken between September 2022 and March 2023.

1.1.3 The objectives of this report are to:

- Identify the presence of notable non-breeding bird species within the Draft Order Limits, and on adjacent land; and,
- Assess the potential importance of the non-breeding bird assemblages which the Draft Order Limits (and adjacent land) supports.

1.1.4 Only common bird species names are referred to within the main text of this report.

1.1.5 **Annex 1** provides a summary of all bird species recorded during the surveys. Both common and species names are provided, together with a summary of their conservation status as relevant.

1.2 Draft Order Limits Overview

1.2.1 The Draft Order Limits (see **Figure 1**) encompasses a series of connected agricultural land parcels, predominately under arable management. Fields are bound by a series of watercourses as well as hedgerows, fences, and tree lines. A woodland copse is present as well as a number of ponds.

1.2.2 The Tween Bridge Wind Farm is located within the Draft Order Limits, and consists of twenty-two operational wind turbines. The Stainforth and Kneadby Canal also intersects the centre of the Draft Order Limits spanning from west to east.

1.2.3 The Draft Order Limits does not form part of any European site comprising part of the National Site Network, designated for non-breeding (i.e. wintering and passage) ornithological interests. A small area of the Draft Order Limits includes part of the Thorne Moors Special Area of Conservation (SAC) designated for non-ornithological interests.

1.2.4 The Thorne, Crowle and Goole Moors Site of Special Scientific Interest (SSSI) also coincides with the boundary of the SAC and lists the site is important for non-breeding birds but no further species specific information is provided within the citation. Whooper swan, pink-footed goose, hen harrier and short-eared owl are however listed as non-breeding visitors to the Humberhead Peatlands National Nature Reserve (NNR), located to the north of the Draft Order Limits, and which includes the Thorne, Goole, Crowle and Hatfield Moors.

1.2.5 European sites designated for non-breeding ornithological interests located within 10km of the Draft Order Limits are summarised in **Table 1.1** and illustrated in **Figure 1**. There are no additional sites located within 20km of the Draft Order Limits, designated for non-breeding pink-footed goose and which may have the potential for functional linkage.

Table 1.1: Ornithological designated sites for nature conservation (non-breeding qualifying interests).
 SPA: Special Protection Areas. SSSI: Site of Special Scientific Interest (SSSI). NNR: National Nature Reserve.

Designation	Distance	Ornithological Interests
Humber Estuary Ramsar site	6.15km east	<p><u>Qualifying Features:</u> Bar-tailed godwit (Wintering); Black-tailed godwit (Wintering and Passage); Dunlin (Wintering and Passage); Golden plover (Wintering and Passage); Knot (Wintering and Passage); Redshank (Wintering and Passage); Shelduck (Wintering); and, Waterbird assemblage (Wintering).</p>
Humber Estuary SPA/SPA (Marine Components GB)	7.44km north-east	<p><u>Qualifying Features:</u> Avocet (Non-breeding); Bar-tailed godwit (Non-breeding); Bittern (Non-breeding); Black-tailed godwit (Non-breeding); Dunlin (Non-breeding); Golden plover (Non-breeding); Hen harrier (Non-breeding); Knot (Non-breeding); Redshank (Non-breeding); Ruff (Non-breeding); Shelduck (Non-breeding); and, Waterbird assemblage (Non-breeding)¹.</p>

2 METHODOLOGY

2.1 Desk Study

- 2.1.1 A desk study was undertaken to identify any existing ornithological records within a 2km radius of the Draft Order Limits. Records were requested from the Doncaster Local Records Centre (DLRC) and Greater Lincolnshire Nature Partnership (GLNP).
- 2.1.2 For the purposes of this report, the search was refined to species listed as qualifying interest of the European sites listed in **Table 1.1**, Amber List, Red List, NERC S41, Doncaster² and Lincolnshire³ Local Biodiversity Action Plan, Annex 1⁴ and/or Schedule 1⁵ species only and which may use the Draft Order Limits for winter foraging.

¹ With reference to Natural England Conservation Advice for Marine Protected Areas: Humber Estuary SPA, the waterfowl assemblage of the Humber consists of over 135,000 waterbirds, including all internationally important regularly occurring migratory species, the Annex I wintering species and species occurring at levels of more than 1% of national populations or whose populations exceed 2,000 individuals. See **Annex 2**.

² <https://dmbcwebstolive01.blob.core.windows.net/media/Default/Planning/Documents/Natural%20Environment/Biodiversity/Species%20Audit.pdf> (Accessed 4th July 2023).

³ <http://www.southkesteven.gov.uk/CHttpHandler.ashx?id=7371&p=0> (accessed 4th July 2023)

⁴ Annex 1 – Species listed on Annex of the Birds Directive - https://environment.ec.europa.eu/topics/nature-and-biodiversity/birds-directive_en.

⁵ Schedule 1 – Species listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) - <https://www.rspb.org.uk/birds-and-wildlife/advice/wildlife-and-the-law/wildlife-and-countryside-act/schedules/>.

- 2.1.3 Furthermore, the search was restricted to only those records for the last 10 years (since 2013), to ensure the most up to date information is considered, and less relevant historic records discounted.
- 2.1.4 The results of the desk study are summarised in **Section 3.1**, with further details presented in **Annex 3**.

2.2 Non-Breeding Bird Surveys

- 2.2.1 Non-breeding bird surveys were undertaken between September 2022 and March 2023.
- 2.2.2 Surveys were carried out within all suitable habitats within the Draft Order Limits, and all suitable fields within a 600m buffer (the Wider Survey Area) of the Draft Order Limits, as shown in **Figure 1**. The combination of the Draft Order Limits and Wider Survey Area will be termed 'Survey Area' hereafter.
- 2.2.3 A total of 14 walkover survey visits were completed adopting the 'look-see' methodology (Gilbert *et al.* 1998⁶). During each survey visit surveyors observed each field within the Study Area, walking the boundaries and stopping at intervals and scanning the fields for Target Species, with binoculars.
- 2.2.4 All Target Species heard or seen were recorded onto field maps. The number of Secondary Species was tallied during the survey, although no attempt to map these species was made.
- 2.2.5 Target Species consisted of all species comprising non-breeding (i.e. passage and wintering) qualifying interests of the Humber Estuary SPA and Ramsar site (see **Table 1.1**), all other wetland species including all swans, geese, ducks, waders, herons and grebes (excluding feral species) and Annex 1/Schedule 1 raptors and all owls.
- 2.2.6 Secondary Species also recorded consisted of non-Annex 1/Schedule 1 raptors, notable flocks of non-wetland species, feral species (Canada goose and Egyptian goose), Birds of Conservation Concern (BoCCs) Amber and Red List species (as per Stanbury *et al.*, 2021⁷), and Lincolnshire/Doncaster Biodiversity Action Plan species^{8,9}.
- 2.2.7 All gull species were also recorded as secondary species, due to the widespread nature of such species, separation distance from the Humber Estuary SPA and the generalist nature of their feeding habits.
- 2.2.8 Suitable habitats for Target Species surveyed within the Draft Order Limits and Wider Survey Area included arable/pasture fields and associated boundary features. Habitats, such as woodland and scrubland were considered unsuitable for Target Species and thus were omitted from the survey.
- 2.2.9 Many fields featured adjacent drainage ditches. Several observations were made of Target Species within these ditches and were recorded as associated with the closest field.
- 2.2.10 A total of 42 standing waterbodies were located within the Draft Order Limits or Wider Survey Area ranging from small ponds that are expected to dry annually and larger ponds (P33 and P35 adjacent to fields 38 and 39). Fields shielded from the Draft Order Limits by significant visual barriers including woodland, main roads and housing developments or otherwise considered unsuitable for Target Species (Fields 179, 199, 206, 208-209, 212-214, 293-296, 300-302, 420, 452, 461, 533-537 and 543-544) were also omitted from the 'Wider Survey Area'.

⁶ Gilbert G, Gibbons D.W. and Evans J. (1998) *Bird Monitoring Methods*. RSPB Sandy.

⁷ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds*, **114**, pp. 723-747.

⁸ <http://www.southkesteven.gov.uk/CHttpHandler.ashx?id=7371&p=0>

⁹ <https://www.doncaster.gov.uk/services/environmental/doncaster-biodiversity-action-plan>

- 2.2.11 Habitats and fields within the Wider Survey Area were surveyed from within the Draft Order Limits, public rights of way (PRoWs) and access tracks where possible.
- 2.2.12 Surveys were primarily undertaken during daylight hours.
- 2.2.13 Due to the foraging habits of Target Species associated with estuarine habitats, birds may also forage at night, dependent on tidal times. From December 2022 to March 2023, one of the two visits per month was therefore carried out at night with the aid of Pulsar night vision equipment.
- 2.2.14 All field surveys were undertaken by C. Gomersall (CG), T. Jones (TJ), A. Hulme (AH) and G. Taylor (GT), all suitably competent and experienced ornithologists.
- 2.2.15 Detailed survey effort is presented in **Annex 4**.
- 2.2.16 For ease of interpreting the survey results, fields within the Study Area were numbered 1-562. Fields within the Draft Order Limits and within the Wider Survey Area are defined in **Table 2.1** and illustrated on **Figures 2-8**.

Table 2.1: Field allocations for Draft Order Limits and Wider Survey Area.

Land Parcel	Field Number Range
The Draft Order Limits	1 – 13, 15-57, 60-122, 124-127, 129-130, 132-142, 173-176, 192, 219, 253, 392-393, 399, 402, 407-413, 415-416, 424-426, 437, 497-500 and 563.
Wider Survey Area	14, 58-59, 123, 128, 131, 143-172, 177-191, 193-218, 220-252, 254-391, 394-398, 400-401, 403-406, 414, 417-423, 427-436, 438-496 and 501-562. Excluding unsuitable fields detailed in Section 2.2 above.

Field Survey Limitations

- 2.2.17 In response to scheme design, the Draft Order Limits boundary has evolved over time. As such, a c.25ha area beyond the southern boundary of the Survey Area was not subject to survey in 2022/23. This area consists of intensively managed agricultural land which is consistent with the majority of the Study Area. It is therefore considered, that this combined with the relatively small extent of the area is not a limitation to the survey and subsequent assessment.
- 2.2.18 Access was permitted to all other parts of the Draft Order Limits during all surveys. All fields considered suitable for Target Species within the Wider Survey Area were visible from the Draft Order Limits and/or PRoWs.
- 2.2.19 Nocturnal surveys were aided by Pulsar nightvision scopes however, it is appreciated that identification to species level is not always possible. Where identification wasn't certain, species were therefore identified to family level e.g. *Anser* goose where identification of pink-footed goose or greylag goose was not certain.
- 2.2.20 No significant limitations in the field survey data in informing the design and assessment of the Scheme are therefore identified.

Assessing Importance

- 2.2.21 For the purposes of this report, the importance of the Draft Order Limits is assessed using functional linkage, based on current Natural England guidance (2021¹⁰).
- 2.2.22 ‘Functionally linked land’ is the term used to describe areas of land (or sea) occurring outside a designated site, which is considered important (or necessary) in supporting the qualifying features of a European site (i.e. SPA, Special Area of Conservation (SAC) and/or Ramsar site).
- 2.2.23 A report published by Natural England (2021) mapped potential areas of Functionally Linked Land used by water birds comprising qualifying features of European sites in the northwest of England, and defined thresholds for the identification of such.
- 2.2.24 The definition of Functionally Linked Land within the report, developed and agreed with Natural England and RSPB, is ‘*areas of land occurring within 20km¹¹ of an SPA, that are regularly used by significant number of qualifying bird species*’, with:
- a significant number of birds defined as 0.5% of the Great British (GB) population, or 1,000 individuals; and,
 - regular defined, with reference to Stroud *et al.* (2001)¹², as when a threshold is met in two thirds of the season for which adequate data is available.
- 2.2.25 The definition of qualifying bird species includes both non-breeding qualifying species and assemblage species.
- 2.2.26 For the purposes of this report, for those species which comprise part of the qualifying assemblage (so are not individually a qualifying species), at least one of three thresholds would need to be reached to appraise the specific study area as being potentially functionally linked to the SPA for that species. These are:
- 1% of each and every listed species that make up the assemblage;
 - 1%, or more, of the designated species GB population; or,
 - Over 2,000 birds of that species.
- 2.2.27 The Humber Estuary SPA /Ramsar site qualifying features are identified as those listed in **Table 1.1**.
- 2.2.28 For the purposes of this report, the waterbird assemblage is identified with reference to Natural England Conservation Advice¹ and the BTO Wetland Bird Survey (WeBS) report for the Humber Estuary¹³, and is summarised in **Annex 2**.

¹⁰ Bowland Ecology (2021). *Identification of Functionally Linked Land supporting SPA waterbirds in the North West of England. NERC361*. Natural England

¹¹ With reference to pink-footed goose, which are known to commute such distances daily between foraging and roosting sites.

¹² Stroud, D.A., Chambers, D., Cook, S., Buxton, N., Fraser, B., Clement, P., Lewis, P., McLean, I., Baker, H. & Whitehead, S. (eds). 2001. *The UK SPA network: its scope and content*. JNCC, Peterborough, p56.

¹³ Austin, G.E., Calbrade, N.A., Birtles, G.A., Peck, K., Shaw, J.M. Wotton, S.R., Balmer, D.E. and Frost, T.M. (2023). Waterbirds in the UK 2021/22: The Wetland Bird Survey and Goose & Swan Monitoring Programme. BTO/RSPB/JNCC/NatureScot. Thetford. Available at: <https://www.bto.org/our-science/projects/wetland-bird-survey/data>.

3 RESULTS

3.1 Desk Study Results

- 3.1.1 **Annex 3** provides details of relevant existing ornithological records returned from the DBRC and GLNP.
- 3.1.2 In summary relevant records included wetland species, such as pink-footed goose, white-fronted goose, whooper swan, greylag goose, redshank and oystercatcher.
- 3.1.3 The most frequent records referred to those observations of birds within Crowle Moor and Thorne Moor within the Thorne & Hatfield Moors SPA to the immediate north east of the Site.
- 3.1.4 These records informed the identification of Target Species for survey and recording and the approach to surveys, including the requirement for nocturnal surveys.

3.2 Non-Breeding Bird Surveys

The Draft Order Limits

- 3.2.1 Of the 154 fields within the Draft Order Limits, Target Species were recorded in 71 of these at least once during the survey period.
- 3.2.2 Target species recorded comprised: whooper swan, mute swan, pink-footed goose, mallard, shoveler, teal, grey heron, little egret, little grebe, lapwing, golden plover, grey plover, green sandpiper, curlew, snipe, woodcock, osprey, red kite, marsh harrier, peregrine, barn owl and little owl.
- 3.2.3 Species recorded more than ten times throughout the survey period were: grey heron (14 observations), lapwing (37 observations on 12 surveys), mallard (30 observations), mute swan (11 observations), pink-footed goose (15 observations, of which most were in flight only. Recorded using the Draft Order Limits on three surveys) and woodcock (22 observations on four surveys). Activity was confined generally to small flocks and/or single birds, with larger flocks mentioned below.
- 3.2.4 Species forming qualifying interests of the Humber Estuary SPA and Ramsar site, recorded within the Draft Order Limits included: pink-footed goose, teal, lapwing, golden plover, grey plover, curlew, marsh harrier and hen harrier. The distributions of such species recorded over the survey period are illustrated in **Figures 9-13**.
- 3.2.5 Pink-footed geese were recorded in the highest numbers, both within the Draft Order Limits and flying over it. Flocks were suspected to be roosting within the Hatfield Moors SSSI, approximately 500m east of the Draft Order Limits.
- 3.2.6 Pink-footed goose flocks recorded within the Draft Order Limits, included 156 in field 11 (south east of the Draft Order Limit), 360 in field 31 (west of Medge Hall), 330 in field 42 (south west of the Draft Order Limit) and 135 in field 43 (south west of the Draft Order Limit).
- 3.2.7 Smaller flocks (<100 birds) were also recorded in fields 29 (south west of Medge Hall), 61 (south west of the Draft Order Limit) and 497 (north east of the Draft Order Limit).
- 3.2.8 Fields where pink-footed goose use was recorded comprised cropped habitats with arable stubble and oilseed rape, with birds predominantly recorded in the autumn period between September to November 2022 (i.e. passage).
- 3.2.9 Teal was recorded on five of the 14 survey visits (<2/3) in very small numbers, with a peak count of 6 birds recorded. Teal were generally associated with field boundary ditches and areas of flood water/temporary pools.

- 3.2.10 Lapwing was recorded within the Draft Order Limits on 11 of the 14 survey visits (>2/3) with the two largest flocks recorded being 260 birds in field 65 (south west of the Draft Order Limit) and 390 birds in field 498 (north east of the Draft Order Limit) in September. Additional lapwing flock numbers only exceeded 100 birds once more within the Draft Order Limits over the course of surveys with a flock of 112 birds observed in field 106 (north of the Draft Order Limit) during a nocturnal survey in January. Flocks were typically recorded over cereal, stubble, oilseed rape crops and recently tilled fields.
- 3.2.11 Golden plover was recorded within the Draft Order Limits on five of the 14 survey visits (<2/3) but observations did not exceed 100 individuals, on any occasion. Flocks typically occurred on fields cropped with arable stubble or fields recently tilled. One field (field 103) was cropped with cereal and one (field 120) was cropped with oil seed rape.
- 3.2.12 Grey plover was recorded once in flight over field 137 with a flock of 17 birds observed. The habitats found within the Site are not considered suitable for this estuarine species.
- 3.2.13 Curlew were recorded once within the Draft Order Limit, during a survey visit March, with two birds observed within Field 15 (south east of the Draft Order Limit).
- 3.2.14 Marsh harrier was recorded within the Draft Order Limits on six of the 14 survey visits (<2/3), generally in flight and hunting. Marsh harrier, although listed as a qualifying feature of the Humber Estuary SPA is only listed as a breeding species.
- 3.2.15 Hen harrier was recorded once within the Draft Order Limits, in flight in over field 118 in December, presumed foraging. The single observation doesn't suggest the Draft Order Limits, is regularly used by the species.
- 3.2.16 Secondary Species recorded comprised the following:
- Grey partridge;
 - Cormorant;
 - Moorhen;
 - Black-headed gull;
 - Common gull;
 - Herring gull;
 - Lesser black-backed gull;
 - Great black-backed gull;
 - Caspian gull;
 - Yellow-legged gull;
 - Sparrowhawk;
 - Buzzard;
 - Kestrel;
 - Woodpigeon;
 - Stock dove;
 - Skylark;
 - Fieldfare;
 - Redwing;
 - Mistle thrush;
 - Starling;
 - Meadow pipit;
 - Yellow wagtail;
 - Linnet; and,
 - Yellowhammer.
- 3.2.17 A summary of results of species identified as qualifying features of the Humber Estuary SPA and Ramsar site are presented below in **Table 3.1**.

3.2.18 The distributions of such species recorded over the survey period, is illustrated in **Figures 9-13**. A full breakdown of all Target Species observations is presented in **Annex 5**. Secondary Species data is presented separately in **Annex 7**.

Table 3.1: Qualifying interests of the Humber Estuary SPA and Ramsar site recorded within the Draft Order Limits.

Target Species	Month	Total	Peak	Number of Surveys Recorded	Mean	
					Surveys Recorded	Survey Period (n=14)
Pink-footed goose	September 2022	497	330	3	340	73
	October 2022	523	360			
Teal	October 2022	2	2	4	6	2
	December 2022	3	3			
	January 2023	10	6			
	March 2023	7	4			
Lapwing	September 2022	813	390	12	125	107
	October 2022	48	25			
	November 2022	31	31			
	December 2022	302	78			
	January 2023	224	112			
	February 2023	54	32			
	March 2023	79	32			
Golden plover	September 2022	212	117	5	51	18
	January 2023	12	11			
	February 2023	32	21			
Curlew	March 2023	2	2	1	2	<1
Marsh harrier	September 2022	4	1	5	2	<1
	October 2022	2	2			
	December 2022	1	1			
	March 2022	1	1			
Hen harrier	December 2022	1	1	1	1	<1

Wider Survey Area

- 3.2.19 Of the 408 fields within the Wider Survey Area, Target Species were recorded in 113 of these at least once during the survey period.
- 3.2.20 Target species comprised: whooper swan, mute swan, pink-footed goose, greylag goose, mallard, shoveler, teal, grey heron, little egret, crane, lapwing, golden plover, green sandpiper, snipe, jack snipe, woodcock, osprey, marsh harrier hen harrier, peregrine, barn owl, little owl and tawny owl.
- 3.2.21 Crane were recorded in arable stubble in fields 182 and 229 in September with a family party of three birds, potentially having bred nearby.
- 3.2.22 Species associated with the Humber Estuary SPA and Ramsar recorded within the Wider Survey Area included: Mallard, teal, lapwing, golden plover, hen harrier and marsh harrier. Each species is assessed below to ascertain whether a significant number of birds associated with the Humber Estuary used the Wider Survey Area).
- 3.2.23 Pink-footed geese were recorded in the largest numbers, both within the Wider Survey Area and flying over it whereby. Large flocks were recorded flying over the Wider Survey Area with flocks of 3000 over field 291, 752 over field 168 and 320 over field 282. Large flocks (>100 birds) were recorded foraging (and loafing), including within fields 230 (217 birds) and 501 (700 birds). Locations of birds were generally within the south east and north east of the Site and dominated by tilled and arable stubble fields.
- 3.2.24 Smaller flocks (<100 birds) were recorded in fields 216, 222, 225, 243, 384, 443, 507, 508 and 519. Observations in fields 222 (46 and 67 birds) and field 508 (36 and 22 birds) were the only fields within the Wider Survey Area to have multiple observations of pink-footed geese within the same field, during both September visits. Crops generally used by pink-footed geese were arable stubble and occasionally oilseed rape.
- 3.2.25 Teal was recorded on four of the 14 survey visits in very small numbers, with a peak count of 23 birds in January in field 385. Teal were mostly associated with field boundary ditches.
- 3.2.26 Lapwing was recorded within the Wider Survey Area on 12 of the 14 survey visits with the two largest flocks recorded being 136 birds in field 185 in October and 260 birds in field 496 in January. Otherwise, lapwing flocks only exceeded 100 birds once more within the Wider Survey Area with a flock of 127 birds observed in field 173 during a nocturnal survey in December.
- 3.2.27 Golden plover was recorded within the Wider Survey Area on nine of the 14 survey visits. The peak flock size within the Wider Survey Area was 480 individuals in field 58. Other flocks of golden plover were recorded within the Wider Survey Area did not otherwise exceed 100 individuals. Fields were generally cropped with arable stubble, cereal, oil seed rape and tilled fields.
- 3.2.28 Marsh harrier was recorded within the Wider Survey Area on two of the 14 survey visits observed flying over fields hunting. Marsh harrier, although listed as a qualifying feature of the Humber Estuary SPA is only listed as a breeding species.
- 3.2.29 Hen harrier was recorded once within the Wider Survey Area, in fields 222-225 in October. This represents 12.5% of the known wintering population of hen harrier on the Humber Estuary. The observation was in flight, which would suggest the bird was foraging within the Site. This was only recorded once which would suggest there isn't regularly use of hen harrier within the Survey Area.
- 3.2.30 Secondary Species comprised the following:
- Grey partridge;
 - Cormorant ;

- Egyptian goose;
- Moorhen;
- Black-headed gull;
- Common gull;
- Herring gull;
- Yellow legged gull;
- Great black-backed gull;
- Lesser black-backed gull;
- Woodpigeon;
- Stock dove;
- Rook;
- Skylark;
- Fieldfare;
- Redwing;
- Mistle thrush;
- Starling;
- Meadow pipit;
- Linnet;
- Greenfinch; and,
- Yellowhammer.

3.2.31 A summary of results of species identified as qualifying features of the Humber Estuary SPA and Ramsar site are presented below in **Table 3.2**.

3.2.32 The distributions of such species recorded over the survey period, is illustrated in **Figures 9-13**. A full breakdown of all Target Species observations is presented in **Annex 5**. Secondary Species data is presented separately in **Annex 7**.

Table 3.2: Qualifying interests of the Humber Estuary SPA and Ramsar site recorded within the Wider Survey Area.

Species	Month	Total	Peak	Number of Surveys Recorded	Mean	
					Surveys Recorded	Survey Period (n=14)
Pink-footed goose	September 2022	1,227	700	6	218	94
	October 2022	56	42			
	February 2023	30	21			
Teal	January 2023	23	23	2	22	3
	February 2023	5	3			
	March 2023	17	9			
Lapwing	September 2022	148	53	11	74	58
	October 2022	173	136			
	November 2022	2	1			
	December 2022	384	127			
	January 2023	91	27			

Species	Month	Total	Peak	Number of Surveys Recorded	Mean	
					Surveys Recorded	Survey Period (n=14)
	February 2023	16	6			
Golden plover	September 2022	365	365	10	105	75
	October 2022	546	480			
	November 2022	41	21			
	December 2022	57	37			
	January 2023	1	1			
	March 2023	38	38			
Hen harrier	October 2022	1	1	2	1	<1
	December 2022	1	1			
Marsh harrier	September 2022	3	2	2	3	<1
	December 2022	2	2			

Assessment of Importance (Functional Linkage)

3.2.33 Tables 3.3 and 3.4 below provide information regarding the potential functional linkage for designated species and overall waterbird assemblages for the surrounding designated sites.

3.2.34 With reference to current Natural England guidance (2021), whilst use of the Draft Order Limits and wider survey area by qualifying interests of the Humber Estuary SPA and Ramsar site is identified, with reference to current Natural England advice (2021) the Draft Order Limits (or the wider survey area) is not identified as being functionally linked for any species.

Table 3.3: Qualifying interests of the Humber Estuary SPA and Ramsar Site recorded within the Draft Order Limits and Wider Survey Area between September 2022 and March 2023.

Species	Month recorded (If month not stated then species not present)	Peak count	% of GB population	Significant numbers criteria met? (Yes/No)
Pink-footed goose ¹⁴	September	700	0.13%	No
	October	360	0.07%	No
	February	21	<0.01%	No
Teal ¹⁵	October	2	<0.01%	No

¹⁴ Pink-footed goose GB population – 510,000 wintering birds

¹⁵ Teal GB population – 430,000 non-breeding birds

Species	Month recorded (If month not stated then species not present)	Peak count	% of GB population	Significant numbers criteria met? (Yes/No)
	December	3	<0.01%	No
	January	23	<0.01%	No
	February	3	<0.01%	No
	March	21	<0.01%	No
Lapwing ¹⁶	September	544	0.08%	No
	October	198	0.03%	No
	November	32	<0.01%	No
	December	549	0.08%	No
	January	346	0.06%	No
	February	70	0.01%	No
	March	64	0.01%	No
Golden plover ¹⁷	September	380	0.09%	No
	October	546	0.14%	No
	November	41	0.01%	No
	December	69	0.02%	No
	January	33	<0.01%	No
	March	38	<0.01%	No
Curlew ¹⁸	March	2	<0.01%	No
Hen harrier ¹⁹	October	1 (hunting)	0.05%	No
	December	1 (hunting)	0.05%	No

3.2.35 **Table 3.9** presents the maximum counts of assemblage species recorded during each month within the Draft Order Limits and Wider Survey Area.

3.2.36 The cumulative Waterbird Assemblage species monthly counts did not exceed any of the three criteria in which significant numbers occurred within the Draft Order Limits of Wider Survey Area.

Table 3.9: Total Wetland Bird Assemblages Recorded.

Month recorded	Wetland Species Assemblage Count – Draft Order Limits	Wetland Species Assemblage Count – Wider Survey Area	Total Wetland Species Assemblage Count	Significant numbers criteria met ²⁰ ?
September	554	269	823	No
October	56	722	778	No
November	31	33	64	No

¹⁶ Lapwing GB population – 620,000 non-breeding birds

¹⁷ Golden plover GB population – 400,000 non-breeding birds

¹⁸ Curlew GB population – 120,000 non-breeding birds

¹⁹ Hen Harrier GB population – 2000 non-breeding birds

²⁰ Methodology for assessing significance is provided within paragraph 2.2.15.

Month recorded	Wetland Species Assemblage Count – Draft Order Limits	Wetland Species Assemblage Count – Wider Survey Area	Total Wetland Species Assemblage Count	Significant numbers criteria met²⁰?
December	314	308	622	No
January	228	326	554	No
February	59	33	92	No
March	54	116	170	No

ANNEX 1: BIRD SPECIES SUMMARY

Table A1.1 provides a list of bird species recorded during the breeding bird surveys. Both common and species names are presented along with a summary of each species conservation status using the following abbreviations:

- Annex 1 – European Birds Directive Annex I species.
- S1 – Schedule 1 of the Wildlife & Countryside Act 1981 (as amended)
- BoCC – Birds of Conservation Concern as listed by leading bird conservation organisations in the UK, including the RSPB and BTO. Red and Amber categories are given (Eaton *et al.*, 2015);
- NERC S41 - species listed as rare and most threatened on the NERC Act (2006);
- LBAP1 – Doncaster Local Biodiversity Action Plan Species; and,
- LBAP2 – Lincolnshire Local Biodiversity Action Plan.

Table A1.1: Summary of bird species.

Common name	Species name	Conservation status
Mute swan	<i>Cygnus olor</i>	BoCC – Amber.
Whooper swan	<i>Cygnus cygnus</i>	S1, Annex 1, BoCC – Amber, LBAP1.
Bewick's swan	<i>Cygnus columbianus bewickii</i>	S1, Annex 1, NERC S41, BoCC – Red.
Pink-footed goose	<i>Anser brachyrhynchos</i>	BoCC – Amber, LBAP1.
White-fronted goose	<i>Anser albifrons</i>	Annex 1, BoCC – Red, LBAP1.
Greylag goose	<i>Anser anser</i>	BoCC – Amber, LBAP1.
Brent goose	<i>Branta bernicla</i>	BoCC – Amber, NERC S41, LBAP1.
Canada goose	<i>Branta canadensis</i>	-
Shelduck	<i>Tadorna tadorna</i>	BoCC – Amber, LBAP1.
Wigeon	<i>Mareca penelope</i>	BoCC – Amber, LBAP1.
Gadwall	<i>Mareca strepera</i>	BoCC – Amber, LBAP1.
Teal	<i>Anas crecca</i>	BoCC – Amber, LBAP1.
Mallard	<i>Anas platyrhynchos</i>	BoCC – Amber.
Grey partridge	<i>Perdix perdix</i>	BoCC – Red, NERC S41, LBAP1, LBAP2.
Pheasant	<i>Phasianus colchicus</i>	-
Little egret	<i>Egretta garzetta</i>	Annex 1.
Grey heron	<i>Ardea cinerea</i>	-
Marsh harrier	<i>Circus aeruginosus</i>	Annex 1, S1, BoCC – Amber, LBAP1.
Moorhen	<i>Gallinula chloropus</i>	-
Golden plover	<i>Pluvialis apricaria</i>	Annex 1.
Oystercatcher	<i>Haematopus ostralegus</i>	BoCC – Amber.

Common name	Species name	Conservation status
Lapwing	<i>Vanellus vanellus</i>	BoCC – Red, NERC S41, LBAP1, LBAP2.
Curlew	<i>Numenius arquata</i>	BoCC – Red, NERC S41, LBAP2.
Common sandpiper	<i>Actitis hypoleucos</i>	BoCC – Amber.
Green sandpiper	<i>Tringa ochropus</i>	S1, BoCC – Amber, LBAP1.
Redshank	<i>Tringa totanus</i>	BoCC – Amber, LBAP2.
Snipe	<i>Gallinago gallinago</i>	BoCC – Amber, LBAP1, LBAP2.
Black-headed gull	<i>Chroicocephalus ridibundus</i>	BoCC – Amber, LBAP1.
Common gull	<i>Larus canus</i>	BoCC – Amber, LBAP1.
Lesser black-backed gull	<i>Larus fuscus</i>	BoCC – Amber, LBAP1.
Herring gull	<i>Larus argentatus</i>	BoCC – Red, NERC S41, LBAP1.
Great black-backed gull	<i>Larus marinus</i>	BoCC – Amber.
Stock dove	<i>Columba oenas</i>	BoCC – Amber, LBAP1.
Woodpigeon	<i>Columba palumbus</i>	-
Barn owl	<i>Tyto alba</i>	S1, LBAP1, LBAP2.
Nightjar	<i>Caprimulgus europaeus</i>	Annex 1, BoCC – Amber, NERC S41, LBAP1.
Swift	<i>Apus apus</i>	-
Kestrel	<i>Falco tinnunculus</i>	BoCC – Amber, LBAP1.
Rook	<i>Corvus frugilegus</i>	-
Merlin	<i>Falco columbarius</i>	Annex 1, S1, BoCC – Red, LBAP1.
Carrion crow	<i>Corvus corone</i>	-
Blue tit	<i>Cyanistes caeruleus</i>	-
Great tit	<i>Parus major</i>	-
Coal tit	<i>Pariparus ater</i>	-
Willow tit	<i>Poecile montanus</i>	BoCC – Red, NERC S41, LBAP1.
Skylark	<i>Alauda arvensis</i>	BoCC – Red, NERC S41, LBAP2.
Sand martin	<i>Riparia riparia</i>	LBAP1.
Swallow	<i>Hirundo rustica</i>	LBAP1.
Long-tailed tit	<i>Aegithalos caudatus</i>	-
Chiffchaff	<i>Phylloscopus collybita</i>	-

Common name	Species name	Conservation status
Willow warbler	<i>Phylloscopus trochilus</i>	BoCC – Amber, LBAP1.
Blackcap	<i>Sylvia atricapilla</i>	-
Lesser whitethroat	<i>Curucca curucca</i>	-
Whitethroat	<i>Curucca communis</i>	-
Nuthatch	<i>Sitta europaea</i>	LBAP1.
Treecreeper	<i>Certhia familiaris</i>	-
Wren	<i>Troglodytes troglodytes</i>	-
Starling	<i>Sturnus vulgaris</i>	BoCC – Red, NERC S41, LBAP1, LBAP2.
Blackbird	<i>Turdus merula</i>	-
Fieldfare	<i>Turdus pilaris</i>	S1, BoCC – Red, LBAP1.
Song thrush	<i>Turdus philomelos</i>	BoCC – Red, NERC S41, LBAP1, LBAP2.
Mistle thrush	<i>Turdus viscivorus</i>	BoCC – Red, LBAP1.
Robin	<i>Erithacus rubecula</i>	-
Redstart	<i>Phoenicurus phoenicurus</i>	BoCC – Amber, LBAP1.
Dunnock	<i>Prunella modularis</i>	BoCC – Amber, NERC S41, LBAP1.
House sparrow	<i>Passer domesticus</i>	BoCC – Red, NERC S41, LBAP1, LBAP2.
Yellow wagtail	<i>Motacilla flava flavissima</i>	BoCC – Red, NERC S41, LBAP1, LBAP2.
Tree pipit	<i>Anthus trivialis</i>	BoCC – Red, NERC S41, LBAP1.
Meadow pipit	<i>Anthus pratensis</i>	BoCC – Amber, LBAP1.
Chaffinch	<i>Fringilla coelebs</i>	-
Linnet	<i>Linaria cannabina</i>	BoCC – Red, NERC S41, LBAP1, LBAP2.
Goldfinch	<i>Carduelis carduelis</i>	-
Yellowhammer	<i>Emberiza citrinella</i>	BoCC – Red, NERC S41, LBAP, LBAP2.
Reed bunting	<i>Emberiza schoeniclus</i>	BoCC – Amber, NERC S41, LBAP1, LBAP2.
Corn bunting	<i>Emberiza calandra</i>	BoCC – Red, NERC S41, LBAP1, LBAP2.

ANNEX 2: HUMBER ESTUARY WATERBIRD ASSEMBLAGE

With reference to Natural England Conservation Advice for Marine Protected Areas: Humber Estuary SPA, the waterfowl assemblage of the Humber consists of over 135,000 waterbirds, including all internationally important regularly occurring migratory species, the Annex I wintering species and species occurring at levels of more than 1% of national populations or whose populations exceed 2,000 individuals.

Species are therefore identified and summarised below, with reference to Austin *et al.* (2023).

Species	Assemblage Thresholds Met
Brent Goose	Population exceeds 2,000 individuals Population exceeds international important threshold
Greylag Goose	Population exceeds national important threshold
Pink-footed Goose	Population exceeds 2,000 individuals Population exceeds international important threshold
Shelduck	Population exceeds 2,000 individuals Population exceeds international important threshold
Shoveler	Population exceeds national important threshold
Wigeon	Population exceeds 2,000 individuals
Teal	Population exceeds 2,000 individuals Population exceeds international important threshold
Goldeneye	Population exceeds national important threshold
Oystercatcher	Population exceeds 2,000 individuals Population exceeds national important threshold
Avocet	Population exceeds 2,000 individuals Population exceeds international important threshold
Lapwing	Population exceeds 2,000 individuals Population exceeds national important threshold
Golden Plover	Population exceeds 2,000 individuals Population exceeds international important threshold
Grey Plover	Population exceeds 2,000 individuals Population exceeds international important threshold
Ringed Plover	Population exceeds international important threshold
Curlew	Population exceeds 2,000 individuals Population exceeds national important threshold
Bar-tailed Godwit	Population exceeds international important threshold
Black-tailed Godwit	Population exceeds 2,000 individuals Population exceeds international important threshold
Knot	Population exceeds 2,000 individuals Population exceeds international important threshold
Ruff	Population exceeds national important threshold
Sanderling	Population exceeds national important threshold
Dunlin	Population exceeds 2,000 individuals

Species	Assemblage Thresholds Met
	Population exceeds international important threshold
Green Sandpiper	Population exceeds national important threshold
Redshank	Population exceeds 2,000 individuals Population exceeds international important threshold
Greenshank	Population exceeds national important threshold
Black-headed Gull	Population exceeds 2,000 individuals
Little Egret	Population exceeds national important threshold

ANNEX 3: DESK STUDY RESULTS

Table A3.1 provides a list of the species returned from the desk study from DLRC and GLNP.

Table A3.1: Desk study results provided by GLNP and DLRC.

Common name	No. of records	Source	Most recent record
Barn owl	22	GLNP	2022
	2	DLRC	2015
Bittern	3	GLNP	2021
Black Tern	1	DLRC	2018
Black stork	2	GLNP	2014
Black-headed gull	15	DLRC	2020
Black-necked grebe	1	GLNP	2018
Bullfinch	14	GLNP	2021
	15	DLRC	2018
Cetti's warbler	27	GLNP	2022
	7	DLRC	2021
Common gull	7	DLRC	2018
Corn bunting	4	GLNP	2021
	3	DLRC	2018
Crane	1	DLRC	2019
Cuckoo	35	GLNP	2022
	3	DLRC	2021
Curlew	7	GLNP	2021
	6	DLRC	2018
Dunnock	1	GLNP	2021
	9	DLRC	2018
Fieldfare	25	GLNP	2022
	16	DLRC	2020
Gadwall	9	GLNP	2017
	16	DLRC	2018
Garganey	3	GLNP	2015
Golden oriole	1	GLNP	2018

Common name	No. of records	Source	Most recent record
Goldeneye	1	DLRC	2018
Golden plover	7	DLRC	2018
Goosander	11	DLRC	2021
Grasshopper warbler	7	GLNP	2020
Great white egret	1	DLRC	2018
Green sandpiper	2	GLNP	2014
	4	DLRC	2018
Greenland white-fronted goose	1	GLNP	2017
Greenfinch	5	DLRC	2018
Grey partridge	10	GLNP	2022
Grey wagtail	2	DLRC	2020
Greylag goose	34	GLNP	2022
	11	DLRC	2018
Hawfinch	1	DLRC	2014
Hen harrier	10	GLNP	2020
Herring gull	4	DLRC	2020
Hobby	25	GLNP	2022
Honey buzzard	2	GLNP	2015
House sparrow	15	GLNP	2021
	3	DLRC	2019
Kestrel	30	DLRC	2020
Kingfisher	2	GLNP	2021
Lapwing	14	GLNP	2022
	17	DLRC	2020
Lesser black-backed gull	2	DLRC	2018
Lesser redpoll	24	GLNP	2021
	14	DLRC	2018
Linnet	27	GLNP	2022
	9	DLRC	2021

Common name	No. of records	Source	Most recent record
Little egret	1	GLNP	2022
	1	DLRC	2021
Little ringed plover	2	DLRC	2018
Mallard	20	DLRC	2019
Marsh harrier	37	GLNP	2022
	10	DLRC	2018
Meadow pipit	16	DLRC	2018
Merlin	1	GLNP	2020
	5	DLRC	2018
Mistle thrush	6	DLRC	2020
Mute swan	6	DLRC	2021
Nightjar	21	GLNP	2017
	81	DLRC	2021
Oystercatcher	1	DLRC	2019
Peregrine	2	GLNP	2014
Pink-footed goose	13	DLRC	2018
Pochard	4	DLRC	2018
Quail	1	GLNP	2013
Red kite	1	GLNP	2014
Red-necked grebe	2	DLRC	2012
Redshank	7	DLRC	2018
Redwing	21	GLNP	2021
	13	DLRC	2018
Reed bunting	43	GLNP	2022
	11	DLRC	2018
Ring ouzel	4	GLNP	2015
Ringed plover	1	DLRC	2018
Rook	2	DLRC	2020
Shelduck	7	DLRC	2018
Short-eared owl	1	DLRC	2012
Shoveler	13	DLRC	2018

Common name	No. of records	Source	Most recent record
Skylark	27	GLNP	2021
	9	DLRC	2018
Snipe	10	GLNP	2021
	11	DLRC	2018
Song thrush	24	GLNP	2022
	9	DLRC	2018
Sparrowhawk	9	DLRC	2018
Spotted flycatcher	4	GLNP	2021
Starling	23	GLNP	2022
	11	DLRC	2018
Stock dove	3	DLRC	2018
Swift	32	GLNP	2020
Teal	20	DLRC	2018
Tree pipit	23	GLNP	2022
	3	DLRC	2014
Tree sparrow	20	GLNP	2020
	1	DLRC	2018
Tufted duck	12	DLRC	2018
Turtle dove	14	GLNP	2020
Water pipit	2	DLRC	2021
Whitethroat	2	DLRC	2018
Whooper swan	6	GLNP	2022
	9	DLRC	2021
Wigeon	6	DLRC	2018
Willow tit	8	DLRC	2018
Willow warbler	2	DLRC	2018
Woodcock	4	DLRC	2018
Woodlark	6	GLNP	2015
Woodpigeon	10	DLRC	2020
Wren	10	DLRC	2018

Common name	No. of records	Source	Most recent record
Yellow wagtail	2	GLNP	2014
Yellowhammer	44	GLNP	2022
	12	DLRC	2018
Yellow-legged gull	1	DLRC	2018

ANNEX 4: NON-BREEDING BIRD SURVEY EFFORT

Table 4.1: Survey Conditions Criteria

Wind Speed		W-Direction	Rain		Cloud Cover		Cloud Height	
Calm	0	Use 16 point Compass	None	0	In eighths e.g.	3/8	<150m	0
Light air	1		Drizzle/Mist	1			150-500m	1
Light breeze	2	N	Light showers	2			>500m	2
Mod. breeze	4	NE	Heavy rain	4				
Fresh breeze	5	ENE						
Strong breeze	6	E						
Mod. gale	7	Etc	Visibility		Snow		Frost	
Fresh gale	8		Poor	0	None	0	None	0
Strong gale	9		< 1km	1	On site	1	Ground	1
Whole gale	10		>1km	2	High ground	2	All day	3
Storm	11							

Table 4.1: Non-Breeding Bird Survey Effort

Date	Surveyor	Start Time (24 hrs)	End time (24 hrs)	Wind Speed	Wind Direction	Rain	Cloud Height	Cloud Cover	Visibility	Frost	Snow	Notes
19/09/2022	CG/TJ	06:45	14:45	1	WNW	1	2	8	2	0	0	Light showers
20/09/2022	CG/TJ	06:45	14:45	1	W	0	2	6	2	0	0	
21/09/2022	CG/TJ	07:00	15:00	2	S	0	2	6	2	0	0	
22/09/2022	CG/TJ	07:00	12:45	2	S	0	2	4	2	0	0	
26/09/2022	CG/TJ	06:30	14:30	3	NW	0	2	6	2	0	0	
27/09/2022	CG/TJ	07:00	14:00	2	W	0	2	6	2	0	0	
28/09/2022	CG/TJ	07:00	14:00	2	NW	1	2	6	2	0	0	Light showers
29/09/2022	CG/TJ	07:00	14:00	1	N	0-2	2	6	2	0	0	Showers
30/09/2022	CG/TJ	10:00	18:00	3-4	S	2-4	2	8	2	0	0	Heavy showers and heavy rain.
13/10/2022	GT	09:00	14:00	0	-	0	-	-	2	0	0	
14/10/2022	GT	09:00	14:00	2	SW	0	2	1	2	0	0	
15/10/2022	GT	09:00	14:00	4	SW	0	2	3	2	0	0	
19/10/2022	GT	09:00	14:00	3	E	0	2	4	2	0	0	
21/10/2022	GT	09:00	14:00	4	E	2	2	8	2	0	0	Showers
25/10/2022	GT	09:00	14:00	3	SW	0	2	3	2	0	0	
26/10/2022	GT	09:00	14:00	5	SW	0	2	5	2	0	0	
27/10/2022	GT	09:00	14:00	2	S	1	2	8	2	0	0	Showers
28/10/2022	GT	09:00	14:00	3	S	2	2	7	2	0	0	Heavy showers
30/10/2022	GT	09:00	14:00	4	SW	0	2	7	2	0	0	
11/11/2022	GT	09:00	14:00	6	SW	0	2	6	1	0	0	
13/11/2022	GT	09:00	14:00	0	-	0	2	8	1	0	0	Fog
14/11/2022	GT	09:00	14:00	0	-	0	2	8	1	0	0	Fog
17/11/2022	GT	09:00	14:00	4	SW	3	2	8	1	0	0	Heavy rain
20/11/2022	GT	09:00	14:00	3	SW	0	2	8	1	0	0	
24/11/2022	GT	09:00	14:00	3	SE	0	2	8	2	0	0	

26/11/2022	GT	09:00	14:00	4	S	0	2	4	2	0	0	
27/11/2022	GT	09:00	14:00	4	S	0	2	8	2	0	0	
28/11/2022	GT	09:00	14:00	2	S	0	2	8	2	0	0	Misty
29/11/2022	GT	09:00	14:00	1	S	0	2	8	2	0	0	Misty
07/12/2022	GT/AH	17:00	00:00	2	SW	0	-	0	2	1	0	
08/12/2022	GT/AH	17:00	00:00	2	NW	0	2	7	2	0	0	
09/12/2022	GT/AH	17:00	01:30	0	-	0	-	0	1	1	0	Foggy
15/12/2022	GT	09:00	16:00	2	NW	0	-	0	2	1	0	
16/12/2022	GT	09:00	16:00	1	S	0	2	4	2	1	0	
19/12/2022	GT	09:00	16:00	5	SW	0	2	7	2	0	0	
29/12/2022	GT	09:00	16:00	6	SW	2	2	4	2	0	0	Heavy showers
12/01/2023	GT	09:00	16:00	5	SW	0	2	8	2	0	0	
13/01/2023	GT	09:00	16:00	3	N	0	2	1	2	1	0	
18/01/2023	GT	09:00	16:00	2	N	0	2	2	2	1	0	
20/01/2023	GT	09:00	16:00	3	W	0	-	0	2	0	0	
24/01/2023	GT	17:00	23:00	0	-	0	-	0	2	0	0	
25/01/2023	GT	17:00	00:00	3	NW	0	-	0	2	0	0	
27/01/2023	GT	17:00	23:00	3	SW	0	2	8	2	0	0	
30/01/2023	GT	17:00	00:00	3	W	0	2	5	2	0	0	
10/02/2023	GT	10:00	15:30	3	S	0	2	8	2	0	0	
14/02/2023	GT	09:45	15:15	0	N/A	0	2	8	2	0	0	Foggy
15/02/2023	GT	09:00	15:30	1	SW	0	2	5	2	0	0	
20/02/2023	GT	09:00	12:45	4	W	0	2	8	2	0	0	
22/02/2023	GT	18:00	23:45	2	N	3	2	8	2	0	0	
23/02/2023	GT	20:15	23:30	2	N	0	2	8	2	0	0	
26/02/2023	GT	18:30	22:45	4	NE	0	2	4	2	0	0	
27/02/2023	GT	18:00	23:00	4	NE	0	2	4	2	0	0	
05/03/2023	GT	09:00	13:00	2	W	0	2	8	2	0	0	
07/03/2023	GT	10:00	17:00	4	N	0	2	1	1	0	0	
09/03/2023	GT	09:00	15:30	3	E	0	2	8	2	0	1	Sleet
10/03/2023	GT	09:00	13:45	6	N	0	2	8	2	0	1	Flurry

29/03/2023	GT	11:00	17:30	3	SW	2	2	8	2	0	0	
31/03/2023	GT	09:15	16:15	3	NE	4	2	8	1	0	0	
01/04/2023	GT	10:00	16:30	2	NE	0	2	8	2	0	0	
02/04/2023	GT	09:30	13:45	1	E	0	2	4	2	0	0	

87	Lapwing	-	-	-	-	-	-	-	12	-	-	-	-	-	-
92	Woodcock	-	-	-	-	-	-	1	-	-	-	-	-	-	-
93	Pink-footed goose	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-
	Peregrine	1	1	-	-	-	-	-	-	-	-	-	-	-	-
94	Grey heron	-	1	-	-	-	-	-	-	-	-	-	-	-	-
95	Mallard	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Grey heron	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Marsh harrier	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-
	Barn owl	-	-	-	-	-	-	-	-	-	-	-	1	-	-
98	Lapwing	-	-	-	-	-	-	-	9	-	-	-	-	-	-
100	Mallard	-	-	-	-	-	-	-	-	-	-	-	-	2	-
	Grey heron	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Woodcock	-	-	-	-	-	-	2	-	-	-	-	-	-	-
103	Lapwing	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	Golden plover	-	-	-	-	-	-	-	1	-	-	-	-	-	-
104	Mallard	-	-	-	9	-	-	-	-	-	-	-	-	-	-
	Teal	-	-	-	-	-	-	3	-	-	-	-	-	4	-
105	Pink-footed goose	(36)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Grey heron	-	-	3	-	-	-	-	-	-	-	-	-	-	-
106	Greylag goose	-	-	-	-	-	-	-	-	-	-	-	-	-	8
	Mallard	-	-	12	-	-	-	-	-	-	27	-	-	-	3

119	Lapwing	-	-	-	-	-	-	-	3	-	-	-	-	-	-
	Snipe	-	-	-	-	-	-	-	2	-	-	-	-	-	-
120	Mallard	-	-	-	-	-	-	4	-	-	-	1	-	-	-
	Little egret	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	Golden plover	17	3	-	-	-	-	-	-	-	-	-	-	-	-
	Woodcock	-	-	-	-	-	-	-	-	-	-	-	4	-	-
121	Woodcock	-	-	-	-	-	-	-	-	-	-	1	-	-	
129	Green sandpiper	-	-	1	-	-	-	-	-	-	-	-	-	-	-
130	Lapwing	-	-	25	-	-	-	-	-	-	-	-	-	-	-
132	Grey heron	-	-	-	2	-	-	-	-	-	-	-	-	-	-
135	Woodcock	-	-	-	-	-	-	-	-	-	-	-	1	-	-
136	Pink-footed goose	-	-	(209)	-	-	-	-	-	-	-	-	-	-	-
	Snipe	-	-	-	-	-	-	-	-	-	-	-	1	-	-
137	Grey plover	(17)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Snipe	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Marsh harrier	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-
175	Greylag goose	7	-	-	-	-	-	-	-	-	-	-	-	-	-
252	Mallard	-	-	-	-	-	-	-	-	-	-	-	-	2	-
275	Lapwing	-	-	-	-	-	-	-	-	-	-	-	-	-	2
282	Whooper swan	-	-	-	-	-	-	-	-	-	-	-	-	8	-
	Pink-footed goose	-	-	-	-	-	(320)	-	-	-	-	-	-	-	-

	Lapwing	-	-	-	-	-	-	-	16	-	-	-	-	-	-
284	Lapwing	-	-	-	-	-	-	-	-	-	-	-	-	14	2
285	Woodcock	-	-	-	-	-	-	-	-	-	-	-	4	-	-
288	Lapwing	-	-	-	-	-	-	-	-	-	9	-	-	13	-
290	Mallard	-	8	-	-	-	-	-	-	-	-	-	-	-	-
	Lapwing	-	-	-	-	-	-	-	-	-	-	-	2	-	9
	Woodcock	-	-	-	-	-	-	2	-	-	-	-	2	-	-
497	Pink-footed goose	32	-	-	-	-	-	-	-	-	-	-	-	-	-
	Lapwing	-	-	-	-	-	-	78	77	-	32	-	-	-	-
	Golden plover	-	-	-	-	-	-	-	11	-	-	-	-	-	-
	Barn owl	-	-	-	-	-	-	1	-	-	-	-	-	-	-
498	Mallard	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	Lapwing	-	390	-	-	-	-	-	-	-	7	-	-	-	-
	Woodcock	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	Osprey	1	-	-	-	-	-	-	-	-	-	-	-	-	-

Species associated with the Humber Estuary SPA recorded in **bold**

'-' means that the species was not recorded during that visit.

Those in brackets were recorded in flight only.

	Pink-footed goose	-	-	-	(19)	-	-	-	-	-	-	-	-	-	-
	Mallard	-	-	2	-	-	-	-	-	-	-	-	-	-	-
225	Pink-footed goose	-	-	42	-	-	-	-	-	-	-	-	-	-	-
	Hen harrier	-	-	(1)	-	-	-	-	-	-	-	-	-	-	-
226	Pink-footed goose	-	-	-	(73)	-	-	-	-	-	-	-	-	-	-
	Mallard	-	-	-	-	-	-	-	-	-	-	-	-	1	2
229	Crane	3	-	-	-	-	-	-	-	-	-	-	-	-	-
	Snipe	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Hen harrier	-	-	(1)	-	-	-	-	-	-	-	-	-	-	-
230	Pink-footed goose	-	-	-	(16)	-	-	-	-	-	-	-	-	-	-
238	Little egret	-	-	-	-	-	-	-	-	1	-	-	-	-	-
242	Pink-footed goose	-	217	-	-	-	-	-	-	-	-	-	-	-	-
243	Pink-footed goose	-	48	-	-	-	-	-	-	-	-	-	-	-	-
249	Mute swan	-	-	-	-	-	-	-	2	-	-	-	-	-	-
250	Mute swan	-	-	-	-	-	-	-	-	-	-	4	-	-	-
264	Whooper swan	-	-	-	-	5	-	-	-	-	-	-	-	-	-
265	Mute swan	-	-	-	-	2	-	-	-	-	-	-	-	-	-
277	Lapwing	-	-	-	-	-	-	-	-	-	12	-	-	-	-

	Golden plover	-	-	43	-	-	-	-	-	-	-	-	-	-	-
278	Woodcock	-	-	-	-	-	-	-	-	-	-	-	3	-	-
279	Lapwing	-	-	-	-	-	-	-	-	3	-	-	-	-	-
286	Greylag goose	-	-	-	-	-	-	-	-	-	-	-	-	2	-
	Lapwing	-	-	-	-	-	-	-	-	14	-	-	-	-	-
287	Greylag goose	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Mallard	-	-	-	-	3	-	-	-	-	-	-	-	-	-
291	Pink-footed goose	-	(3000)	-	-	-	-	-	-	-	-	-	-	-	-
	Mallard	-	4	-	-	-	-	-	-	-	-	-	-	-	-
292	Lapwing	17	-	-	-	-	-	-	-	-	-	-	-	-	-
293	Crane	-	-	(2)	-	-	-	-	-	-	-	-	-	-	-
304	Little egret	-	-	-	-	1	-	-	-	-	-	-	-	-	-
309	Lapwing	-	-	-	-	1	-	-	-	-	-	-	-	-	-
319	Greylag goose	(20)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mallard	-	-	-	-	-	-	-	-	-	-	-	-	3	-
323	Lapwing	-	-	-	-	-	-	-	-	-	14	-	-	-	-
	Woodcock	-	-	-	-	-	-	-	-	-	-	-	1	-	-
325	Woodcock	-	-	-	-	-	-	-	-	-	5	-	-	-	-
340	Barn owl	-	-	-	-	-	-	-	-	-	-	-	1	-	-
358	Grey heron	-	-	2	-	-	-	-	-	-	-	-	-	-	-
361	Woodcock	-	-	-	-	-	-	1	-	-	-	-	-	-	-

382	Pink-footed goose	-	(160)	-	-	-	-	-	-	-	-	-	-	-	-
	Little egret	1	-	-	-	-	-	-	-	-	-	-	-	-	-
383	Mallard	5	-	-	-	-	-	-	-	-	-	-	-	-	-
384	Pink-footed goose	-	-	-	12	-	-	-	-	-	-	-	-	-	-
	Mallard	-	-	-	-	-	5	-	-	-	-	-	-	10	-
	Teal	-	-	-	-	-	-	-	-	-	-	-	-	9	-
	Grey heron	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	Little egret	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	Lapwing	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	Golden plover	25	43	-	-	21	-	-	-	-	-	-	-	-	-
	Jack snipe	-	-	-	-	-	-	1	-	-	-	-	-	-	-
385	Mallard	-	-	-	-	-	-	-	-	21	-	-	-	-	-
	Teal	-	-	-	-	-	-	-	-	23	-	-	-	-	-
386	Mallard	-	-	-	-	-	-	-	-	-	-	-	-	3	-
	Teal	-	-	-	-	-	-	-	-	-	-	-	-	8	-
387	Mallard	-	16	-	-	-	-	-	22	-	18	17	12	-	-
	Teal	-	-	-	-	-	-	-	-	-	-	3	2	-	-
	Grey heron	2	-	-	-	-	-	-	-	-	-	-	-	-	-
	Golden plover	-	-	-	-	-	12	-	-	-	-	-	-	-	-
388	Mallard	-	9	-	-	-	-	31	-	-	-	-	-	-	
390	Golden plover	-	-	-	-	-	-	20	-	-	-	-	-	-	

	Little owl	-	-	-	-	-	-	1	1	-	-	1	-	-	-
391	Mute swan	-	-	-	-	-	-	-	-	9	-	11	-	2	-
398	Mallard	-	-	-	-	-	-	-	42	-	-	-	-	-	-
	Grey heron	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	Woodcock	-	-	-	-	-	-	1	-	-	-	-	-	-	-
416	Golden plover	-	-	-	-	-	-	-	37	-	-	-	-	-	-
417	Lapwing	-	-	-	-	-	-	-	-	-	-	-	6	-	-
428	Barn owl	-	-	-	-	-	-	(1)	-	-	-	-	-	-	-
429	Woodcock	-	-	-	-	-	-	-	-	-	2	-	1	-	-
431	Pink-footed goose	(190)	(216)	-	-	-	-	-	-	-	-	-	-	-	-
	Woodcock	-	-	-	-	-	-	-	-	-	-	-	1	-	-
436	Snipe	-	-	-	-	-	-	-	-	-	1	-	1	-	-
	Woodcock	-	-	-	-	-	-	-	-	-	-	-	2	-	-
	Marsh harrier	-	(2)	-	-	-	-	-	-	-	-	-	-	-	-
443	Pink-footed goose	-	-	2	-	-	-	-	-	-	-	-	21	-	-
	Greylag goose	-	-	-	-	-	-	-	-	-	-	-	155	-	34
	Lapwing	-	-	-	-	-	-	71	-	-	-	-	-	-	-
444	Greylag goose	-	-	-	-	-	-	-	-	-	-	-	-	34	-
450	Mallard	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Snipe	-	-	-	-	-	-	-	-	-	2	-	-	-	-
464	Barn owl	-	-	-	-	-	-	1	-	-	-	-	-	-	-

465	Little owl	-	-	-	-	-	-	-	-	-	1	-	-	-	-
466	Lapwing	-	-	-	-	-	-	-	-	-	-	-	4	-	-
	Snipe	-	-	-	-	-	-	-	-	-	-	-	1	-	-
476	Little egret	-	-	-	-	-	-	-	1	-	-	-	-	-	-
485	Lapwing	-	-	-	-	-	-	-	-	-	16	-	-	-	-
	Golden plover	-	-	-	-	-	-	-	-	-	-	-	-	38	-
486	Peregrine	-	-	-	-	1	-	-	-	-	-	-	-	-	-
488	Woodcock	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	Barn owl	-	-	-	-	-	-	-	-	-	-	-	1	-	-
489	Lapwing	-	19	-	-	-	-	-	-	-	3	-	-	-	-
490	Woodcock	-	-	-	-	-	-	-	-	-	-	-	2	-	-
492	Lapwing	21	-	-	-	-	-	-	-	-	-	-	-	-	-
493	Lapwing	(4)	8	-	-	-	-	-	-	-	-	-	-	-	-
494	Lapwing	(17)	-	-	-	-	-	-	-	-	-	-	-	-	-
496	Lapwing	-	-	-	-	-	-	37	-	260	27	-	-	-	-
	Woodcock	-	-	-	-	-	-	1	-	-	-	-	-	-	-
501	Pink-footed goose	700	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greylag goose	150	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mallard	30	-	-	-	-	-	-	-	-	-	-	-	-	-
504	Greylag goose	-	-	-	-	-	-	-	-	-	-	-	-	2	-
	Grey heron	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	Lapwing	-	-	-	-	-	-	-	-	-	-	-	6	-	-

505	Lapwing	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	Woodcock	-	-	-	-	-	-	1	-	-	-	-	-	-	-
506	Woodcock	-	-	-	-	-	-	-	-	-	-	-	1	-	-
507	Pink-footed goose	13	-	-	-	-	-	-	-	-	-	-	-	-	-
508	Pink-footed goose	36	22	-	-	-	-	-	-	-	-	-	-	-	-
509	Osprey	1	-	-	-	-	-	-	-	-	-	-	-	-	-
511	Mallard	-	-	-	-	-	-	-	-	-	-	-	-	-	1
512	Woodcock	-	-	-	-	-	-	-	-	-	1	-	-	-	-
514	Lapwing	-	53	-	-	-	-	-	-	-	-	-	-	-	-
	Woodcock	-	-	-	-	-	-	2	-	-	-	-	-	-	-
515	Mute swan	-	-	-	-	-	-	-	-	-	-	-	-	2	-
	Lapwing	-	-	-	-	-	-	-	-	-	14	-	-	-	-
516	Woodcock	-	-	-	-	-	-	1	-	-	-	-	1	-	-
	Barn owl	-	-	-	-	-	-	(1)	-	-	-	-	-	-	-
518	Pink-footed goose	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-
519	Pink-footed goose	-	49	-	-	-	-	-	-	-	-	-	-	-	-
521	Mute swan	-	-	-	1	-	-	-	-	2	-	-	-	-	-
	Greylag goose	-	-	-	-	-	-	-	-	-	-	-	-	2	2
	Mallard	-	-	-	-	-	-	-	-	-	-	64	-	-	-
	Grey heron	-	-	1	-	-	-	-	-	1	-	-	-	-	-

	Lapwing	-	-	-	-	-	-	45	8	-	-	-	-	-	-
	Green sandpiper	-	-	-	-	1	1	-	-	1	-	-	-	-	-
	Snipe	-	-	-	-	-	-	3	-	-	-	-	-	-	-
	Jack snipe	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	Woodcock	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	Tawny owl	-	-	-	-	-	-	-	-	-	1	-	-	-	-
523	Tawny owl	-	-	-	-	-	-	-	-	-	-	-	1	-	-
545	Woodcock	-	-	-	-	-	-	-	-	-	-	-	4	-	-
546	Lapwing	-	-	-	-	-	-	7	-	-	1	-	-	-	-
548	Green sandpiper	-	-	-	-	-	-	-	1	-	-	-	-	-	-
550	Marsh harrier	-	-	-	-	-	-	-	(2)	-	-	-	-	-	-
553	Crane	-	-	-	-	-	-	-	-	-	-	-	-	2	-

Species associated with the Humber Estuary SPA recorded in **bold**

'-' means that the species was not recorded during that visit.

Those in brackets were recorded in flight only.

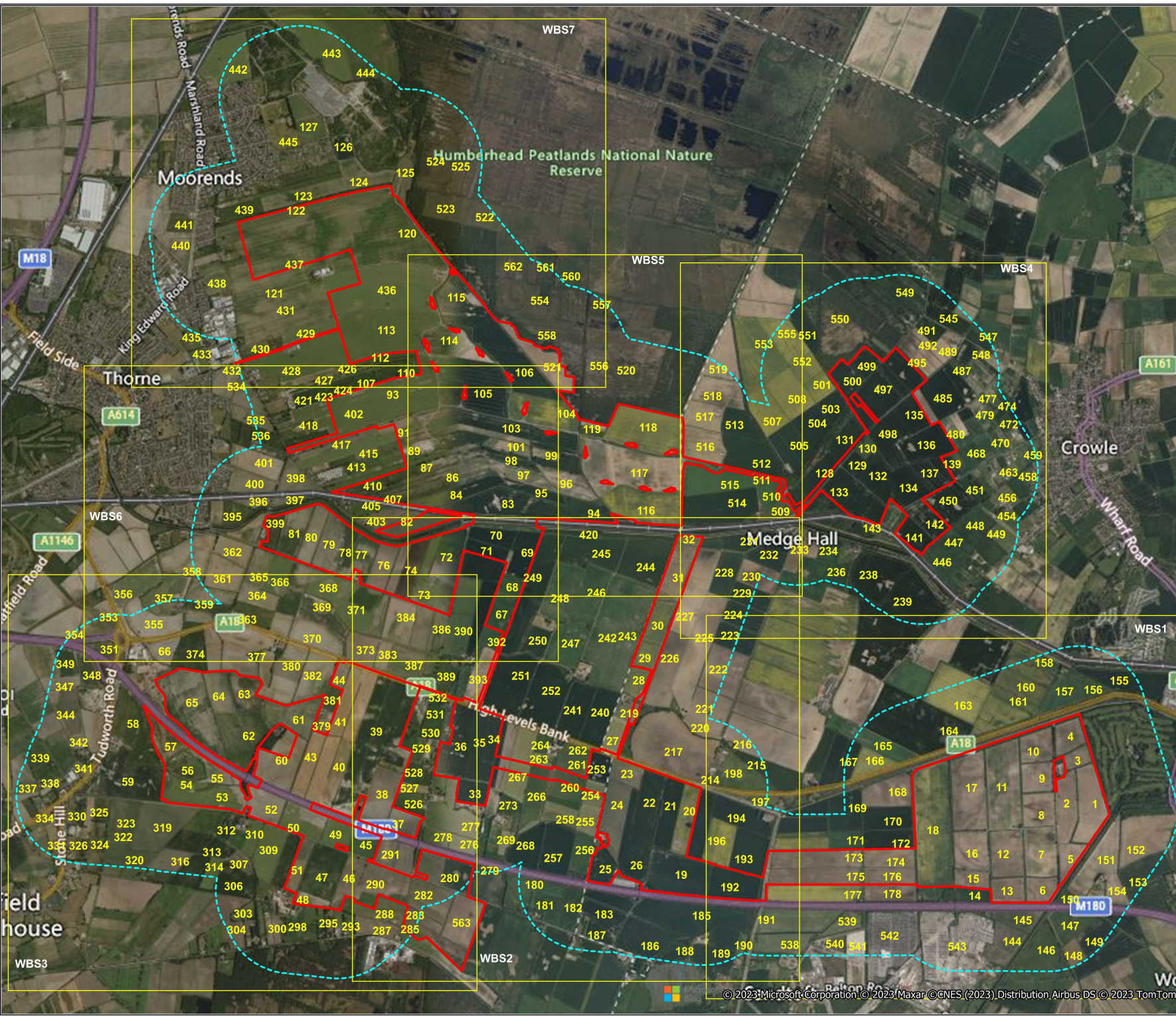
	Black-headed gull	-	-	-	58	30	-	-	-	-	-	-	-	-	-
	Common gull	-	-	-	8	-	-	-	-	-	-	-	-	-	-
82	Fieldfare	-	-	-	-	29	-	-	-	-	-	-	-	-	-
	Fieldfare	-	-	-	-	-	-	-	-	-	-	-	-	-	161
	Black-headed gull	-	-	-	-	6	-	-	-	-	-	-	-	-	-
84	Herring gull	-	-	-	-	4	-	-	-	-	-	-	-	-	-
85	Starling	-	-	-	-	550	-	-	-	-	-	-	-	-	-
	Buzzard	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	Black-headed gull	-	-	-	-	17	-	-	-	-	-	-	-	-	-
	Common gull	-	-	-	-	26	-	-	-	-	-	-	-	-	-
	Herring gull	-	-	-	-	12	-	-	-	-	-	-	-	-	-
86	Lesser black-backed gull	-	-	-	-	1	-	-	-	-	-	-	-	-	-
	Common gull	-	-	8	-	-	-	-	-	12	-	-	-	-	-
	Black-headed gull	-	-	126	-	-	-	-	-	4	-	-	-	-	-
	Fieldfare	-	-	-	-	-	-	-	88	-	-	-	-	-	-
	Redwing	-	-	-	-	-	-	-	220	-	-	-	-	-	-
	Buzzard	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	Herring gull	-	-	6	-	-	-	-	-	-	-	-	-	-	-
	Lesser black-backed gull	-	-	21	-	-	-	-	-	-	-	-	-	-	-
87	Yellow-legged gull	-	-	2	-	-	-	-	-	-	-	-	-	-	-
89	Kestrel	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	Skylark	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	Buzzard	-	-	-	1	-	-	-	-	-	-	-	-	-	-
	Lesser black-backed gull	-	282	-	-	-	-	-	-	-	-	-	-	-	-
	Great black-backed gull	-	16	-	-	-	-	-	-	-	-	-	-	-	-
	Herring gull	-	119	-	-	-	-	-	-	-	-	-	-	-	-
	Yellow-legged gull	-	7	-	-	-	-	-	-	-	-	-	-	-	-
	Caspian gull	-	1	-	-	-	-	-	-	-	-	-	-	-	-
92	Kestrel	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Reed bunting	-	-	-	-	-	-	-	-	-	14	-	22	-	-
	Corn bunting	-	-	-	-	-	-	-	-	-	-	-	1	-	-
94	Yellowhammer	-	-	-	-	19	-	-	-	-	-	-	4	-	-

	Lesser black-backed gull	-	21												
114	Skylark	-	-	-	-	-	-	-	-	-	-	-	-	-	2
115	Buzzard	-	-	-	-	-	-	-	-	-	-	-	-	1	-
116	Buzzard	-	-	1	-	-	-	-	-	-	-	-	-	-	-
117	Yellowhammer	-	-	-	-	-	-	-	-	-	-	-	-	-	5
	Kestrel	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	Sparrowhawk	-	-	-	-	-	-	-	1	-	-	-	-	-	-
118	Skylark	-	-	-	-	-	-	1	-	-	-	-	-	-	2
	Buzzard	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	Kestrel	-	-	1	-	-	-	-	-	-	-	-	-	-	-
119	Buzzard	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	Skylark	-	-	-	-	-	-	-	-	-	1	-	-	-	-
120	Buzzard	-	-	-	-	-	-	-	-	-	-	1	-	1	-
	Skylark	-	-	-	-	-	-	-	-	-	-	-	-	2	-
	Starling	-	-	-	-	-	-	-	-	-	-	105	-	-	-
	Fieldfare	-	-	-	-	-	-	-	-	-	-	30	-	-	-
	Black-headed gull	11	-	330	243	4	-	-	-	-	-	-	-	-	-
	Common gull	-	-	25	-	27	-	-	-	-	-	-	-	-	-
	Herring gull	14	21	11	11	23	-	-	-	-	-	-	-	-	-
	Great black-backed gull	4	3	-	-	1	-	-	-	-	-	-	-	-	-
	Lesser black-backed gull	60	87	20	16	-	-	-	-	-	-	-	-	-	-
	Yellow-legged gull	6	4	1	-	-	-	-	-	-	-	-	-	-	-
123	Caspian gull	-	1	1	-	-	-	-	-	-	-	-	-	-	-
	Herring gull	-	2	-	-	-	-	-	-	-	-	-	-	-	-
	Yellow-legged gull	-	2	-	-	-	-	-	-	-	-	-	-	-	-
	Lesser black-backed gull	-	17	-	-	-	-	-	-	-	-	-	-	-	-
124	Black-headed gull	-	4	-	-	-	-	-	-	-	-	-	-	-	-
	Buzzard	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	Fieldfare	-	-	-	-	-	470	-	-	-	-	-	-	-	-
	Redwing	-	-	-	-	-	40	-	-	-	-	-	-	-	-
125	Starling	-	-	-	-	-	220	-	-	-	-	-	-	-	-
	Fieldfare	-	-	-	-	-	-	-	61	-	-	-	-	-	-

	Redwing	-	-	-	-	-	-	-	20	-	-	-	-	-	-
	Black-headed gull	-	-	280	-	-	-	-	-	-	-	-	-	-	-
	Common gull	-	-	17	-	-	-	-	-	-	-	-	-	-	-
	Herring gull	-	-	7	-	-	-	-	-	-	-	-	-	-	-
	Yellow-legged gull	-	-	12	-	-	-	-	-	-	-	-	-	-	-
	Caspian gull	-	-	1	-	-	-	-	-	-	-	-	-	-	-
128	Black-headed gull	-	-	-	-	-	-	-	-	-	-	-	-	23	-
	Black-headed gull	-	-	-	-	-	-	-	3	-	-	-	-	-	-
130	Black-headed gull	-	-	-	89	47	38	-	4	-	-	-	-	-	-
	Common gull	-	-	-	-	1	-	-	-	-	-	-	-	-	-
133	Black-headed gull	-	-	-	-	39	9	-	12	-	-	-	-	36	-
	Common gull	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	Kestrel	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Buzzard	-	-	-	-	-	1	-	-	-	-	-	-	-	-
135	Skylark	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Black-headed gull	-	-	-	-	-	-	-	-	-	-	50	-	-	-
	Common gull	-	-	-	-	-	-	-	-	-	-	4	-	-	-
	Starling	-	-	-	-	-	-	-	-	-	-	34	-	-	-
136	Skylark	-	-	-	-	43	-	-	-	-	-	-	-	-	2
	Black-headed gull	-	-	-	-	44	-	-	-	-	-	-	-	-	-
	Common gull	-	-	-	-	6	-	-	-	-	-	-	-	-	-
	Linnet	-	-	-	-	20	-	-	-	-	-	-	-	-	-
137	Skylark	-	-	-	8	-	-	-	-	-	-	-	-	-	-
	Lesser black-backed gull	9	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yellow-legged gull	2	-	-	-	-	-	-	-	-	-	-	-	-	-
138	Skylark	-	-	-	2	-	-	-	-	-	-	-	-	-	-
139	Skylark	-	-	-	6	-	-	-	-	-	-	-	-	-	-
149	Skylark	-	-	-	5	-	-	-	-	-	-	-	-	-	-
	Stock dove	122	-	-	-	-	-	-	-	-	-	-	-	-	-
151	Woodpigeon	80	-	-	-	-	-	-	-	-	-	-	-	-	-
	Starling	35	-	-	-	-	-	-	-	-	-	-	-	-	-
155	Sparrowhawk	-	-	-	-	-	-	-	-	-	-	1	-	-	-

	Lesser black-backed gull	-	1	11	-	-	-	-	-	-	-	-	-	-	-
	Great black-backed gull	-	32	-	-	-	-	-	-	-	-	-	-	-	-
318	Black-headed gull	-	-	26	-	-	-	-	3	-	-	-	-	-	-
	Common gull	-	-	2	-	-	-	-	-	-	-	-	-	-	-
	Herring gull	-	-	6	-	-	-	-	-	-	-	-	-	-	-
	Lesser black-backed gull	-	-	4	-	-	-	-	-	-	-	-	-	-	-
319	Black-headed gull	-	-	-	-	44	41	-	-	-	-	-	-	-	-
	Common gull	-	-	-	-	6	-	-	-	-	-	-	-	-	-
	Herring gull	15	3	-	-	16	-	-	-	-	-	-	-	-	-
	Lesser black-backed gull	-	1	-	-	3	-	-	-	-	-	-	-	-	-
	Black-headed gull	10	4	22	-	-	-	-	-	-	-	-	-	-	-
	Common gull	-	-	6	-	-	-	-	-	-	-	-	-	-	-
	Great black-backed gull	25	9	-	-	-	-	-	-	-	-	-	-	-	-
	Yellow-legged gull	1	-	-	-	-	-	-	-	-	-	-	-	-	-
320	Egyptian goose	2	-	-	-	-	-	-	-	-	-	-	-	-	-
320	Skylark	-	-	-	6	-	-	-	-	-	-	-	-	-	-
323	Fieldfare	-	-	-	-	-	-	-	-	-	-	11	-	-	-
	Linnet	50	-	-	-	-	-	-	-	-	-	-	-	-	-
324	Fieldfare	-	-	-	-	-	-	-	-	-	-	83	-	-	-
325	Buzzard	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	Grey partridge	-	-	-	-	4	-	-	-	-	-	-	-	-	-
351	Buzzard	-	-	-	-	-	-	-	-	-	-	1	-	-	-
353	Buzzard	-	-	-	-	-	-	-	1	-	-	-	-	-	-
355	Kestrel	-	-	-	-	-	-	-	-	-	-	1	-	-	-
358	Cormorant	-	-	-	-	7	-	-	-	-	-	-	-	-	-
361	Black-headed gull	-	-	-	-	-	39	-	-	12	-	-	-	-	-
	Common gull	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	Fieldfare	-	-	-	-	19	-	-	-	-	-	-	-	-	-
	Redwing	-	-	-	-	6	-	-	-	-	-	-	-	-	-
	Starling	-	-	-	-	180	-	-	-	-	-	-	-	-	-
362	Fieldfare	-	-	-	-	-	149	-	450	-	-	-	-	-	-
	Redwing	-	-	-	-	-	2	-	230	-	-	-	-	-	-

	Greenfinch	-	-	-	120	-	-	-	-	-	-	-	-	-	-
492	Linnet	-	-	-	240	-	-	-	-	-	-	-	-	-	-
496	Black-headed gull	-	-	-	-	-	-	-	11	-	-	-	-	28	-
497	Starling	-	-	-	-	-	-	-	-	-	-	-	-	22	-
	Black-headed gull	-	-	-	-	126	179	-	66	-	-	-	-	-	-
498	Fieldfare	-	-	-	-	-	-	-	-	-	-	180	-	-	-
	Common gull	-	-	-	-	-	22	-	-	-	-	-	-	-	-
	Linnet	-	-	1	-	-	-	-	-	-	-	-	-	-	-
	Stock dove	-	-	-	14	-	-	-	-	-	-	-	-	-	-
	Black-headed gull	-	-	-	2	-	-	-	-	-	-	-	-	-	-
499	Fieldfare	-	-	-	-	-	-	-	-	-	-	-	-	65	-
	Redwing	-	-	-	-	-	-	-	-	-	-	-	-	140	-
	Starling	-	-	-	-	-	-	-	-	-	-	-	-	95	-
501	Buzzard	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	Canada goose	15	-	-	-	-	-	-	-	-	-	-	-	-	-
	Snow goose	1	-	-	-	-	-	-	-	-	-	-	-	-	-
505	Buzzard	-	-	-	-	1	-	-	-	-	-	-	-	-	-
506	Buzzard	-	-	1	1	-	-	-	-	-	-	-	-	-	-
507	Buzzard	-	-	1	-	-	1	-	-	-	-	-	-	1	-
	Kestrel	-	-	-	-	-	-	-	1	-	-	-	-	-	-
508	Skylark	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	Black-headed gull	-	-	-	-	-	-	-	-	-	-	-	-	13	-
	Skylark	-	-	-	4	-	-	-	-	-	-	-	-	-	-
510	Redwing	-	-	-	-	-	-	-	-	-	-	72	-	-	-
	Black-headed gull	-	-	-	-	-	-	-	144	-	-	-	-	-	-
	Common gull	-	-	-	-	-	-	-	9	-	-	-	-	-	-
	Buzzard	-	-	-	-	-	-	-	2	-	-	-	-	-	-
512	Skylark	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Black-headed gull	-	-	-	-	-	-	-	56	-	-	-	-	-	-
	Common gull	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	Kestrel	-	-	-	-	-	-	-	1	-	-	-	-	-	-
513	Kestrel	-	-	-	-	-	1	-	-	-	-	-	-	-	-

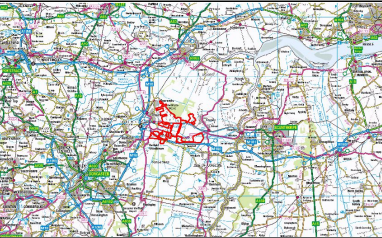


Legend

- Draft Order Limits
- Wider Survey Area

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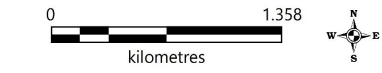


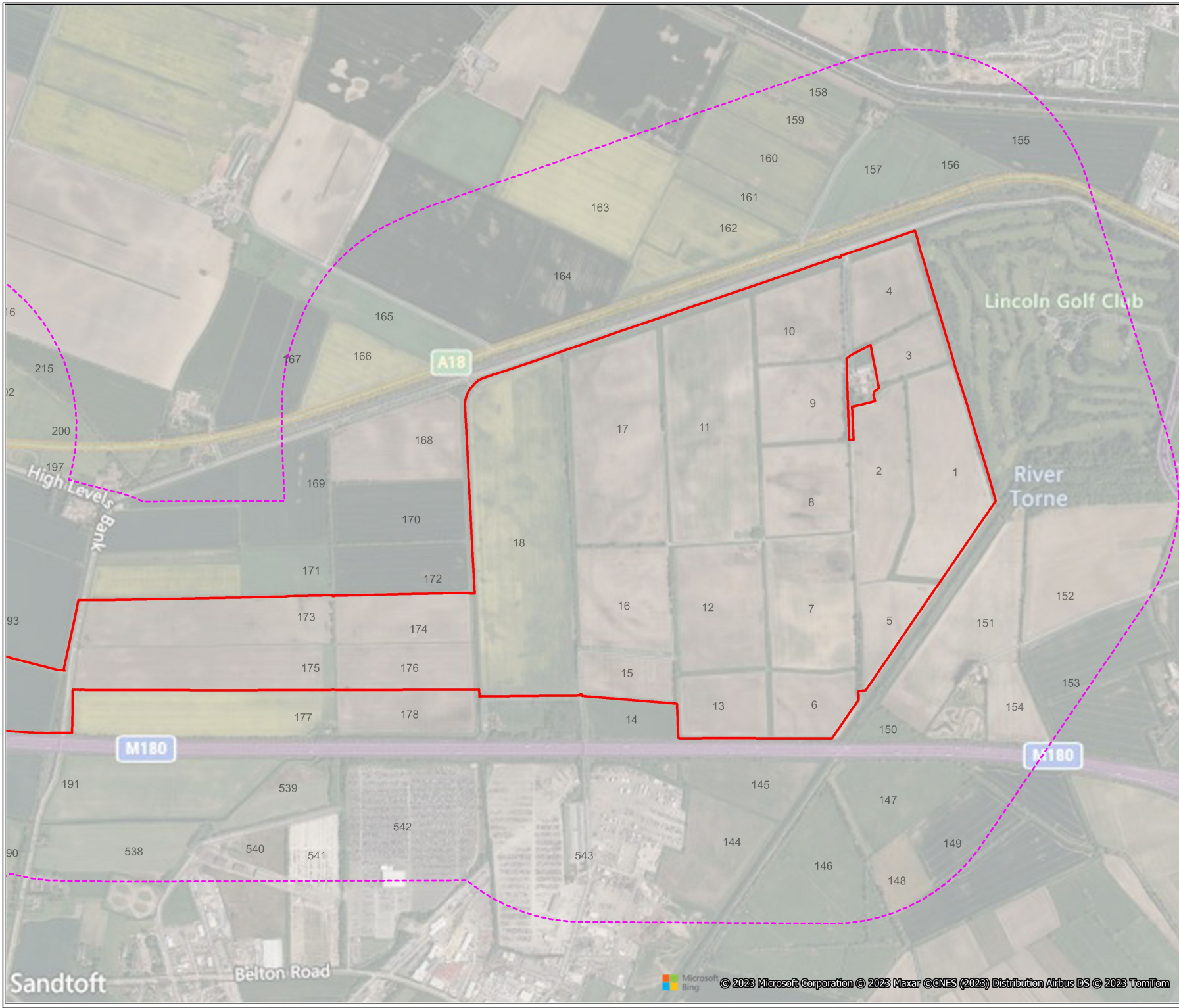
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NON-BREEDING BIRD SURVEY PLAN - OVERVIEW

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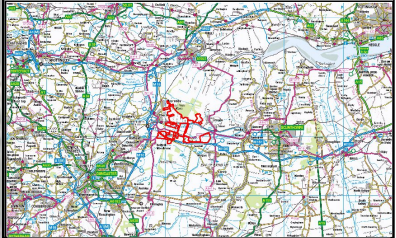
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- Draft Order Limits
- Wider Survey Area

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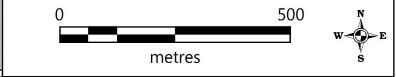


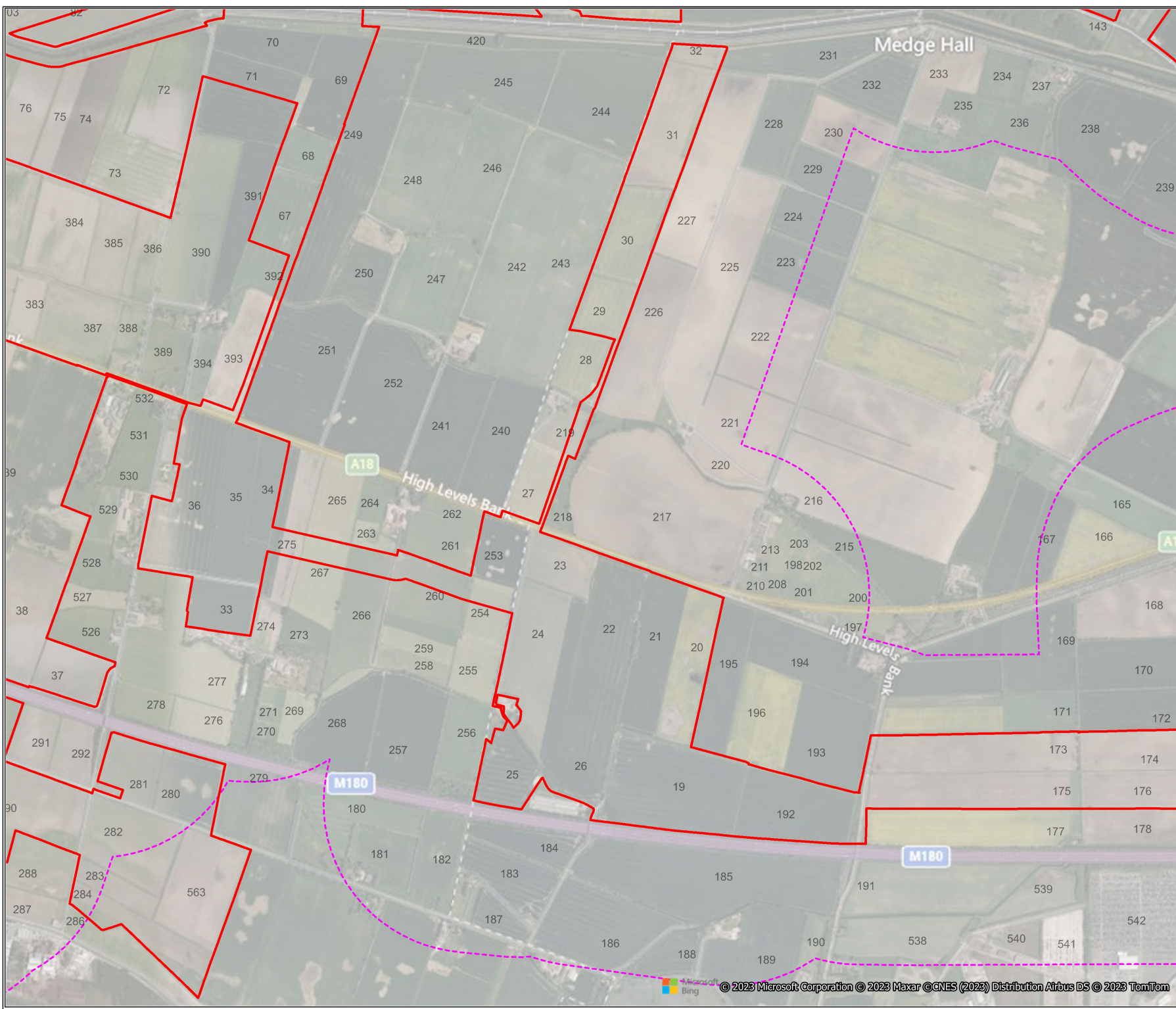
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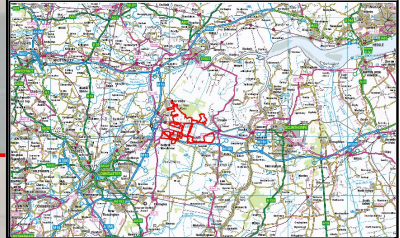


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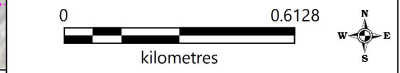


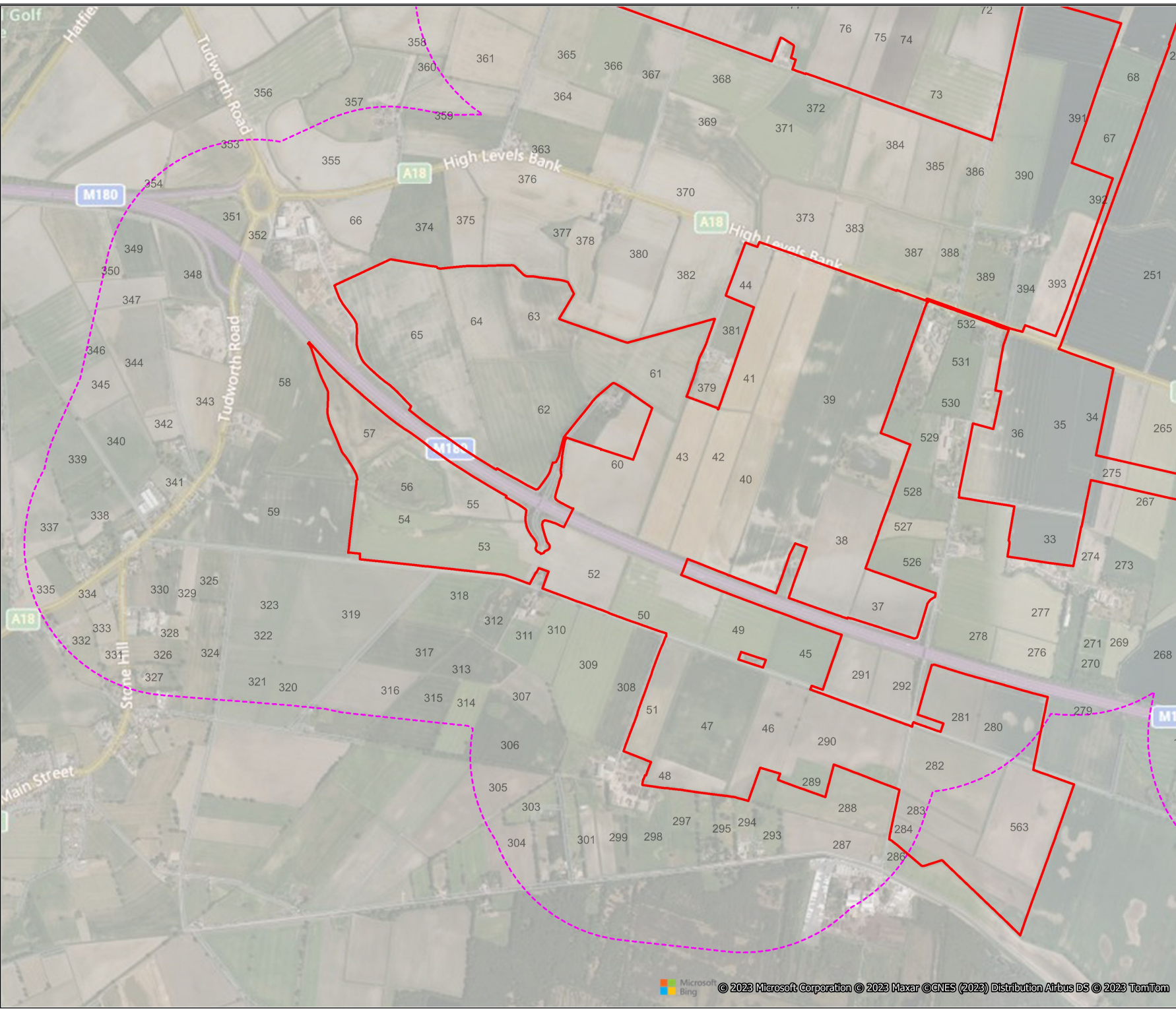
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NON-BREEDING BIRD SURVEY PLAN - 2

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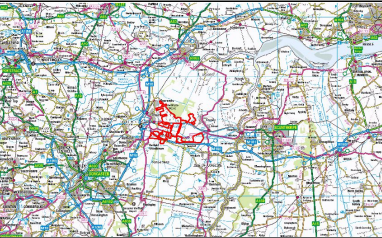
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- Draft Order Limits
- Wider Survey Area

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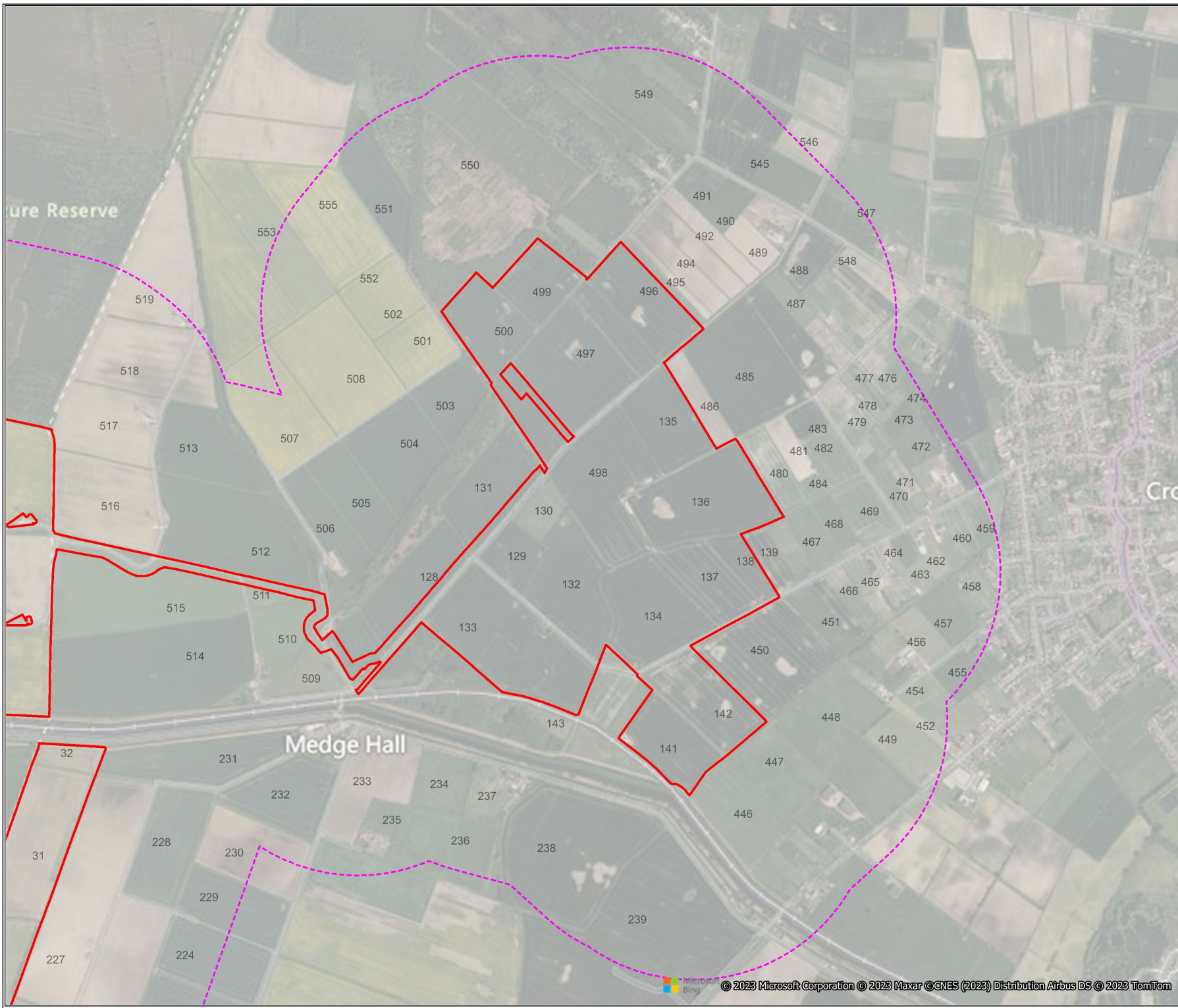
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NON-BREEDING BIRD SURVEY PLAN - 3

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0 0.6039
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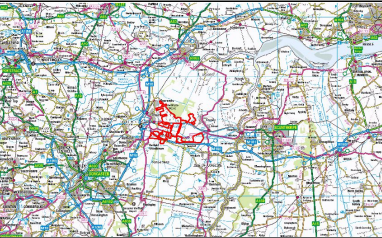


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- Draft Order Limits
- Wider Survey Area

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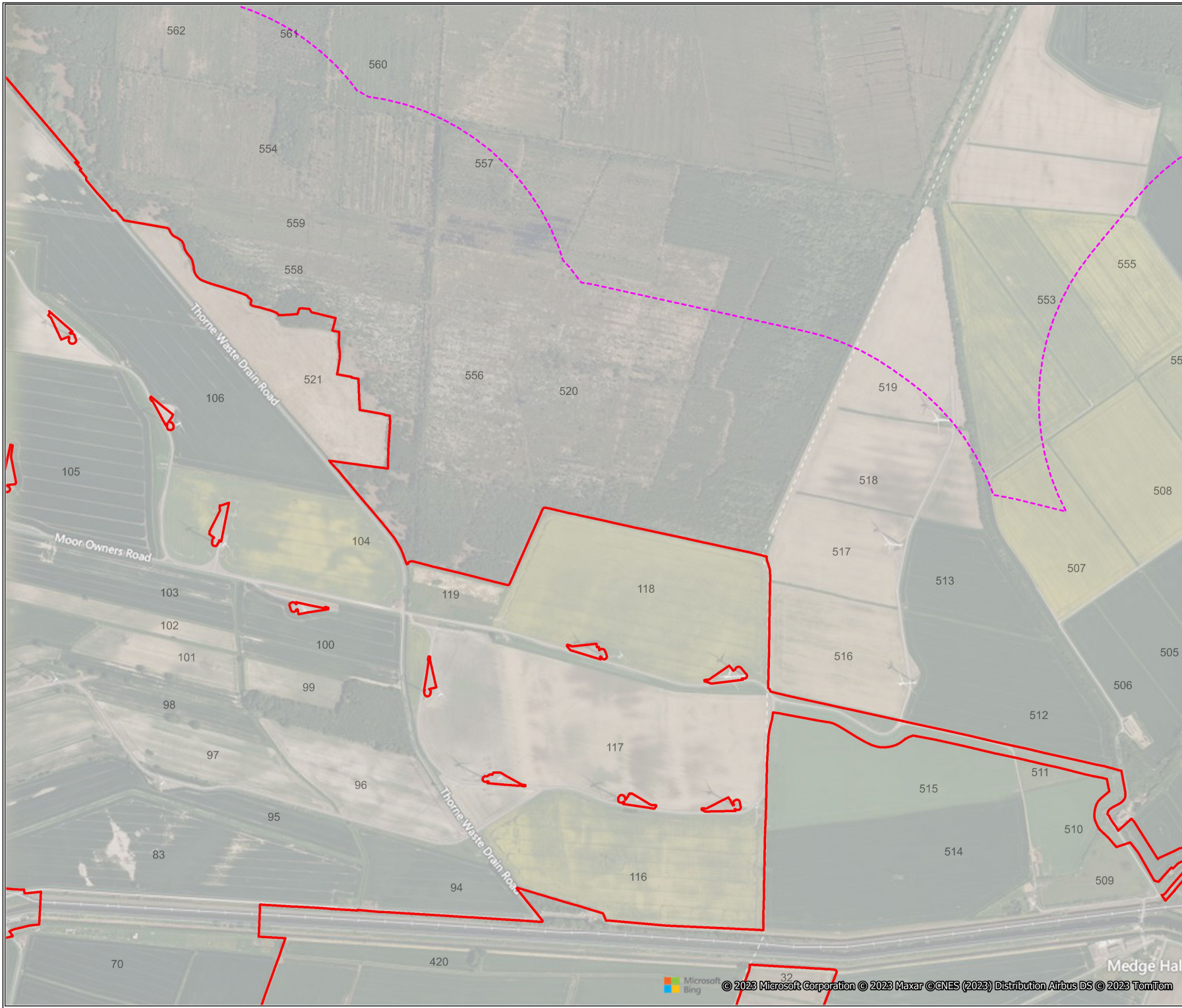
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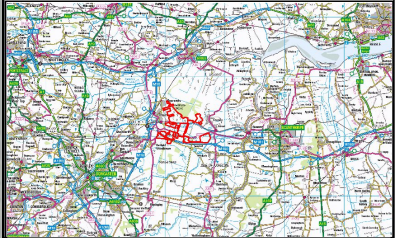
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- Wider Survey Area

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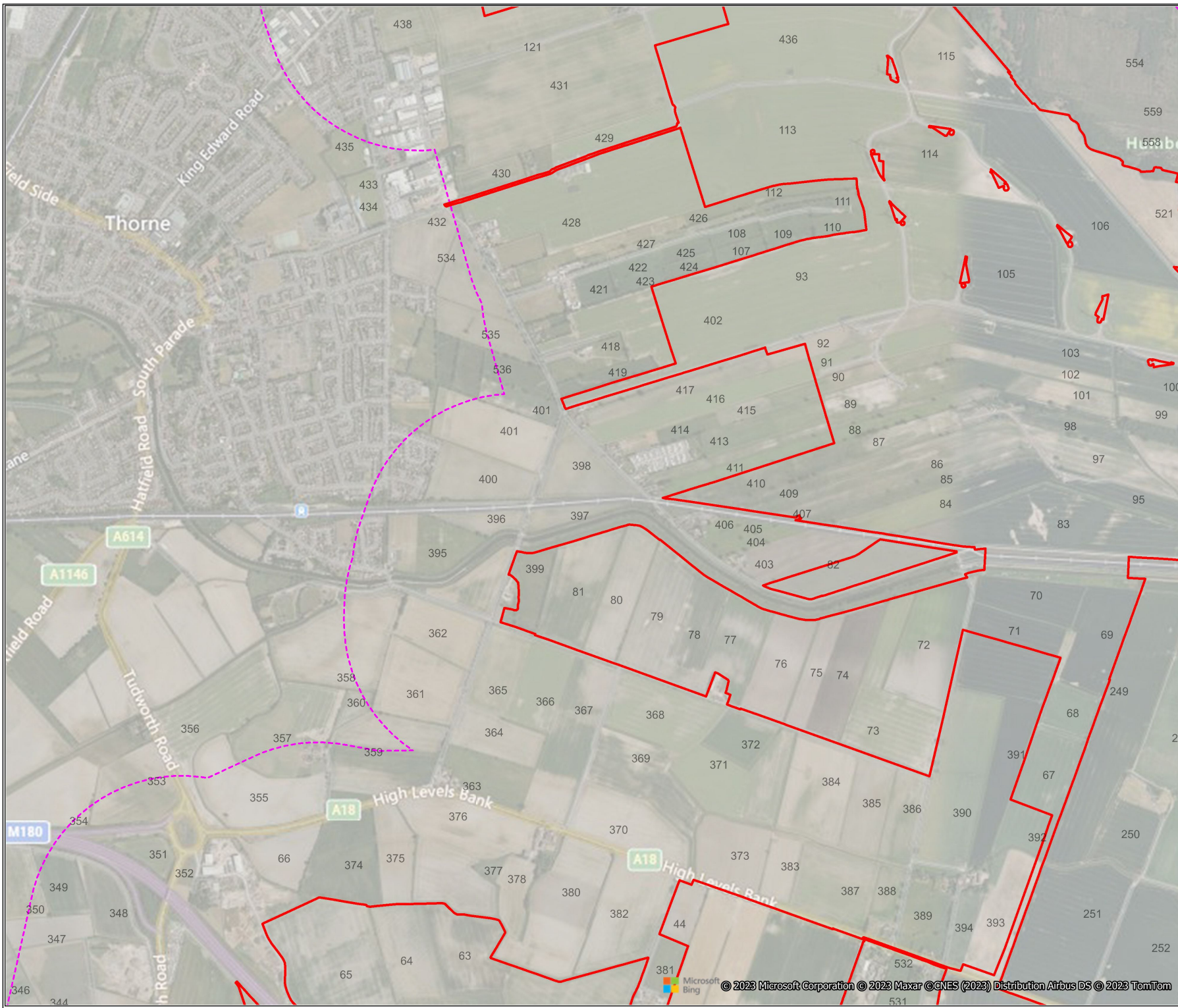
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NON-BREEDING BIRD SURVEY PLAN - 5

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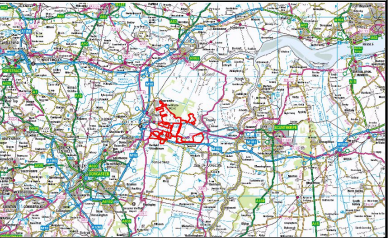
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- Draft Order Limits
- Wider Survey Area

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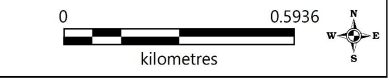


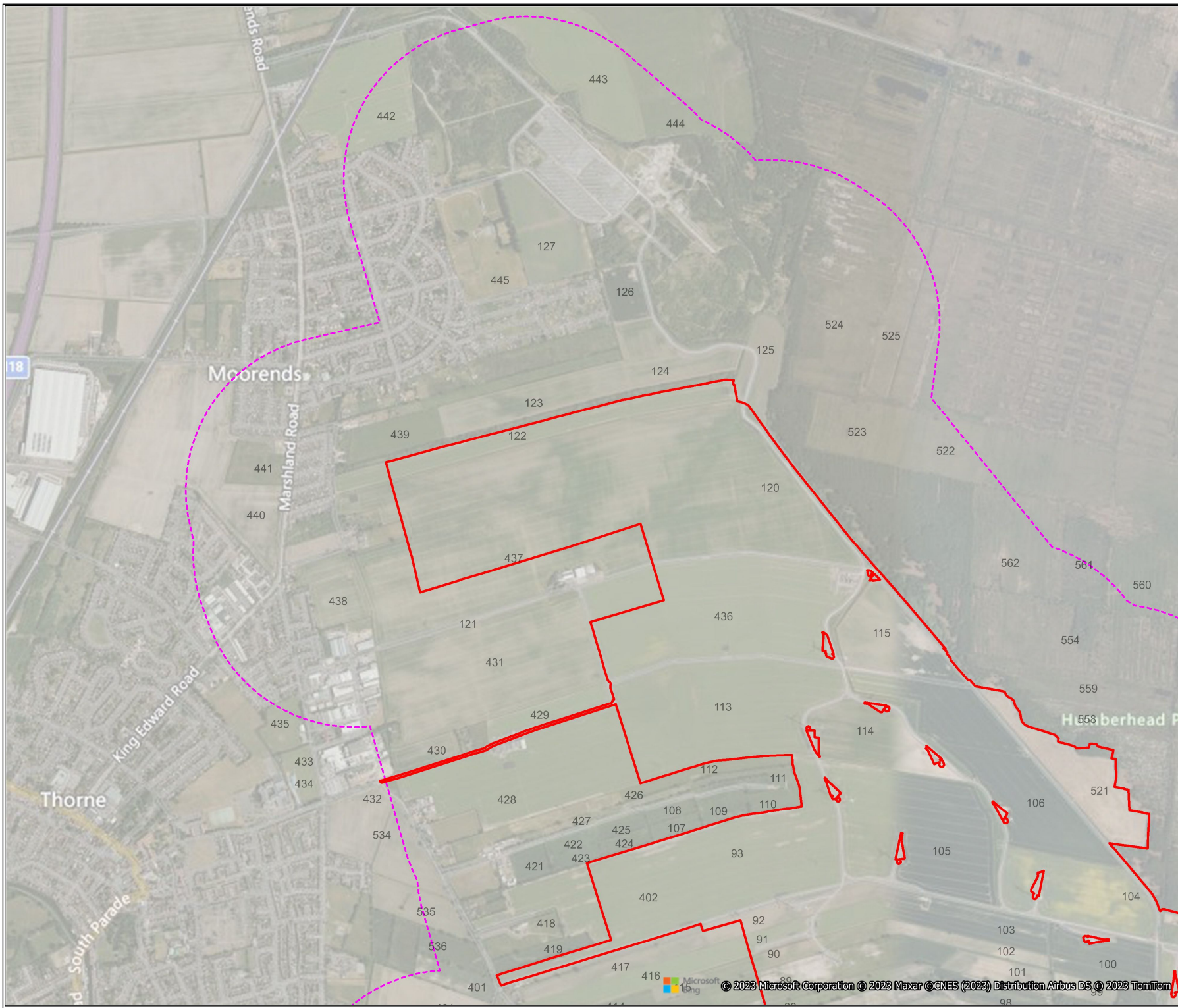
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NON-BREEDING BIRD SURVEY PLAN - 6

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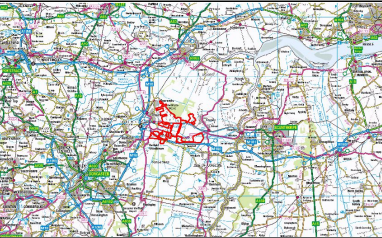
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- Draft Order Limits
- Wider Survey Area

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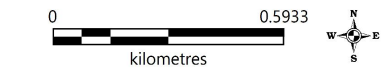


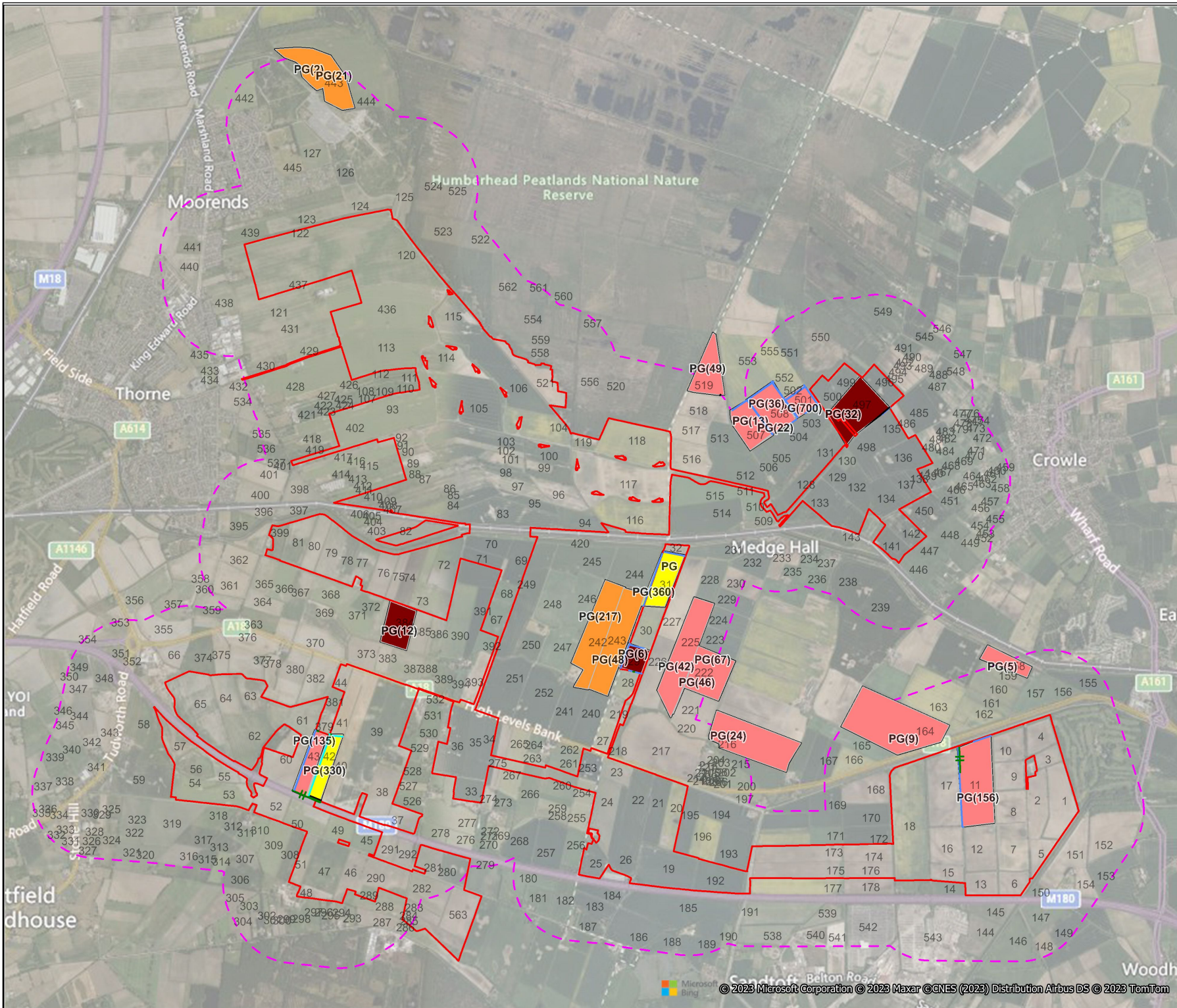
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NON-BREEDING BIRD SURVEY PLAN - 7

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Legend

- Draft Order Limits
- Wider Survey Area

Field types

- Cereal
- Oilseed rape
- Stubble
- Tilled

Field boundaries

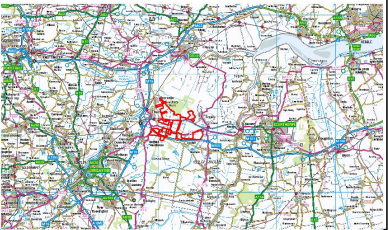
- Hedgerow
- Dry ditch
- Wet ditch
- Fenceline
- Line of trees

Species
PG Pink-footed goose

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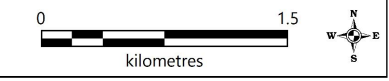


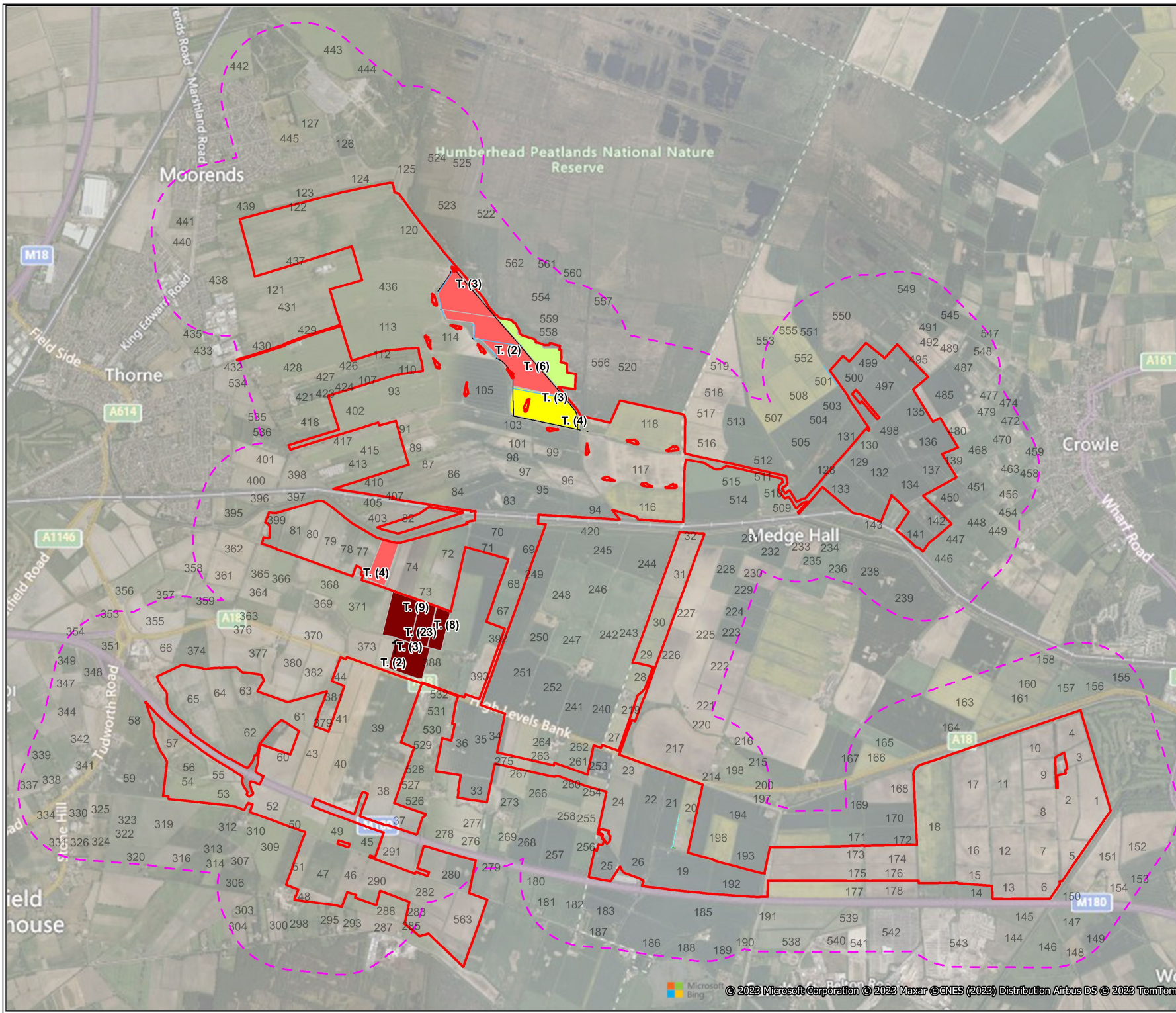
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HUMBER ESTUARY SPA - PINK-FOOTED GOOSE

avianecology

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Legend

- Draft Order Limits
- Wider Survey Area

Habitats

- Oilseed rape
- Rough grassland
- Arable stubble
- Tilled

Field boundary habitats

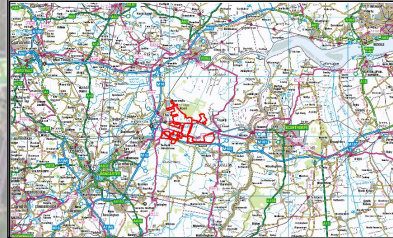
- Hedge
- Dry ditch
- Ditch
- Fence
- Line of trees

Species

- T. - Teal

00	27/07/2023		ZH	HD
Rev	Date	Description	De	App

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 Projection: Transverse Mercator Datum: OSGB 1939 Units: Metres
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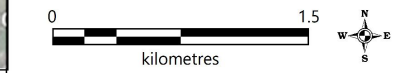


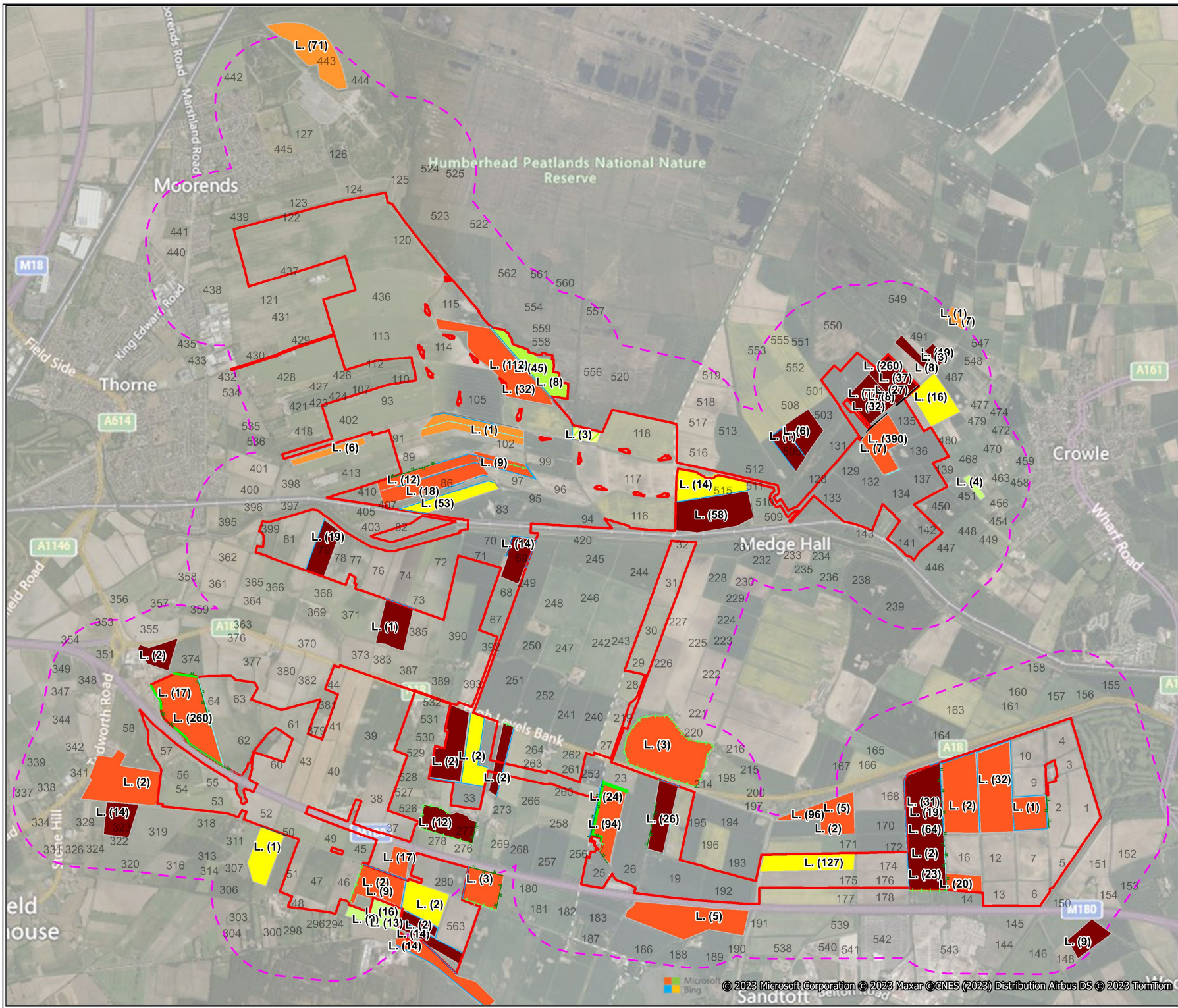
TWEEN BRIDGES NSIP

HUMBER ESTUARY SPA - TEAL

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Legend

- Draft Order Limits
- Wider Survey Area

Habitats

- Cereal
- Oilseed rape
- Pasture (Ungrazed)
- Pasture (Grazed)
- Rough grassland
- Arable stubble
- Tilled

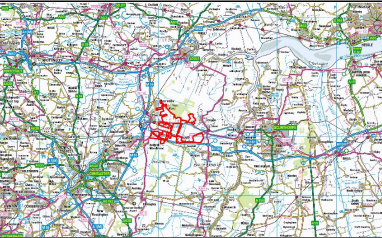
Field boundary features

- Ditch
- Fenceline
- Grassland edge
- Hedgerow
- Line of trees

Species
L. - Lapwing

00	27/07/2023		ZH	HD
Rev	Date	Description	De	App

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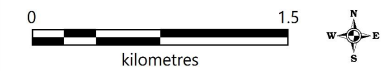


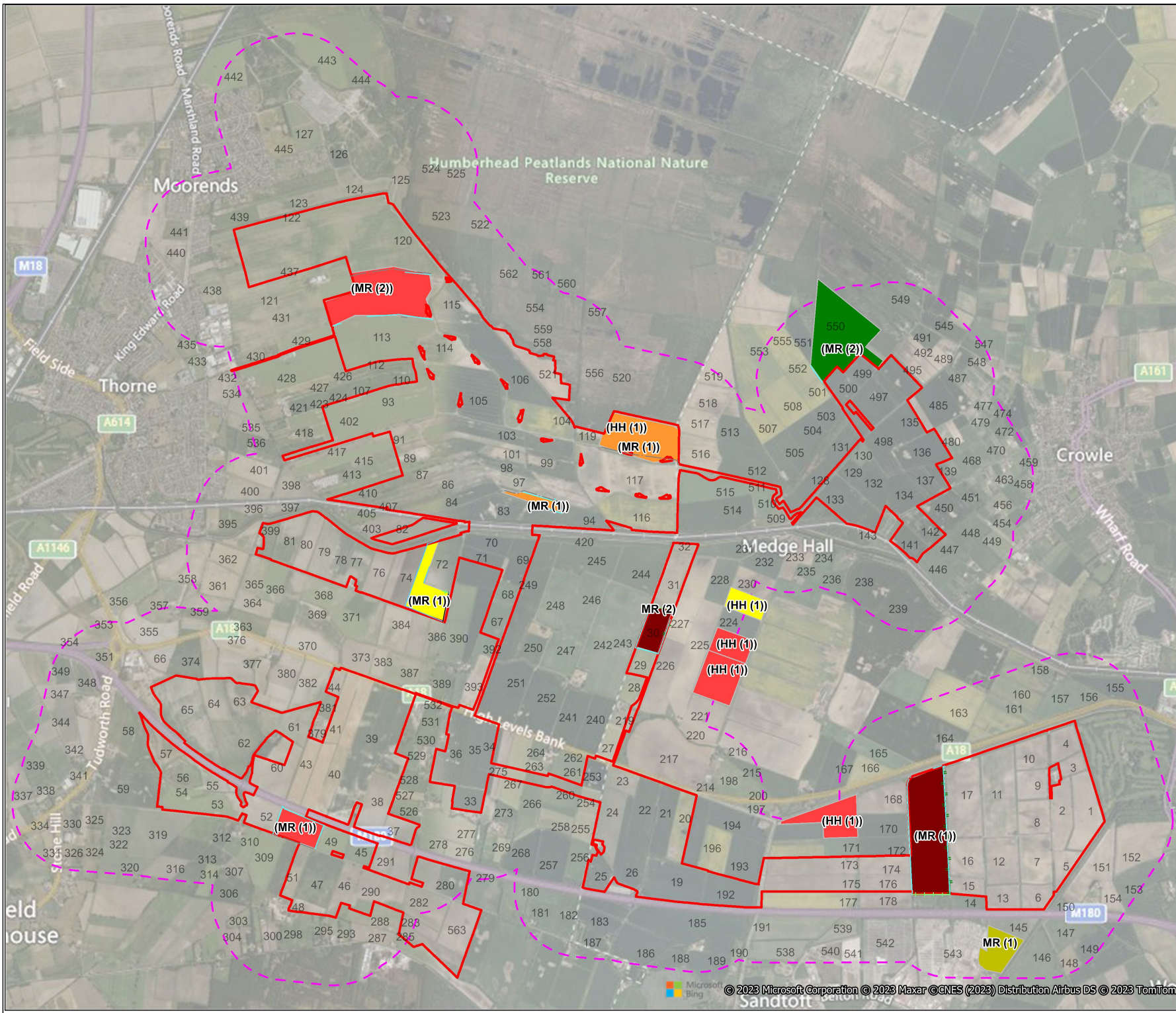
TWEEN BRIDGES NSIP

HUMBER ESTUARY SPA -LAPWING

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Legend

- Draft Order Limits
- Wider Survey Area

Habitats

- Cereal
- Oilseed rape
- Rough Grassland
- Scrub
- Arable stubble
- Tilled

Field boundary habitats

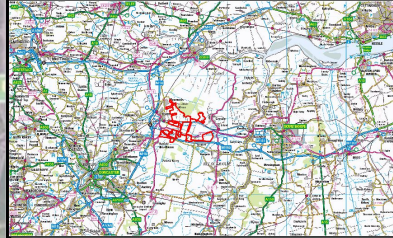
- Ditch
- Fence
- Hedge
- Ditch
- Track
- Line of trees

Species

- HH - Hen harrier
- MR - Marsh harrier

00	27/07/2023		ZH	HD
Rev	Date	Description	De	App

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TWEEN BRIDGES NSIP

HUMBER ESTUARY SPA - HEN HARRIER AND MARSH HARRIER

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