



Pearmtree Hill Solar Farm

Environmental Statement

Volume 4

Appendix 7.5: Ornithological Survey Report

Application Document Ref: EN010157/APP/6.4
February 2025

Planning Act 2008
Infrastructure Planning
(Applications: Prescribed Forms
and Procedure) Regulations 2009 –
Regulation 5(2)(a)

Appendix 7.5: Ornithological Survey Report (produced by Avian Ecology Ltd) – summary of divergences

Following completion of **Environmental Statement (ES) Volume 4, Appendix 7.5: Ornithological Survey Report [EN010157/APP/6.4]**, there have been amendments to the Proposed Development that have resulted in divergences between this Avian Ecology Ltd report and other documents submitted as part of the ES. These differences relate to terminology used and the survey area covered. The breeding bird survey area covered by the Avian Ecology Ltd report includes several parcels of land which now lie outside of the Order Limits, whilst several parcels of land within the Order Limits are not included in the Avian Ecology Ltd report. The Applicant has undertaken additional surveys to cover the missing land parcels within the Order Limits (see **ES Volume 4, Appendix 7.3: Breeding Bird Survey Report [EN010157/APP/6.4]** for more details). The Avian Ecology Ltd report has not been amended to address such divergences; instead, a summary table is provided below. The Order Limits, Land Areas and field numbering system can be seen at **ES Volume 3, Figure 1.2: Land Areas and Cable Routes Plan with Field Numbering System [EN010157/APP/6.3]**.

ES Volume 4, Appendix 7.5: Ornithological Survey Report [EN010157/APP/6.3] (Avian Ecology Ltd report)	Environmental Statement
Changes to Order Limits	<p>There have been changes to the Order Limits since the Avian Ecology Ltd report was produced. A summary of these changes is as follows:</p> <ul style="list-style-type: none"> • Removal of Land Area A (more information on this is provided in ES Volume 1, Chapter 4: Reasonable Alternatives Considered [EN010157/APP/6.1]); • Extension of the Order Limits to include the grid connection cable route, interconnecting cable routes, and access tracks; and • Minor changes to the Order Limits due to evolutions in the Proposed Development design.
Land parcels defined as Areas 1-7	<p>Land parcels defined as Land Areas B to F within the ES.</p> <p>Areas 1-7 described in the Avian Ecology Ltd report do not correspond directly to Land Areas B to F in other ES documents, as the Avian Ecology Ltd study area for bird surveys extends outside of the Order Limits in some locations. There have also been</p>

ES Volume 4, Appendix 7.5: Ornithological Survey Report [EN010157/APP/6.3] (Avian Ecology Ltd report)	Environmental Statement
	changes to the Order Limits since the Avian Ecology Ltd surveys were undertaken.
Area 1	Corresponds to Land Area A, which has now been removed from the Order limits.
Area 2	Located outside of the Order Limits, adjacent to Land Area B at its northern extent.
Area 3	Corresponds to Fields B1 to B4, B7 and B8; partial coverage of Field C1 to the south and Field D7 to the west.
Area 4	Corresponds to Fields D1 to D6.
Area 5	Corresponds to Land Area C.
Area 6	Corresponds to Land Area F .
Area 7	Corresponds to Fields E13 to E17.
Creyke Beck Solar Farm	The Proposed Development is now named Peartree Hill Solar Farm.
JBM Solar Projects (UK) Limited	JBM Solar was acquired by RWE and therefore the Applicant is now RWE Renewables UK Solar and Storage Ltd.
Red line boundary and Site boundary	Now referred to as the Order Limits and these are not the same as the boundary presented in the Avian Ecology Ltd report due to developments in the design of the Proposed Development.
Site – referring to the land within the red line boundary that the Avian Ecology Ltd report is based on.	Site – referring to the land within the Order Limits.

Creyke Beck Solar Farm
on behalf of JBM Solar Projects (UK) Limited
Ornithological Survey Report



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1 INTRODUCTION

1.1 Project Background

- 1.1.1 Avian Ecology Ltd. was commissioned to undertake ornithological surveys in relation to a renewable energy project, consisting of ground-mounted solar photovoltaic arrays, together with associated infrastructure (termed 'Proposed Development'). The Proposed Development is located on land to the east of the town of Beverley, in the East Riding of Yorkshire (the 'Site').
- 1.1.2 The objectives of this report are to:
- Provide baseline information on the current ornithological features (non-breeding and breeding) within the Site and adjacent habitats; and,
 - Identify the presence of notable bird species within the Site and adjacent habitats.
- 1.1.3 Only common bird species names are referred to within the main text of this report. A summary of all bird species recorded during the surveys or referenced within the text are presented with their scientific names and conservation status in **Appendix 1**.

1.2 Site Overview

- 1.2.1 The Site as illustrated by the red-line boundary, shown on **Figures 1-4**, comprises multiple fields containing mainly agricultural land, across seven areas (termed 'Area 1-7' for ease of interpretation), with the central area (termed 'Area 3') located at the approximate grid reference of TA 10801 41507.
- 1.2.2 The Site predominantly comprises arable and pasture fields divided by a series of field boundaries and roads. In the wider context, the Site is surrounded by further extensive areas of cereal and pastoral farmland.
- 1.2.3 The Site, at its nearest point, is approximately 9.6km north of the Humber Estuary Special Protection Area (SPA), Ramsar site and Site of Special Scientific Interest (SSSI), and 9km west from the Hornsea Mere SPA and SSSI. These designated statutory sites all have qualifying non-breeding bird interests, and include shelduck, mute swan, redshank and golden plover¹²³.

¹ Information on Humber Estuary SPA available at:

<https://publications.naturalengland.org.uk/publication/5382184353398784> (Accessed September 2023).

² Information on Humber Estuary Ramsar available at: <https://rsis.ramsar.org/ris/663> (Accessed September 2023).

³ Information on Hornsea Mere SPA available at:

<https://publications.naturalengland.org.uk/publication/5144340473053184> (Accessed September 2023).

2 METHODOLOGY

2.1 Non-breeding Bird Surveys

- 2.1.1 The 'Non-breeding Bird Survey Area' comprised the habitats, respectively for the 2021-22 and 2022-23 non-breeding seasons, as shown in **Figures 1a** and **1b**. Note, design evolution of the Proposed Development meant that the Site boundary in 2021-22 was considerably different from the updated Site boundary used in 2022-23. This meant that not all parts of the Site were surveyed during the 2021-22 non-breeding season but were in 2022-23. See *Limitations* section for further details.
- 2.1.2 The non-breeding bird surveys were carried out to determine the usage of the Survey Area by Target Species. A 'Walk-over' survey was carried out monthly between December and March (inclusive) in 2021-22 and 2022-23, with the survey undertaken over several days given the extent of the Survey Area.
- 2.1.3 The 'walk-over' surveys adopted the 'look-see' methodology (Gilbert *et al.* 1998⁴) whereby the surveyor observed each field within the Survey Area, walked the boundaries, and stopped at intervals and scanned the fields for Target Species with binoculars. Where required, and where access was not permitted, fields were surveyed from public rights of way (PROWs) and the road network. All Target Species heard or seen within the Survey Area were recorded onto base maps (see **Figure 2** and **Figures 3a-b**).
- 2.1.4 Suitable habitats for Target Species within the Survey Area consisted of arable/pasture fields. Habitats, such as woodland and scrubland were considered unsuitable for Target Species and thus were omitted from the survey. Waterbodies were included in the survey given their suitability to support Target Species.
- 2.1.5 **Figures 1a** and **1b** show the habitat type within the Survey Areas, respectively during the 2021-2022 and 2022-23.
- 2.1.6 Target Species identified consisted of wetland birds such as waders, waterfowl and gulls, and Annex 1 of the EU Birds Directive (Directive 79/409/EEC⁵) and Schedule 1 of the Wildlife and Countryside Act (WCA; 1981, as amended⁶) raptors and owls. Target Species therefore included those qualifying species of the Humber Estuary SPA, Ramsar and SSSI, and Hornsea SPA and SSSI.
- 2.1.7 All surveys were undertaken during daylight hours.
- 2.1.8 Field surveys were undertaken by G. Taylor, who is a suitably qualified and experienced ornithologist.
- 2.1.9 Survey effort and conditions is presented in **Tables 2.1** and **2.2**, respectively for the 2021-22 and 2022-23 non-breeding seasons.

⁴ 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.

⁵ Available at: https://environment.ec.europa.eu/topics/nature-and-biodiversity/birds-directive_en#:~:text=For%20threatened%20bird%20species%2C%20Member,of%20wetlands%20of%20international%20importance (Accessed September 2023).

⁶ Available at: <https://www.bto.org/our-science/projects/ringing/taking-part/protected-birds/s1-list> (Accessed September 2023).

Table 2.1: Wintering Bird Survey Effort – 2021-22

Survey Visit	Date	Start Time (24hrs)	End Time (24hrs)	Survey Conditions <i>WS – Windspeed⁷, WD – Wind direction, R – Rain⁸, CC – Cloud cover, CH – Cloud height, V – Visibility, F/S – Frost/Snow⁹</i>
1	21/12/2021	09:00	15:30	WS: 1, WD: S, R: 0, CC: 1/8, CH: >1km, V: >2km, F/S: 0
	22/12/2021	08:45	15:45	WS: 2-4, WD: SW, R: 0, CC: 4/8, CH: >1km, V: >2km, F/S: 0
	30/12/2021	09:15	13:30	WS: 4-5, WD: SW, R: 0, CC: 8/8, CH: >0.5km, V: >2km, F/S: 0
2	19/01/2022	08:45	15:45	WS: 2-4, WD: NW, R: 0, CC: 0/8, CH: n/a, V: >2km, F/S: 0
	20/01/2022	09:00	15:45	WS: 4, WD: NW, R: 0, CC: 8/8, CH: >1km, V: >2km, F/S: 0
	28/01/2022	10:15	15:30	WS: 2-3, WD: W, R: 0, CC: 8/8, CH: >0.1km, V: >2km, F/S: 0
3	23/02/2022	09:15	16:00	WS: 6, WD: SW, R: 0, CC: 0/8, CH: n/a, V: >2km, F/S: 0
	24/02/2022	08:30	14:45	WS: 5, WD: W, R: 3, CC: 8/8, CH: >1km, V: >2km, F/S: 0
	25/02/2022	10:45	13:45	WS: 3, WD: NW, R: 0, CC: 1/8, CH: >0.1km, V: >2km, F/S: 0
4	08/03/2022	10:30	15:00	WS: 4, WD: SE, R: 0, CC: 0/8, CH: n/a, V: >2km, F/S: 0
	09/03/2022	09:00	16:00	WS: 5, WD: S, R: 0, CC: 3/8, CH: >1km, V: >2km, F/S: 0
	11/03/2022	10:45	13:45	WS: 4, WD: SE, R: 2, CC: 4/8, CH: >0.1km, V: >2km, F/S: 0

Table 2.2: Wintering Bird Survey Effort – 2022-23

Survey Visit	Date	Start Time (24hrs)	End Time (24hrs)	Survey Conditions <i>WS – Windspeed¹⁰, WD – Wind direction, R – Rain¹¹, CC – Cloud cover, CH – Cloud height, V – Visibility, F/S – Frost/Snow¹²</i>
1	22/12/2022	09:30	14:00	WS: 1, WD: SW, R: 0, CC: 8/8, CH: >1km, V: >2km, F/S: 0
	23/12/2022	10:00	14:30	WS: 4, WD: SW, R: 0, CC: 7/8, CH: >1km, V: >2km, F/S: 0
	27/12/2022	08:30	14:45	WS: 5, WD: SW, R: 0, CC: 6/8, CH: >0.5km, V: >2km, F/S: 0
	05/01/2023	09:00	14:00	WS: 4, WD: SW, R: 0, CC: 6/8, CH: >1km, V: >2km, F/S: 0
	06/01/2023	09:00	13:45	WS: 3, WD: SW, R: 0, CC: 2/8, CH: >1km, V: >2km, F/S: 0
2	09/01/2023	09:00	14:15	WS: 4, WD: W, R: 0, CC: 3/8, CH: >1km, V: >2km, F/S: 0
	25/01/2023	09:45	15:00	WS: 4, WD: NW, R: 0, CC: 1/8, CH: >1km, V: >2km, F/S: 0
	26/01/2023	09:30	14:00	WS: 3, WD: NW, R: 0, CC: 8/8, CH: >1km, V: >2km, F/S: 0
	28/01/2023	10:00	14:00	WS: 1, WD: SW, R: 0, CC: 4/8, CH: >1km, V: >2km, F/S: 0
3	23/02/2023	08:30	13:15	WS: 3, WD: N, R: 0, CC: 2/8, CH: >1km, V: >2km, F/S: 0
	24/02/2023	09:00	14:30	WS: 4, WD: N, R: 2, CC: 5/8, CH: >1km, V: >2km, F/S: 0
	26/02/2023	08:45	14:15	WS: 3, WD: NE, R: 0, CC: 7/8, CH: >0.5km, V: >2km, F/S: 0
	27/02/2023	09:15	13:00	WS: 2, WD: NE, R: 0, CC: 6/8, CH: >1km, V: >2km, F/S: 0
4	14/03/2023	08:30	14:30	WS: 6, WD: SW, R: 0, CC: 8/8, CH: >1km, V: >2km, F/S: 0
	15/03/2023	09:00	15:30	WS: 4, WD: SW, R: 2, CC: 4/8, CH: >1km, V: >2km, F/S: 0
	16/03/2023	08:30	14:00	WS: 4, WD: SW, R: 4, CC: 8/8, CH: >0.5km, V: >2km, F/S: 0
	17/03/2023	08:00	11:30	WS: 2, WD: SW, R: 0, CC: 4/8, CH: >1km, V: >2km, F/S: 0

⁷ Beaufort Scale.⁸ 0 - None, 1 - Drizzle, 2 - Light showers, 3 - Heavy showers, 4 - Heavy rain.⁹ Frost: 0 – None, 1 – On ground (part of survey), 2 – All day; Snow: 0 – None, 2 – On site, 3 – High ground.¹⁰ Beaufort Scale.¹¹ 0 - None, 1 - Drizzle, 2 - Light showers, 3 - Heavy showers, 4 - Heavy rain.¹² Frost: 0 – None, 1 – On ground (part of survey), 2 – All day; Snow: 0 – None, 2 – On site, 3 – High ground.

2.2 Breeding Bird Surveys (BBS)

- 2.2.1 A breeding bird survey (BBS) was undertaken between April and June 2022 (inclusive), employing an adapted version of the British Trust for Ornithology (BTO) Common Bird Census (CBC) technique, as detailed in Gilbert *et al.* (1998) and comprising a series of three staggered survey visits undertaken at least seven days apart.
- 2.2.2 The 'Breeding Bird Survey Area' is shown in **Figure 4a-g**.
- 2.2.3 Due to the size of the Survey Area each monthly survey visit was completed over a number of days.
- 2.2.4 All survey visits were carried out between dawn and 10:00hrs and were carried out in conditions conducive for breeding bird surveys (avoiding heavy rain and strong winds).
- 2.2.5 During survey visits, all bird registrations were recorded on suitably scaled field maps using standard BTO species codes and behaviour notations (such as singing, carrying food, active nest).
- 2.2.6 The approximate locations of bird territories within the Survey Area were determined using standard territory mapping techniques to identify and isolate areas within which birds consistently displayed breeding behaviours (following Gilbert *et al.* 1998).
- 2.2.7 Records of birds just visiting the Survey Area (e.g. corvids feeding in fields) and birds flying over only were also recorded.
- 2.2.8 Field surveys were undertaken by G. Taylor, who is a suitably qualified and experienced ornithologist.
- 2.2.9 Survey effort and survey conditions is presented in **Table 2.3**.
- 2.2.10 For the purposes of this report, although the estimated number of breeding territories for all species is provided (**Table 3.1**), only the breeding territories of Notable Species are mapped on **Figure 4a-g**, given these are the most relevant species to the design and assessment of the Proposed Development.
- 2.2.11 Survey results are presented split into the seven distinct areas (Area 1-7), that comprised the Survey Area, for ease of interpretation. The total number of breeding territories/pairs of breeding species within the Survey Area is the combined number within Areas 1-7.
- 2.2.12 Notable Species comprised Birds of Conservation Concern (BoCC) Amber and Red List Species (Stanbury *et al.* 2021¹³), Natural Environment and Rural Communities Act 2006 Section 41 species (NERC S41¹⁴), WCA Schedule 1 species and Birds Directive Annex 1 species.

Table 2.3: Breeding Bird Survey Effort

Survey Visit	Date	Start Time (24hrs)	End Time (24hrs)	Sunrise Time (24hrs)	Survey Conditions <i>WS – Windspeed, WD – Wind direction, R – Rain, CC – Cloud cover, CH – Cloud height, V – Visibility</i>
1	11/04/2022	06:30	09:20	06:08	WS: 0-3, WD: SE, R: 0, CC: 1/8, CH: >1km, V: >2km
	13/04/2022	06:30	09:20	06:03	WS: 1-2, WD: SW, R: 0, CC: 5-7/8, CH: >0.5km, V: >2km
	14/04/2022	06:15	08:30	06:01	WS: 0, WD: n/a, R: 0, CC: 4/8, CH: >0.5km, V: >2km

¹³ 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: 723-747.

¹⁴ Available at: <https://www.gov.uk/government/publications/habitats-and-species-of-principal-importance-in-england> (Accessed September 2023).

Survey Visit	Date	Start Time (24hrs)	End Time (24hrs)	Sunrise Time (24hrs)	Survey Conditions <i>WS – Windspeed, WD – Wind direction, R – Rain, CC – Cloud cover, CH – Cloud height, V – Visibility</i>
	15/04/2022	06:30	08:30	05:58	WS: 0, WD: n/a, R: 0, CC: 2/8, CH: >0.5km, V: >2km
	17/04/2022	06:30	09:45	05:54	WS: 2, WD: SE, R: 0, CC: 2/8, CH: >0.5km, V: >2km
	23/04/2022	06:00	09:50	05:40	WS: 1-3, WD: SE/SW, R: 0, CC: 0/8, CH: n/a, V: >2km
2	02/05/2022	06:15	08:50	05:21	WS: 0, WD: n/a, R: 0, CC: 8/8, CH: >0.5km, V: >1km
	05/05/2022	05:35	08:15	05:15	WS: 1, WD: SW, R: 0, CC: 1/8, CH: >0.5km, V: >1km
	10/05/2022	06:00	07:45	05:05	WS: 4, WD: WSW, R: 0, CC: 7/8, CH: >0.5km, V: >1km
	12/05/2022	05:30	09:10	05:02	WS: 2-3, WD: SW, R: 0, CC: 0-1/8, CH: >0.5km, V: >1km
	18/05/2022	06:30	08:00	04:52	WS: 3, WD: SW, R: 0, CC: 0/8, CH: n/a, V: >1km
	29/05/2022	05:15	09:15	04:37	WS: 4, WD: NW, R: 0, CC: 4-6/8, CH: >0.5km, V: >1km
3	02/06/2022	05:45	08:45	04:33	WS: 0-1, WD: E, R: 0, CC: 0/8, CH: n/a, V: >1km
	08/06/2022	06:45	08:10	04:29	WS: 2, WD: SW, R: 0, CC: 3/8, CH: >0.5km, V: >1km
	11/06/2022	07:00	08:15	04:28	WS: 5, WD: SW, R: 0, CC: 0/8, CH: n/a, V: >1km
	15/06/2022	05:15	09:15	04:27	WS: 2, WD: S, R: 0, CC: 2-3/8, CH: >0.5km, V: >1km
	19/06/2022	05:30	09:20	04:27	WS: 3, WD: SW, R: 0, CC: 1-3/8, CH: >0.5km, V: >1km
	24/06/2022	05:20	08:30	04:28	WS: 0, WD: n/a, R: 0, CC: 5-6/8, CH: >0.5km, V: >1km

Limitations

Non-breeding Bird Survey

- 2.2.13 Non-breeding bird surveys are considered to represent a snapshot in time whereby it is accepted that some birds that use the Survey Area may not always be present during the duration of the surveys. In addition, it is accepted that cropping regime and human disturbance through agricultural activities may change the species composition using the Survey Area during the non-breeding bird survey period. No significant disturbance events were recorded during the surveys. The surveys are considered to have provided indicative evidence of the non-breeding bird assemblage within the Survey Area.
- 2.2.14 Non-breeding bird surveys are typically carried out from around mid-September to March, however in both non-breeding seasons (2021-22 and 2022-23) surveys were undertaken December to March, inclusive. This is not considered a substantive limitation given the main wintering period was appropriately covered.
- 2.2.15 Design evolution in the Proposed Development meant that the Survey Areas differed between 2021-22 and 2022-23 surveys, with considerable areas now within the Site not covered by the 2021-22 surveys (see **Figures 1a** and **Figure 2**). This is not considered a substantive limitation given the Survey Area in 2022-23 provided full coverage of the Site and is supplemented with partial survey coverage from the 2021-22 season.
- 2.2.16 During the December 2022 surveys access was not permitted to some fields within the Survey Area. For these fields, surveys were rescheduled and undertaken in early January 2023. This is not considered a major limitation given the early January surveys were only one week after December and thus considered representative of the mid-winter period.
- 2.2.17 Permission was not granted to some fields in 2022-23, although many of these could be surveyed from adjacent accessible fields or PROWs. Fields 182 to 184 and 196 were however not accessible (and these

could not be surveyed thoroughly). These fields are not within the Site (as shown in **Figure 1b**). The omission of these small number of fields from the survey coverage is thus not considered a major limitation.

Breeding Bird Survey

- 2.2.18 The results of the surveys are only a snapshot in time of the habitat use and activity of the bird assemblage within the Survey Area; however, the surveys have provided indicative evidence of the breeding bird assemblages.
- 2.2.19 It is appreciated that factors, including cropping regime/ land use and disturbance will influence habitat use within the Site by birds. It is an assumption that the cropping regime / land use during the survey period is typical. No significant disturbance events were recorded during the surveys.
- 2.2.20 The Survey Area between the BBS and the updated Site boundary (used for the 2022-23 non-breeding bird surveys) differed with some areas having been dropped and other areas added. This is particularly apparent for Area 2 surveyed during the BBS, which has now been almost entirely dropped, with two additional land parcels added to the south of Area 2 which have largely not been surveyed during the BBS, with the exception of the northern extreme of the additional fields (see **Figure 4b**). Area 6 also has been considerably reduced in size with the whole of the western part of Area 6 now dropped (see **Figure 4f**). Despite some typically modest alterations to the Site boundary due to design evolution it is considered that the BBS provide a robust estimate of the breeding bird assemblage present within the Survey Area (and the Site).

3 RESULTS

3.1 Non-breeding Bird Surveys

- 3.1.1 Target Species activity within the Survey Areas was modest throughout the survey period, with birds being limited to sporadic and typically small flocks. A total of 15 Target Species were recorded during the surveys (2021-22 and 2022-23 combined). The largest flocks were 800 golden plovers in field 130 during one of the 2021-22 surveys, 246 lapwings in field 197 during one of the 2022-23 surveys and 290 and 110 common gulls and black-headed gulls, respectively in field 18 during one of the 2022-23 surveys. All other records were ≤ 70 birds.
- 3.1.2 The respective results of those Target Species recorded within the Survey Areas during the 2021-22 and 2022-23 non-breeding seasons are presented in **Tables 3.1** and **3.2**. Note, those records in brackets are birds only seen in flight passing over, and not using the field itself. ‘-’ means that the species was not recorded during that survey. If the field is not listed in **Tables 3.1** and **3.2**, no Target Species were recorded in the field during any of the surveys.
- 3.1.3 **Figure 2** and **Figures 3a-b** respectively show the records of Target Species within the Survey Area (not including over-flying only birds), in 2021-22 and 2022-23.

Table 3.1: Target Species recorded within the Survey Area (2021-22)

Field No.	Species	Survey Visit			
		Dec-21	Jan-22	Feb-22	Mar-22
9	Little egret	1	-	-	-
18	Common gull	-	6	-	-
19	Common gull	-	14	-	-
	Black-headed gull	-	10	-	-
20 (field boundary ditch)	Mallard	-	2	-	-
21	Common gull	-	-	27	-
25	Grey heron	1	-	-	-
	Common gull	-	-	2	-
	Mallard	-	-	-	2
	Greylag goose	(22)	-	-	-
28	Common gull	13	-	-	4
	Black-headed gull	11	-	-	4
	Lapwing	-	-	22	-
30 (field boundary ditch)	Mallard	-	-	2	-
30, 34, 35	Pink-footed goose	(34)	-	-	-
31	Lapwing	-	-	-	2
32	Lapwing	-	-	-	5
34	Lapwing	-	-	-	16
35	Lapwing	-	-	5	-
	Golden plover	-	-	60	-
51	Golden plover	-	46	-	-
57 (field boundary ditch)	Mallard	-	-	2	-

Field No.	Species	Survey Visit			
		Dec-21	Jan-22	Feb-22	Mar-22
58	Grey heron	3	-	-	1
58 (field boundary ditch)	Teal	-	30	64	-
	Mallard	-	-	-	2
60, 61 (field boundary ditch)	Teal	22	-	-	-
61	Common gull	-	-	-	2
69	Common gull	11	-	-	-
89 (field boundary ditch)	Teal	-	6	-	-
90	Grey heron	-	-	(2)	-
94	Common gull	-	-	-	31
	Black-headed gull	-	-	-	9
97	Common gull	-	9	-	-
	Black-headed gull	-	41	-	-
102	Common gull	-	12	-	-
	Black-headed gull	-	34	-	-
103	Common gull	-	8	14	26
	Black-headed gull	-	12	-	2
104	Common gull	-	-	2	4
110 (field boundary ditch)	Grey heron	-	-	1	-
114	Lapwing	-	-	1	-
115 (field boundary ditch)	Mallard	3	-	-	-
116	Golden plover	-	-	(11)	-
124	Lapwing	-	-	42	-
130	Golden plover	-	-	800	-
	Lapwing	-	-	59	-
	Common gull	-	-	51	-
	Black-headed gull	-	-	36	-
134	Common gull	-	-	38	-
140	Golden plover	-	-	-	62
	Lapwing	-	-	-	28
	Common gull	-	-	19	-
	Black-headed gull	-	-	4	-
141	Common gull	-	-	24	-
	Black-headed gull	-	-	2	-
155	Lapwing	-	-	19	-
158	Lapwing	-	-	-	2
169	Marsh harrier	-	-	(1)	-

Table 3.2: Target Species recorded within the Survey Area (2022-23)

Field No.	Species	Survey Visit			
		Dec-22/ Early Jan-23	Jan-23	Feb-23	Mar-23
18	Common gull	-	-	290	-
	Black-headed gull	-	-	110	-
20	Common gull	-	2	-	-
23	Lapwing	2	-	-	-
28	Herring gull	-	20	2	-
29	Lapwing	2	-	-	-
	Mallard	-	-	-	2
30	Lapwing	16	-	-	-
	Common gull	64	-	-	-
	Black-headed gull	53	-	-	-
	Herring gull	7	-	-	-
32	Mallard	-	-	-	2
37 (field boundary ditch)	Mallard	-	-	-	2
40	Lapwing	-	-	-	2
46	Barn owl	-	-	-	(1)
46 (field boundary ditch)	Mallard	-	4	2	-
52	Pink-footed goose	-	-	-	6
58	Greylag goose	-	-	2	-
58 (field boundary ditch)	Mallard	-	-	-	6
59	Mallard	-	-	2	-
65 (field boundary ditch)	Mallard	2	-	-	-
67	Mallard	-	4	-	-
84	Snipe	-	-	2	-
	Hen harrier	-	-	(1)	-
84 (field boundary ditch)	Mallard	-	-	-	7
89 (field boundary ditch)	Mallard	18	-	-	-
	Teal	13	-	-	-
90 (field boundary ditch)	Mallard	-	8	-	-
	Teal	-	18	-	-
102	Greylag goose	-	-	-	2
103, 104	Common gull	-	84	-	-
103, 104	Black-headed gull	-	13	-	-
108 (field boundary ditch)	Mallard	-	-	-	2
113	Lapwing	-	-	33	-
	Mallard	-	-	2	-
114	Lapwing	-	8	-	-
	Golden plover	-	2	-	-

Field No.	Species	Survey Visit			
		Dec-22/ Early Jan-23	Jan-23	Feb-23	Mar-23
117	Lapwing	48	-	-	-
141	Greylag goose	52	12	-	1
	Common gull	-	-	32	48
	Black-headed gull	-	-	19	21
	Mute swan	-	-	-	2
	Herring gull	-	-	-	2
	Lesser black-backed gull	-	-	-	4
142	Common gull	-	-	-	49
	Black-headed gull	-	-	-	11
	Herring gull	-	-	-	4
193	Mallard	-	-	3	4
197	Lapwing	-	246	-	-
	Common gull	-	-	-	16
	Black-headed gull	-	-	-	29
198	Common gull	-	-	-	2
	Black-headed gull	-	-	-	6
200	Lapwing	0	(450)	-	-
202	Mute swan	2	-	1	-
	Common gull	-	-	-	3
	Black-headed gull	-	-	-	8
204	Little egret	-	1	-	-
	Barn owl	-	-	-	(1)
	Lapwing	-	-	4	1
205	Mallard	-	-	2	-
206	Lapwing	-	-	-	9
215	Mute swan	-	21	-	1
	Pink-footed goose	-	1	-	-
216	Common gull	-	2	-	-
217	Common gull	25	5	-	-
	Black-headed gull	2	1	-	-
	Herring gull	1	1	-	-
	Mallard	-	2	-	-
	Great black-backed gull	4	3	-	-
218	Lapwing	-	-	-	2
	Common gull	-	-	-	48
	Black-headed gull	-	-	-	17
220	Common gull	-	6	-	-

Field No.	Species	Survey Visit			
		Dec-22/ Early Jan-23	Jan-23	Feb-23	Mar-23
221	Lapwing	-	-	-	2
	Common gull	-	-	67	-
	Black-headed gull	-	-	41	-
222	Little egret	-	-	-	2
	Barn owl	-	(1)	-	-

3.1.4 Based on the updated Site boundary (as shown in **Figures 1-4**) the following fields are within the Site boundary:

- 13 - 18;
- 23, 27, 28;
- 40 - 50;
- 54-61, 63 - 68;
- 88, 89;
- 117, 119;
- 128 - 130;
- 143, 175, 177, 178; and,
- 202 - 222.

3.1.5 **Tables 3.3** and **3.4** respectively presents those Target Species records within the Site. Target Species used the Site sporadically and in modest numbers, with the exception of field 130 during the February 2022 survey when 800 golden plover were present and field 18 during the February 2023 survey when 290 common gulls and 110 black-headed gulls were present.

Table 3.3: Target Species recorded within the Site (2021-22)

Field No.	Species	Survey Visit			
		Dec-21	Jan-22	Feb-22	Mar-22
18	Common gull	-	6	-	-
28	Common gull	13	-	-	4
	Black-headed gull	11	-	-	4
	Lapwing	-	-	22	-
57 (field boundary ditch)	Mallard	-	-	2	-
58	Grey heron	3	-	-	1
58 (field boundary ditch)	Teal	-	30	64	-
	Mallard	-	-	-	2
60, 61 (field boundary ditch)	Teal	22	-	-	-
61	Common gull	-	-	-	2
89 (field boundary ditch)	Teal	-	6	-	-
130	Golden plover	-	-	800	-
	Lapwing	-	-	59	-

Field No.	Species	Survey Visit			
		Dec-21	Jan-22	Feb-22	Mar-22
	Common gull	-	-	51	-
	Black-headed gull	-	-	36	-

Table 3.4: Target Species recorded within the Site (2022-23)

Field No.	Species	Survey Visit			
		Dec-22/ Early Jan-23	Jan-23	Feb-23	Mar-23
18	Common gull	-	-	290	-
	Black-headed gull	-	-	110	-
23	Lapwing	2	-	-	-
28	Herring gull	-	20	2	-
40	Lapwing	-	-	-	2
46	Barn owl	-	-	-	(1)
46 (field boundary ditch)	Mallard	-	4	2	-
58	Greylag goose	-	-	2	-
58 (field boundary ditch)	Mallard	-	-	-	6
59	Mallard	-	-	2	-
65 (field boundary ditch)	Mallard	2	-	-	-
67	Mallard	-	4	-	-
89 (field boundary ditch)	Mallard	18	-	-	-
	Teal	13	-	-	-
117	Lapwing	48	-	-	-
202	Mute swan	2	-	1	-
	Common gull	-	-	-	3
	Black-headed gull	-	-	-	8
204	Little egret	-	1	-	-
	Barn owl	-	-	-	(1)
	Lapwing	-	-	4	1
205	Mallard	-	-	2	-
206	Lapwing	-	-	-	9
215	Mute swan	-	21	-	1
	Pink-footed goose	-	1	-	-
216	Common gull	-	2	-	-
217	Common gull	25	5	-	-
	Black-headed gull	2	1	-	-
	Herring gull	1	1	-	-
	Mallard	-	2	-	-
	Great black-backed gull	4	3	-	-
218	Lapwing	-	-	-	2

Field No.	Species	Survey Visit			
		Dec-22/ Early Jan-23	Jan-23	Feb-23	Mar-23
	Common gull	-	-	-	48
	Black-headed gull	-	-	-	17
220	Common gull	-	6	-	-
221	Lapwing	-	-	-	2
	Common gull	-	-	67	-
	Black-headed gull	-	-	41	-
222	Little egret	-	-	-	2
	Barn owl	-	(1)	-	-

3.2 Breeding Bird Surveys

- 3.2.1 A total of 26 Notable Species were recorded breeding (or suspected breeding) within the Survey Area (Areas 1-7), with the most abundant of these species, skylark (78 pairs), wren (69 pairs), whitethroat (58 pairs), yellowhammer (43 pairs) and reed bunting (42 pairs). This comprised of 10 BoCC Red list species, 15 BoCC Amber list species and one WCA Schedule 1 species.
- 3.2.2 A further 17 'common' (BoCC Green list) or non-native species were recorded as breeding (or suspected breeding) within the Survey Area.
- 3.2.3 All breeding species (or suspected breeding species) recorded along with an estimated number of the breeding territories/ pairs in the Survey Area are detailed within **Table 3.5**. Notable Species are listed first in **Table 3.5** and are **in bold**. Indicative locations of the territories of Notable Species are provided in **Figure 4**.

Table 3.5: BBS Results in Survey Area (2022)

Species	Estimated No. Breeding Territories / Pairs in Survey Area							
	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Total No. Survey Area
Skylark	21	4	8	12	10	21	2	78
Lapwing	9	1	-	2	2	1	-	15
Linnet	5	4	5	3	5	9	2	33
Little ringed plover	1	1	-	-	-	-	-	2
Reed bunting	10	2	5	3	10	11	1	42
Meadow pipit	2	-	-	-	-	1	-	3
Grey partridge	2	1	-	-	1	2	1	7
Tree sparrow	1	-	-	-	1	-	-	2 (colony)
Cuckoo	1	-	-	-	-	-	-	1
Whitethroat	4	2	13	1	13	21	4	58
Willow warbler	3	1	-	-	1	2	-	7
Wren	6	15	6	2	14	19	7	69
Kestrel	1	-	-	1	-	-	-	2

Species	Estimated No. Breeding Territories / Pairs in Survey Area							
	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Total No. Survey Area
Dunnoch	1	3	1	-	2	5	5	17
Corn bunting	-	1	-	-	-	-	-	1
Greylag goose	-	1	-	-	-	1	-	2
Moorhen	-	1	1	-	-	-	-	2
Song thrush	-	8	1	-	3	5	1	18
Bullfinch	-	1	-	-	-	-	-	1
Yellowhammer	-	1	9	4	13	10	6	43
Greenfinch	-	1	-	-	-	1	-	2
Sedge warbler	-	1	1	-	1	1	-	4
Yellow wagtail	-	-	1	1	-	-	-	2
Mallard	-	-	-	1	1	-	-	2
Sparrowhawk	-	-	-	1	-	-	-	1
Stock dove	-	-	-	-	-	1	-	1
Blackbird	4	13	6	1	7	11	7	49
Chaffinch	9	13	13	1	14	18	10	78
Blackcap	6	9	2	-	4	9	3	33
Robin	4	14	4	-	1	4	4	31
Blue tit	3	5	2	-	-	-	2	12
Pheasant	1	1	1	-	2	4	1	10
Great tit	1	3	-	-	1	2	3	10
Sand martin	-	1	-	-	-	-	-	1
Red-legged partridge	-	4	-	-	-	-	-	4
Pied wagtail	-	1	-	-	-	1	-	2
Goldfinch	-	2	2	1	1	1	3	10
Reed warbler	-	2	-	-	-	-	-	2
Chiffchaff	-	3	2	-	-	3	4	12
Magpie	-	2	-	-	1	2	1	6
Goldcrest	-	1	-	-	-	-	-	1
Long-tailed tit	-	1	1	-	1	-	-	3
Lesser whitethroat	-	-	-	-	1	-	1	2

3.2.4 During the BBS, several species were recorded but were not suspected as breeding within the Survey Area, and this included over-flying birds only and those considered only visiting the Survey Area to forage/hunt. Non-breeding species recorded comprised the following:

- Area 1 – Shelduck loafing, marsh harrier pair (including food pass in east of Area 1; possible nesting in wider area outside Area 1), peregrine active adjacent to Area 1 and barn owl hunting south of Area 1;

- Area 2 – Kingfisher in flight with food over Area 2;
- Area 3 – Barn owl in flight over Area 3 and kestrel considered visiting only;
- Area 4 – Barn owl in flight over Area 4 and green woodpecker considered visiting only;
- Area 5 – Barn owl in flight over Area 5;
- Area 6 – Barn owl and buzzard in flight over Area 6; and,
- Area 7 - Barn owl and hobby in flight over Area 7.

3.2.5 Given the alterations to the Site boundary, some of the records within the BBS Survey Area (presented in **Table 3.5**) are now outside the Site boundary. Accordingly, and based on the updated Site boundary, **Table 3.6** provides those records, for Notable Species, within the Site itself.

3.2.6 A total of 23 Notable Species were recorded breeding (or suspected breeding) within the Site, with the most abundant of these species, skylark (59 pairs), wren (43 pairs), whitethroat (44 pairs), yellowhammer (32 pairs) and reed bunting (35 pairs). This comprised of nine BoCC Red list species, 13 BoCC Amber list species and one WCA Schedule 1 species.

Table 3.6: BBS Results, for Notable Species, in the Site (2022)

Species	Estimated No. Breeding Territories / Pairs in the Site							
	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Total No. Site
Skylark	21	-	7	12	10	7	2	59
Lapwing	9	-	-	2	2	1	-	14
Linnet	5	1	2	3	4	3	2	20
Little ringed plover	1	-	-	-	-	-	-	1
Reed bunting	10	-	5	3	10	6	1	35
Meadow pipit	2	-	-	-	-	1	-	3
Grey partridge	2	-	-	-	1	1	1	5
Tree sparrow	1	-	-	-	1	-	-	2 (colony)
Cuckoo	1	-	-	-	-	-	-	1
Whitethroat	4	-	11	1	12	13	3	44
Willow warbler	3	-	-	-	1	2	-	6
Wren	6	2	4	2	12	11	6	43
Kestrel	1	-	-	1	-	-	-	2
Dunnock	1	-	1	-	2	3	5	12
Moorhen	-	-	1	-	-	-	-	1
Song thrush	-	-	1	-	3	4	1	9
Yellowhammer	-	-	5	4	13	5	5	32
Greenfinch	-	-	-	-	-	1	-	1
Sedge warbler	-	-	-	-	1	-	-	1
Yellow wagtail	-	-	1	1	-	-	-	2
Mallard	-	-	-	1	1	-	-	2
Sparrowhawk	-	-	-	1	-	-	-	1
Stock dove	-	-	-	-	-	1	-	1

4 SUMMARY

Non-breeding Bird Survey Results

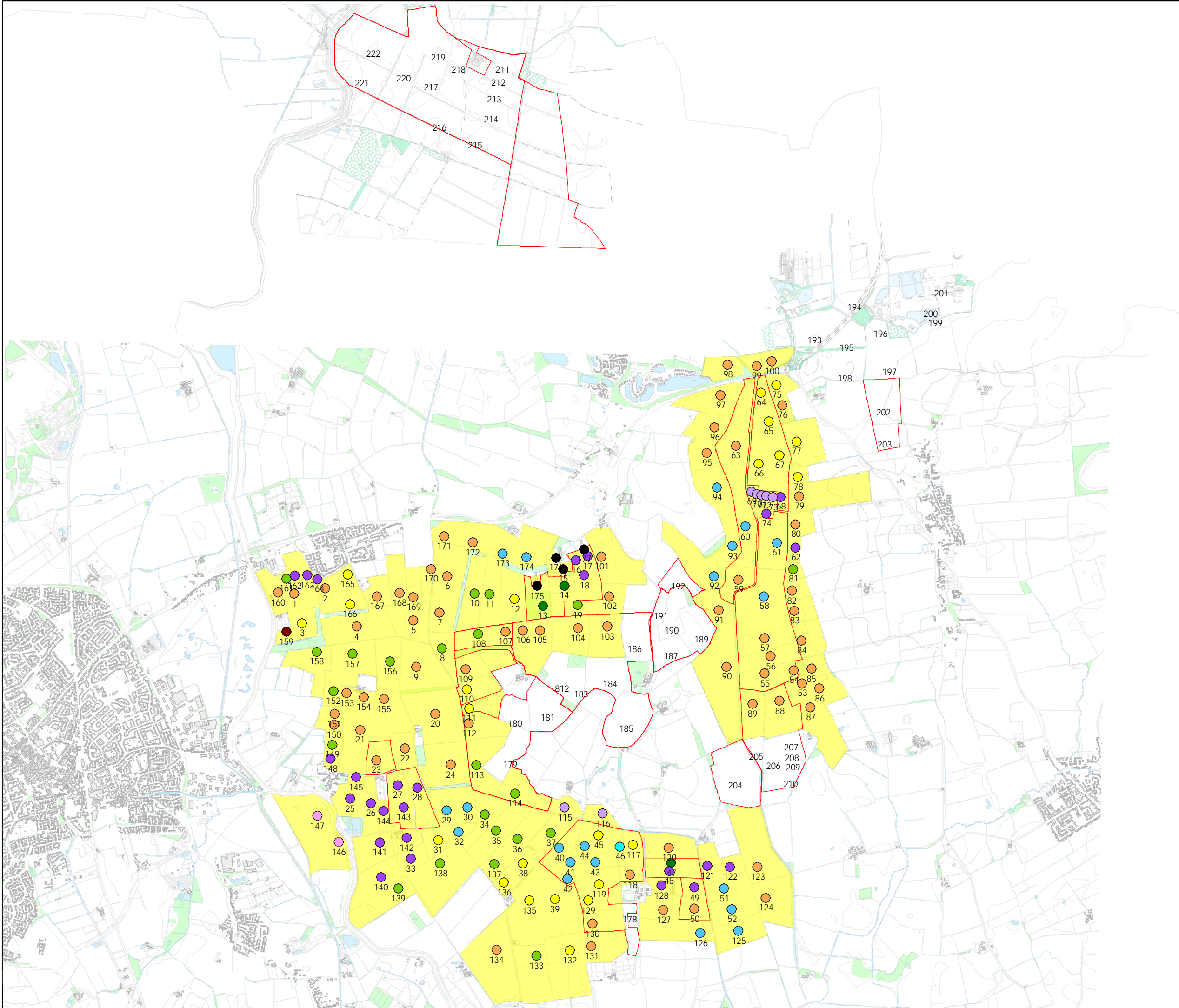
- 4.1.1 Target Species activity within the Survey Areas, during the non-breeding surveys, was modest throughout the survey period, with birds being limited to sporadic and typically small flocks. A total of 15 Target Species were recorded during the surveys (2021-22 and 2022-23 combined). The largest flocks were 800 golden plovers in field 130 during the February 2022 survey, 246 lapwings in field 197 during the January 2023 survey, and 290 and 110 common gulls and black-headed gulls, respectively in field 18 during the February 2023 survey. Of these counts, the 800 golden plover and 290 and 110 respective common and black-headed gulls were within the Site.

Breeding Bird Survey Results

- 4.1.2 Twenty-six breeding (or suspected breeding) Notable Species were recorded within the Survey Area, with 23 of these within the Site. The most abundant of these species within the Site were skylark (59 pairs), wren (43 pairs), whitethroat (44 pairs), yellowhammer (32 pairs) and reed bunting (35 pairs). This breeding bird assemblage within the Site comprised of nine BoCC Red list species, 13 BoCC Amber list species and one WCA Schedule 1 species.

FIGURE 1A – LAND USE DURING NON-BREEDING BIRD SURVEYS 2021-2022

FIGURE 1B – LAND USE DURING NON-BREEDING BIRD SURVEYS 2022-2023



Legend

Site

2021-2022 Survey Area

Land Use Per Field Parcel

Arable Stubble

Cereal

Chicken shed

Figham Carrs

Game cover crop

Horse Paddock

Oilseed Rape

Pasture (stocked)

Pasture (unstocked)

Tilled

Xmas Trees

00	04/10/2023		KW	MJR
Rev	Date	Description	De	App

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CREYKE BECK

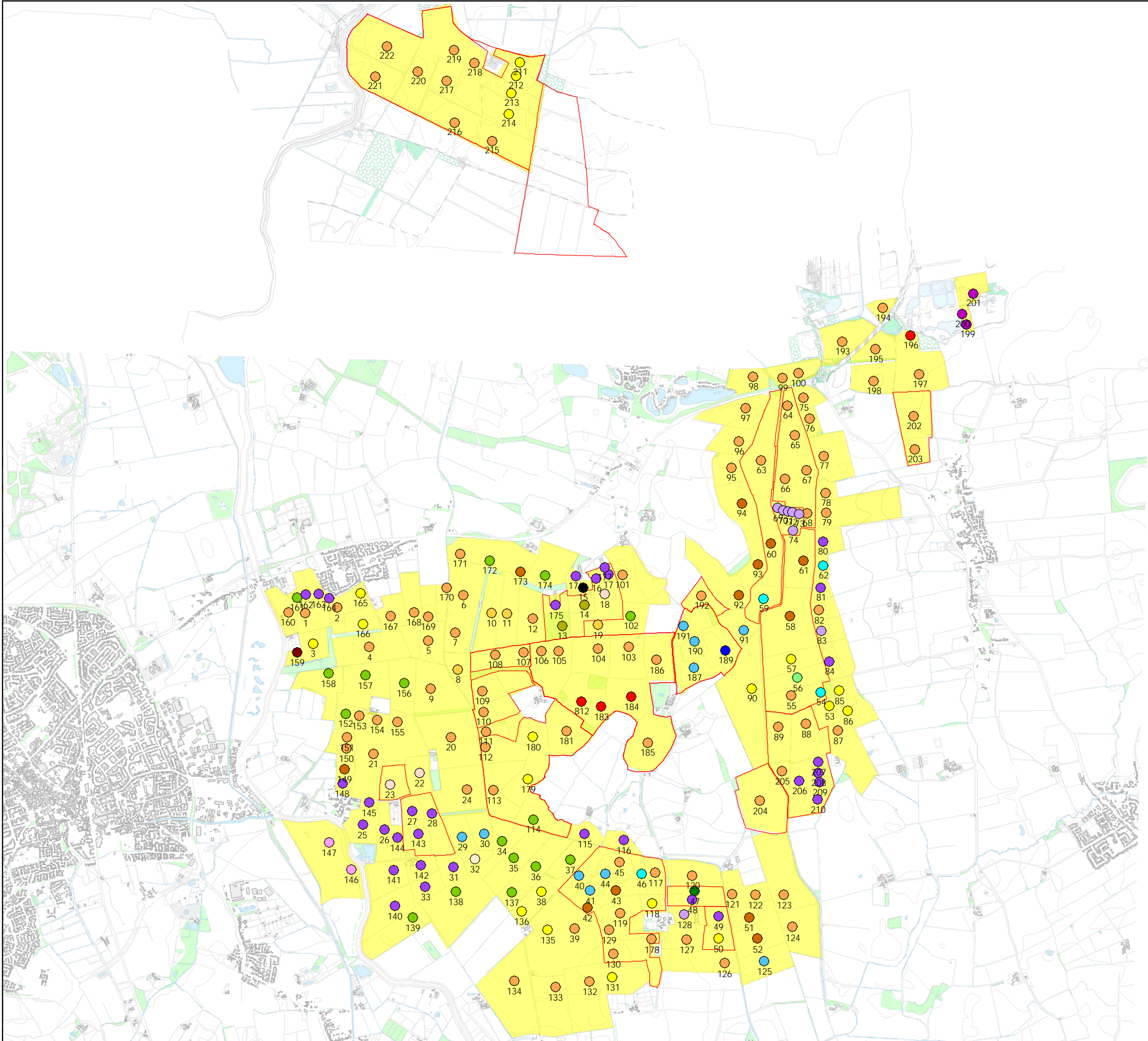
Figure 1a: Land Use During 2021-22
Non-Breeding Season

Avian Ecology, Suite 3c Walnut Tree Farm, Northwich Road, Lower Stretton
WA4 4PC
Tel: 0843 506 5116
www.avianecology.co.uk

0

2

kilometres



Legend

Site

2022-2023 Survey Area

Land Use Per Field Parcel

Arable Stubble

Arable Stubble - Cereal

Cereal

Cereal-Oilseed rape

Chicken shed

Figham Carrs

Game cover crop

Horse Paddock

No Permission

Oilseed Rape

Pasture (stocked)

Pasture (unstocked)

Pasture (unstocked) - Cereal

Quarry

Stubble

Tilled

Tilled - Cereal

Tilled - Set-aside

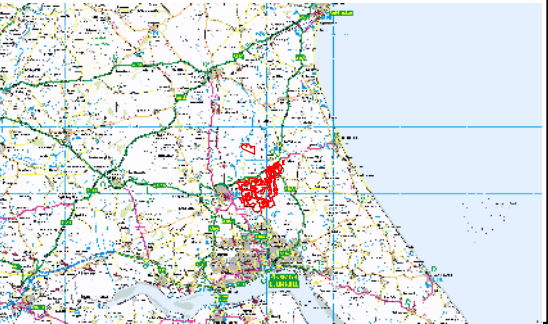
Xmas Trees

Xmas trees - Pasture (unstocked)

00	04/10/2023		KW	MJR
Rev	Date	Description	De	App

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Figure 1b: Land Use During 2022-23
Non-Breeding Season

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2

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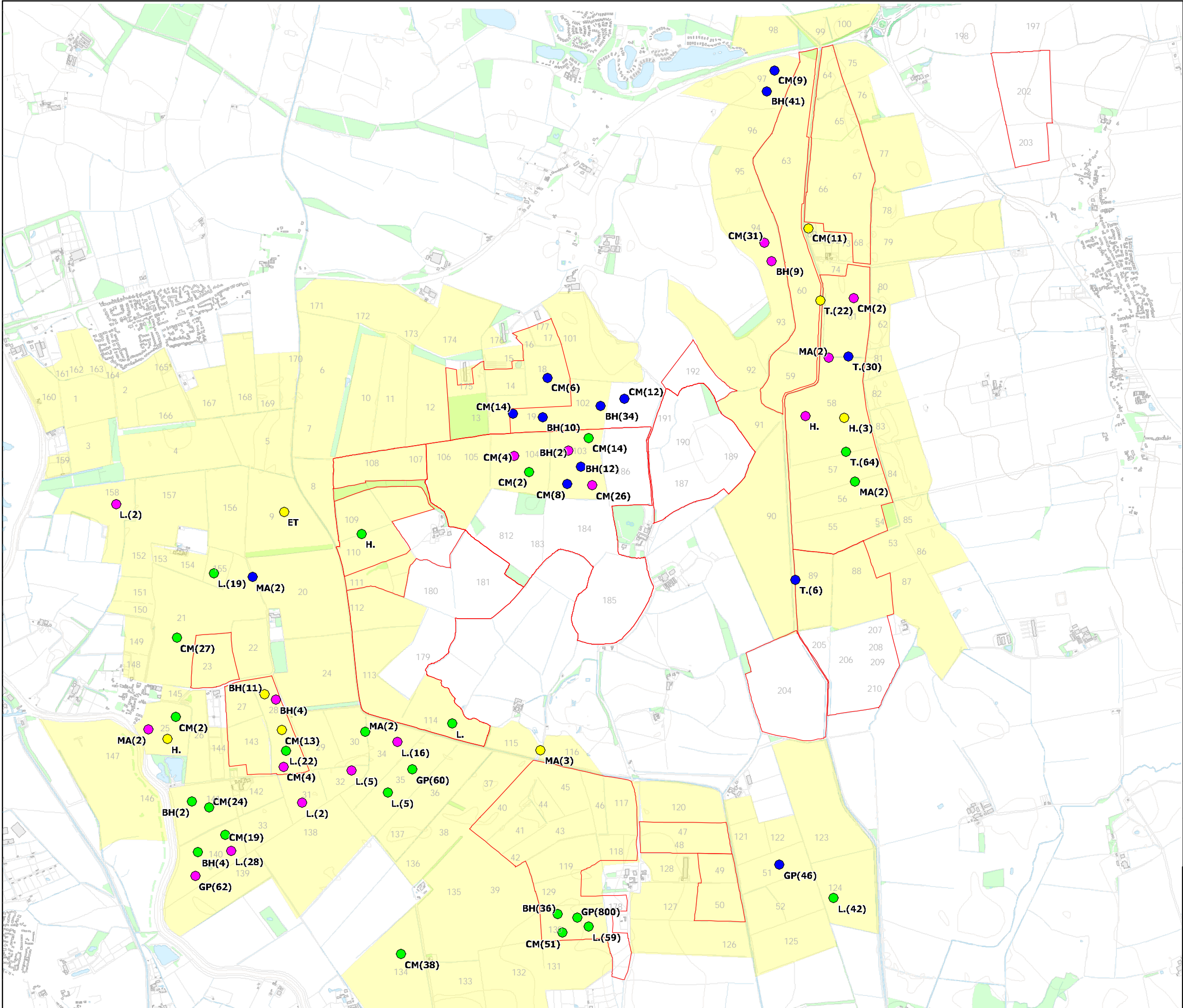
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S

W

FIGURE 2 – NON-BREEDING BIRD SURVEY RESULTS 2021-2022



Legend

Site

2021-2022 Survey Area

Survey Date

Dec-21

Jan-22

Feb-22

Mar-22

Target Species Recorded

BH - Black-headed gull

CM - Common gull

ET - Little egret

GP - Golden plover

H. - Grey heron

L. - Lapwing

MA - Mallard

T. - Teal

00	04/10/2023		KW	MJR
Rev	Date	Description	De	App

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Figure 2: Non-Breeding Bird Survey Results
(2021-22)

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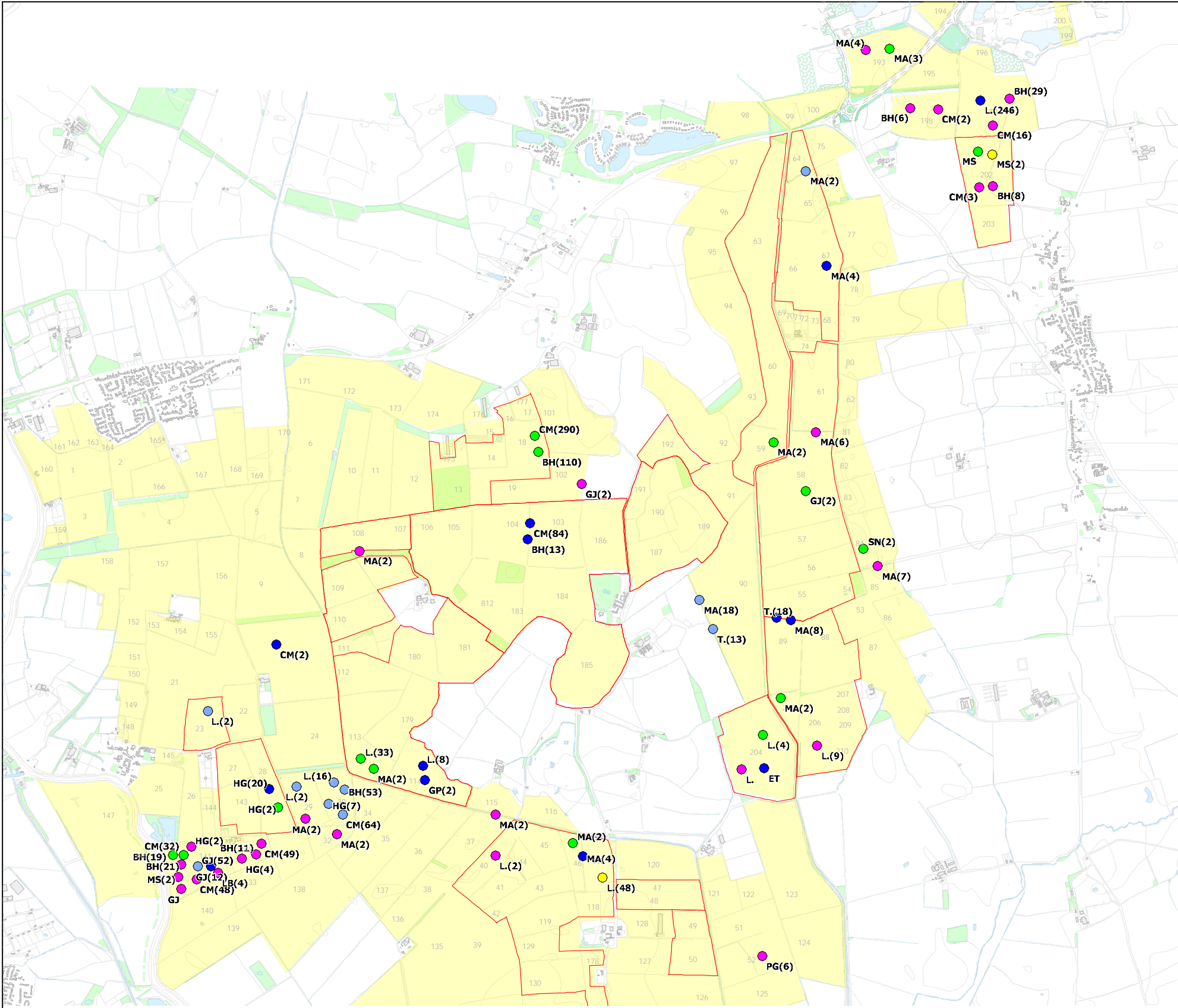
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kilometres

FIGURE 3A – NON-BREEDING BIRD SURVEY RESULTS 2022-2023

FIGURE 3B – NON-BREEDING BIRD SURVEY RESULTS 2022-2023 (AREA 1)



Legend

Site

2022-2023 Survey Area

Survey Date

Dec-22

Dec-22/Early Jan-23

Jan-23

Feb-23

Mar-23

Target Species Recorded

BH - Black-headed gull
CM - Common gull
ET - Little egret
GB - Great black-backed gull
GJ - Greylag goose
GP - Golden plover
HG - Herring gull
L - Lapwing
LB - Lesser black-backed gull
MA - Mallard
MS - Mute swan
PG - Pink-footed goose
SN - Snipe
T - Teal

00	04/10/2023		KW	MJR
Rev	Date	Description	De	App

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Figure 3a: Non-Breeding Bird Survey Results
(2022-23)

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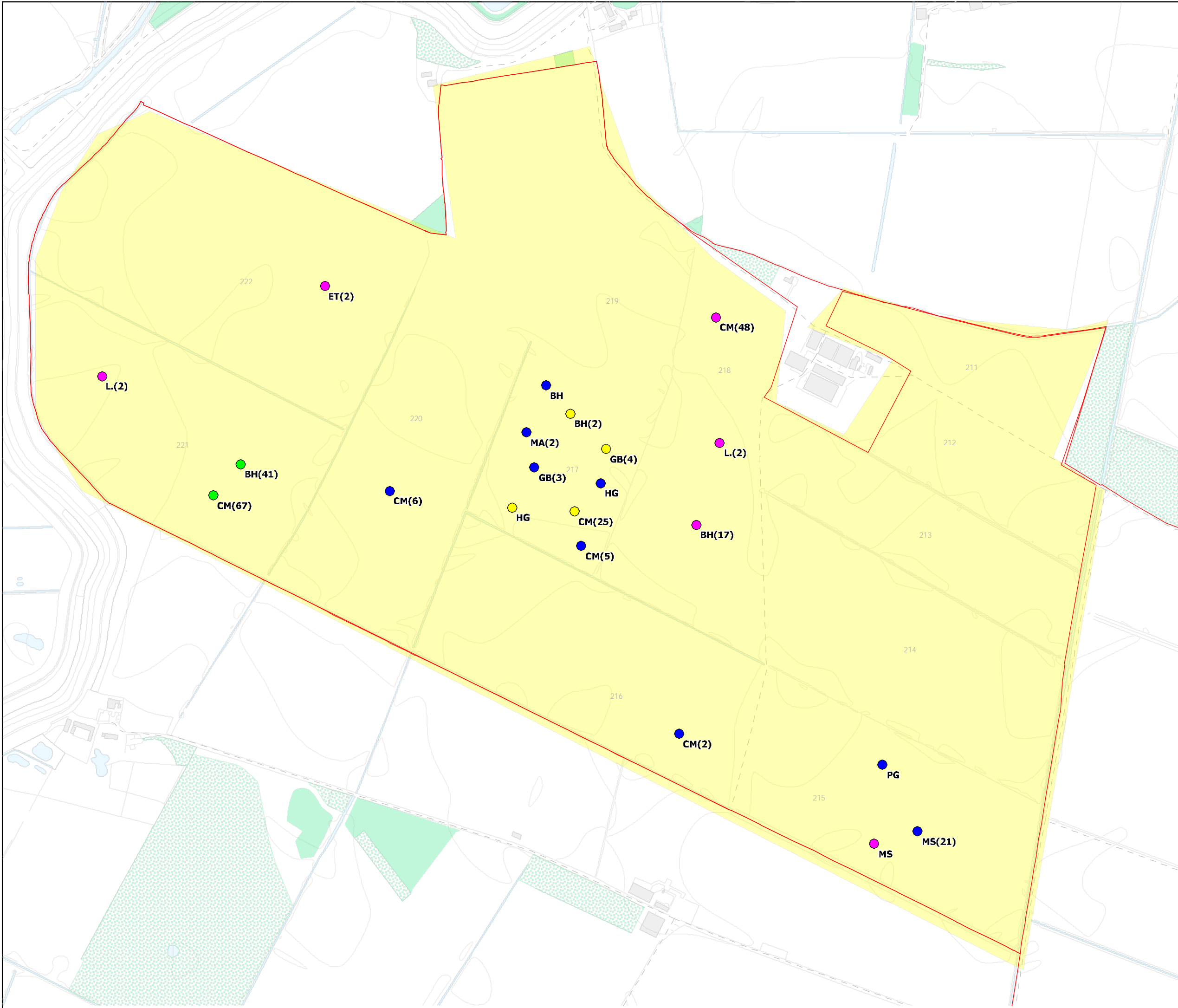
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E

S

W



Legend

Site

2022-2023 Survey Area

Survey Date

Dec-22

Dec-22/Early Jan-23

Jan-23

Feb-23

Mar-23

Target Species Recorded

BH - Black-headed gull

CM - Common gull

ET - Little egret

GB - Great black-backed gull

HG - Herring gull

L - Lapwing

MA - Mallard

MS - Mute swan

PG - Pink-footed goose

00	04/10/2023		KW	MJR
Rev	Date	Description	De	App

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Figure 3b: Non-Breeding Bird Survey Results
(2022-23)

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WA4 4PC
Tel: 0843 506 5116
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0

250

metres

N

W

E

S

FIGURE 4A – BREEDING BIRD SURVEY RESULTS 2022 (AREA 1)

FIGURE 4B – BREEDING BIRD SURVEY RESULTS 2022 (AREA 2)

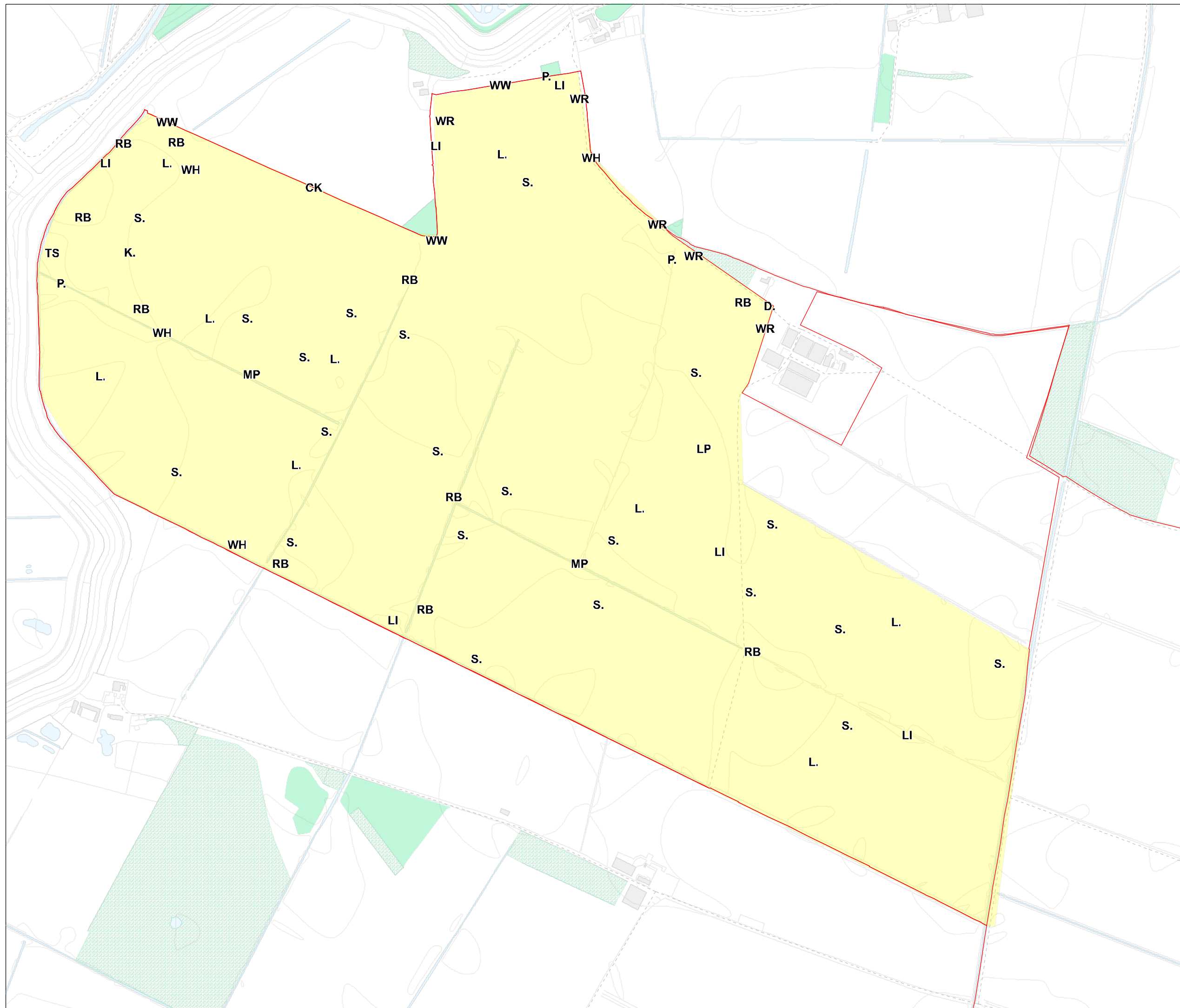
FIGURE 4C – BREEDING BIRD SURVEY RESULTS 2022 (AREA 3)

FIGURE 4D – BREEDING BIRD SURVEY RESULTS 2022 (AREA 4)

FIGURE 4E – BREEDING BIRD SURVEY RESULTS 2022 (AREA 5)

FIGURE 4F – BREEDING BIRD SURVEY RESULTS 2022 (AREA 6)

FIGURE 4G – BREEDING BIRD SURVEY RESULTS 2022 (AREA 7)



Legend



Site

Breeding Bird Survey Area

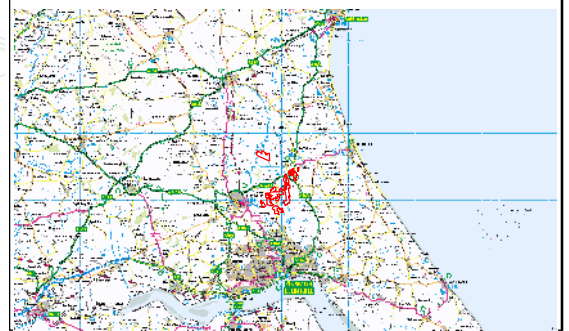
Estimated No. Breeding Territories/Pairs
1
2
3
4
5
6
7
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Red List	CK-Cuckoo	(1)
	L.-Lapwing	(9)
	LI-Linnet	(6)
	P.-Grey partridge	(3)
	S.-Skylark	(21)
Amber List	TS-Tree sparrow	(1)
	D.-Dunnoch	(1)
	K.-Kestrel	(1)
	MP-Meadow pipit	(2)
	RB-Reed bunting	(10)
WCA Sch1	WH-Whitethroat	(4)
	WR-Wren	(5)
	WW-Willow warbler	(3)
	LP-Little ringed plover	(1)

00	03/10/2023		KW	MJR
Rev	Date	Description	De	App

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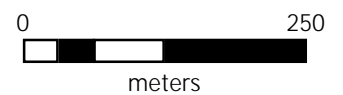


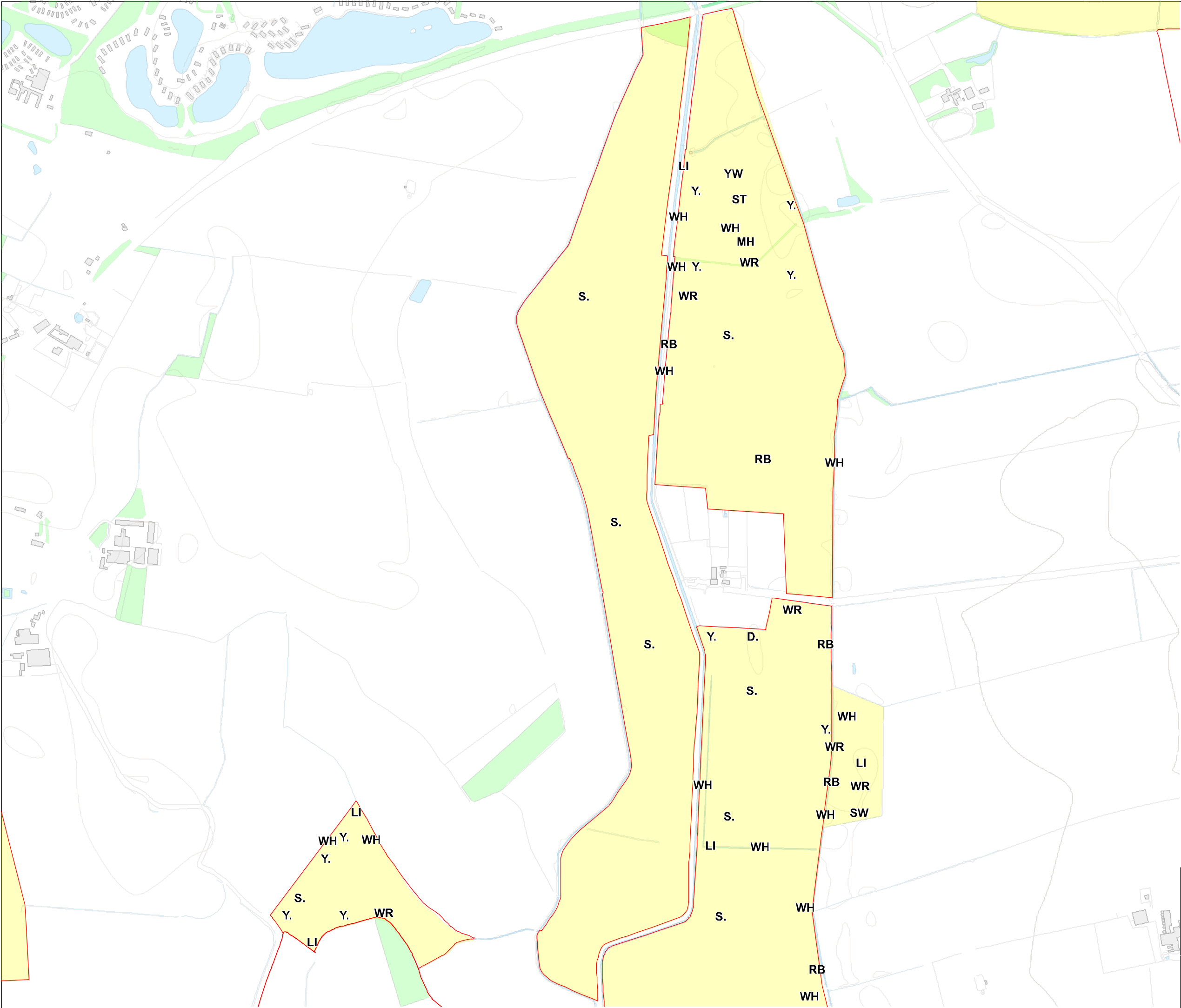
CREYKE BECK

Figure 4a: Breeding Bird Survey Results
(2022) - Area 1



Avian Ecology, Suite 3c Walnut Tree Farm, Northwich Road, Lower Stretton
WA4 4PG
Tel: 0843 506 5116
www.avianecology.co.uk





Legend

Site

Breeding Bird Survey Area

Estimated No. Breeding Territories/Pairs

Red List

LI-Linnet (5)
S.-Skylark (8)
Y.-Yellowhammer (10)
YW-Yellow wagtail (1)

Amber List

D.-Dunnock (1)
MH-Moorhen (1)
RB-Reed bunting (5)
ST-Song thrush (1)
SW-Sedge warbler (1)
WH-Whitethroat (13)
WR-Wren (6)

00	03/10/2023		KW	MJR
Rev	Date	Description	De	App

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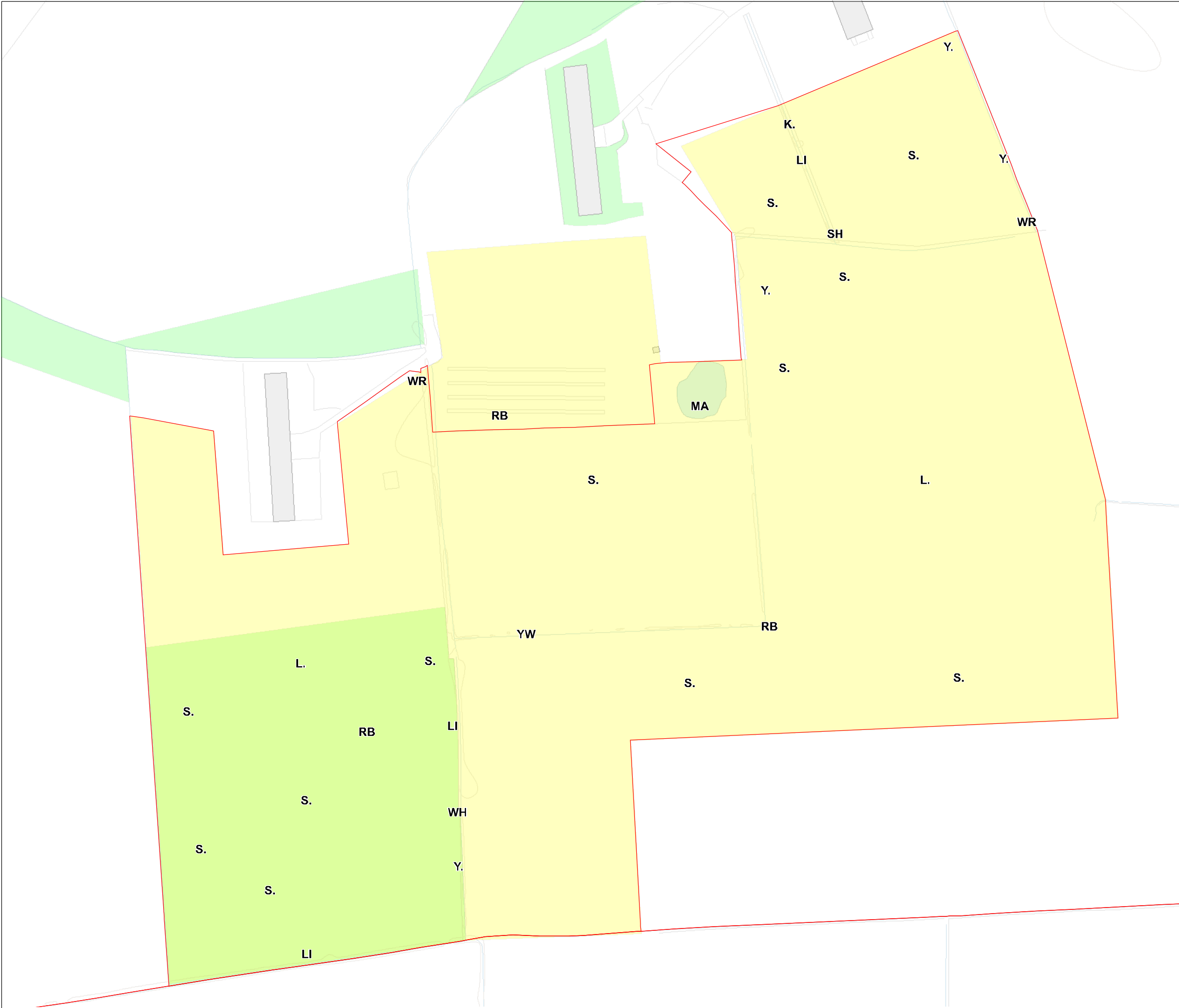
CREYKE BECK

Figure 4c: Breeding Bird Survey Results
(2022) - Area 3

Avian Ecology, Suite 3c Walnut Tree Farm, Northwich Road, Lower Stretton
WA4 4PG
Tel: 0843 506 5116
www.avianecology.co.uk

0350

metres



Legend

Site

Breeding Bird Survey Area

Estimated No. Breeding Territories/Pairs

Red List

Amber List

L.-Lapwing
S.-Skylark
Y.-Yellowhammer
YW-Yellow wagtail
K.-Kestrel
LI-Linnet
MA-Mallard
RB-Reed bunting
SH-Sparrowhawk
WH-Whitethroat
WR-Wren

(2)
(12)
(4)
(1)
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(1)
(3)
(1)
(1)
(2)

00	03/10/2023		KW	MJR
Rev	Date	Description	De	App

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Co-ordinate System : British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Metres

CREYKE BECK

Figure 4d: Breeding Bird Survey Results
(2022) - Area 4

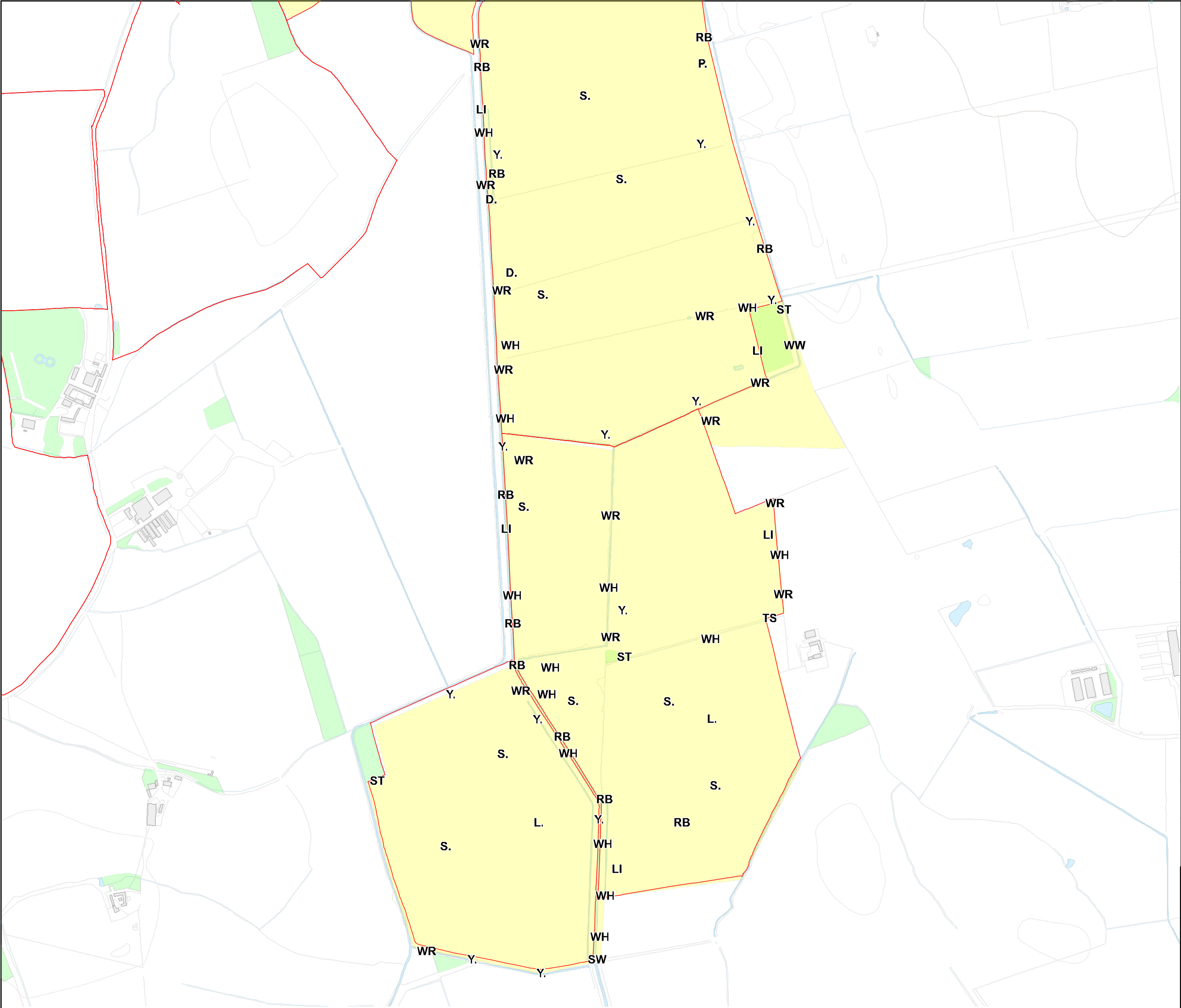
Avian Ecology, Suite 3c Walnut Tree Farm, Northwich Road, Lower Stretton
WA4 4PG
Tel: 0843 506 5116
www.avianecology.co.uk

0100 meters

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Legend

Site

Breeding Bird Survey Area

Estimated No. Breeding Territories/Pairs

Red List

L.-Lapwing (2)
LI-Linnet (5)
P.-Grey partridge (1)
S.-Skylark (9)
TS-Tree sparrow (1)
Y.-Yellowhammer (13)

Amber List

D.-Dunnock (2)
RB-Reed bunting (10)
ST-Song thrush (3)
SW-Sedge warbler (1)
WH-Whitethroat (14)
WR-Wren (14)
WW-Willow warbler (1)

00	04/10/2023		KW	MJR
Rev	Date	Description	De	App

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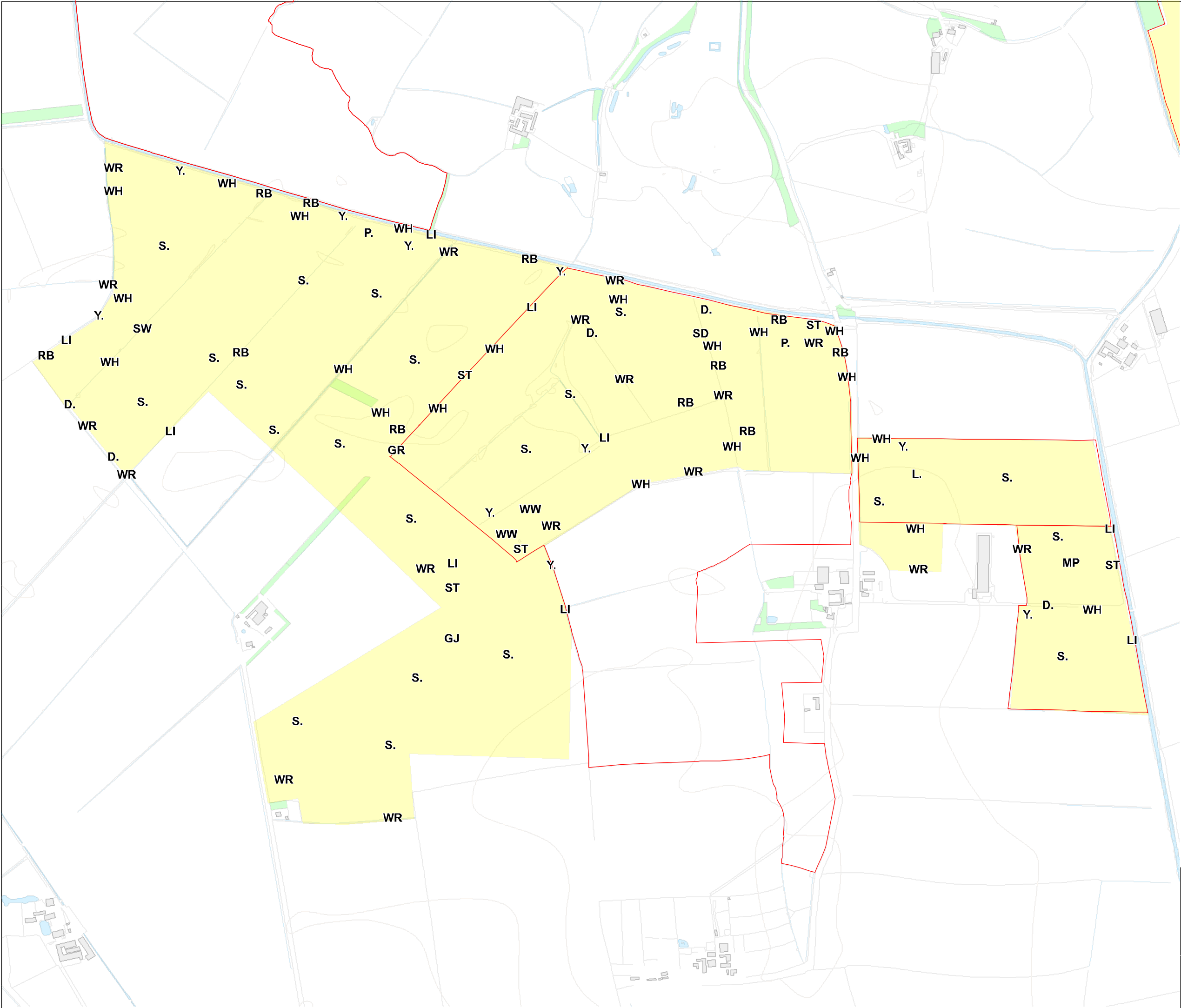
Co-ordinate System : British National Grid
Projection: Traverse Mercator
Datum: OSGB 1936
Units: Metres

CREYKE BECK

Figure 4e: Breeding Bird Survey Results (2022)
- Area 5

Avian Ecology, Suite 3c Walnut Tree Farm, Northwich Road, Lower Stretton
WA4 4PC
Tel: 0843 506 5116
www.avianecology.co.uk

0250
metres



Legend

Site

Breeding Bird Survey Area

Estimated No. Breeding Territories/Pairs

Red List

GR-Greenfinch (1)

L.-Lapwing (1)

LI-Linnet (9)

P.-Grey partridge (2)

S.-Skylark (21)

Y.-Yellowhammer (10)

Amber List

D.-Dunnock (5)

GJ-Greylag goose (1)

MP-Meadow pipit (1)

RB-Reed bunting (11)

SD-Stock dove (1)

ST-Song thrush (5)

SW-Sedge warbler (1)

WH-Whitethroat (21)

WR-Wren (17)

WW-Willow warbler (2)

00	03/10/2023		KW	MJR
Rev	Date	Description	De	App

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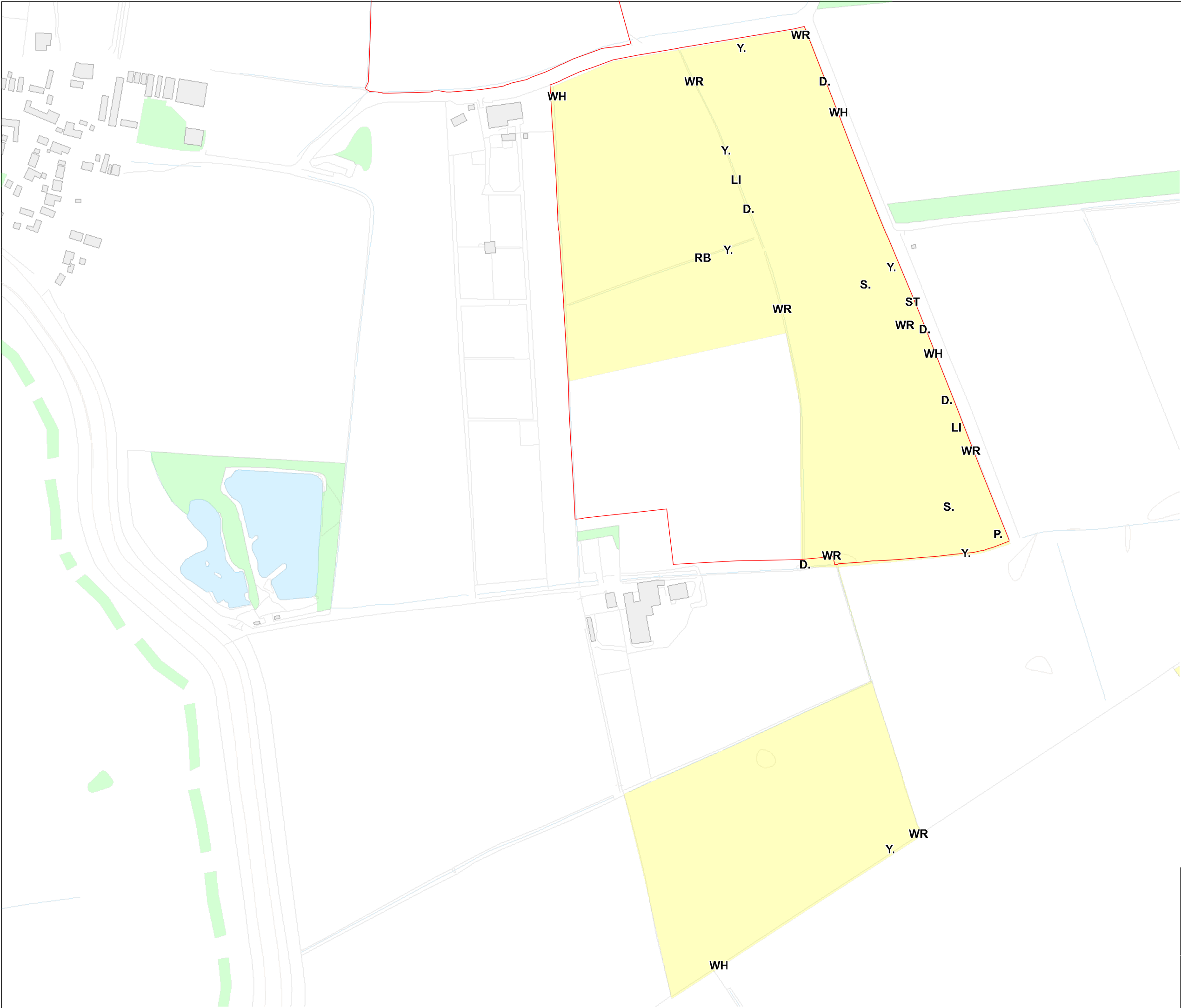
Co-ordinate System : British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Metres

CREYKE BECK

Figure 4f: Breeding Bird Survey Results (2022) - Area 6

Avian Ecology, Suite 3c Walnut Tree Farm, Northwich Road, Lower Stretton
WA4 4PG
Tel: 0843 506 5116
www.avianecology.co.uk

0300 meters



Legend

Site

Breeding Bird Survey Area

Estimated No. Breeding Territories/Pairs

Red List

LI-Linnet (2)
P.-Grey partridge (1)
S.-Skylark (2)
Y.-Yellowhammer (6)

Amber List

D.-Dunnock (5)
RB-Reed bunting (1)
ST-Song thrush (1)
WH-Whitethroat (4)
WR-Wren (7)

00	03/10/2023		KW	MJR
Rev	Date	Description	De	App

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Projection: Traverse Mercator
Datum: OSGB 1936
Units: Metres

CREYKE BECK

Figure 4g: Breeding Bird Survey Results
(2022) - Area 7

Avian Ecology, Suite 3c Walnut Tree Farm, Northwich Road, Lower Stretton
WA4 4PG
Tel: 0843 506 5116
www.avianecology.co.uk

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APPENDIX 1. BIRD SPECIES SUMMARY

Table A1 provides a list of bird species regarded in this report. Both common and species names are presented along with a summary of each species conservation status using the following abbreviations:

- Ann1 – European Birds Directive Annex 1 species;
- Sch1 – Schedule 1 of the Wildlife & Countryside Act 1981 (as amended);
- RBBP – Birds listed on the Rare Breeding Bird Panel within the United Kingdom¹⁵;
- BoCC – Birds of Conservation Concern as listed by leading bird conservation organisations in the UK, including the Royal Society for the Protection of Birds (RSPB) and British Trust for Ornithology (BTO). Red and Amber categories are given (Stanbury *et al.*, 2021); and,
- NERCS41 - species listed on the NERC (2006) Act as principal importance species.

Table A1: Summary of bird species

Common Name	Species Name	Conservation Status
Greylag Goose	<i>Anser anser</i>	BoCC - Amber
Pink-footed Goose	<i>Anser brachyrhynchus</i>	BoCC - Amber; RBBP
Mute Swan	<i>Cygnus olor</i>	BoCC - Amber
Shelduck	<i>Tadorna tadorna</i>	BoCC - Amber
Mallard	<i>Anas platyrhynchos</i>	BoCC - Amber
Teal	<i>Anas crecca</i>	BoCC - Amber
Grey Partridge	<i>Perdix perdix</i>	BoCC - Red; NERCS41
Pheasant	<i>Phasianus colchicus</i>	-
Red-legged partridge	<i>Alectoris rufa</i>	-
Moorhen	<i>Gallinula chloropus</i>	BoCC - Amber
Lapwing	<i>Vanellus vanellus</i>	BoCC – Red; NERCS41
Golden Plover	<i>Pluvialis apricaria</i>	Ann1
Little ringed Plover	<i>Charadrius dubius</i>	Sch1, RBBP
Snipe	<i>Gallinago gallinago</i>	BoCC - Amber
Redshank	<i>Tringa totanus</i>	BoCC - Amber
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	BoCC – Amber
Common Gull	<i>Larus canus</i>	BoCC – Amber
Great Black-backed Gull	<i>Larus marinus</i>	BoCC – Amber
Herring Gull	<i>Larus argentatus</i>	BoCC - Red; NERCS41
Lesser Black-backed Gull	<i>Larus fuscus</i>	BoCC – Amber
Little egret	<i>Egretta garzetta</i>	Ann1
Grey Heron	<i>Ardea cinerea</i>	-
Kingfisher	<i>Alcedo atthis</i>	Ann1, Sch1, RBBP
Green woodpecker	<i>Picus viridis</i>	-
Barn Owl	<i>Tyto alba</i>	Sch1, RBBP

¹⁵ Available at: <https://rbbp.org.uk/species-overview/> (Accessed September 2023).

Common Name	Species Name	Conservation Status
Peregrine	<i>Falco peregrinus</i>	Ann1, Sch1, RBBP
Hobby	<i>Falco subbuteo</i>	Sch1, RBBP
Hen harrier	<i>Circus cyaneus</i>	Ann1, Sch1, RBBP, BoCC – Red; NERCS41
Marsh harrier	<i>Circus aeruginosus</i>	Ann1, Sch1, RBBP, BoCC - Amber
Sparrowhawk	<i>Accipiter nisus</i>	BoCC - Amber
Buzzard	<i>Buteo buteo</i>	-
Kestrel	<i>Falco tinnunculus</i>	BoCC – Amber
Magpie	<i>Pica pica</i>	-
Cuckoo	<i>Cuculus canorus</i>	BoCC – Red, NERCS41
Stock dove	<i>Columba oenas</i>	BoCC – Amber
Skylark	<i>Alauda arvensis</i>	BoCC – Red, NERCS41
Meadow pipit	<i>Anthus pratensis</i>	BoCC – Amber
Yellow wagtail	<i>Motacilla flava</i>	BoCC – Red, NERCS41
Pied wagtail	<i>Motacilla alba</i>	-
Sand martin	<i>Riparia riparia</i>	-
Dunnock	<i>Prunella modularis</i>	BoCC – Amber, NERCS41
Wren	<i>Troglodytes troglodytes</i>	BoCC – Amber
Goldcrest	<i>Regulus regulus</i>	-
Robin	<i>Erithacus rubecula</i>	-
Blackbird	<i>Turdus merula</i>	-
Song thrush	<i>Turdus philomelos</i>	BoCC – Amber, NERCS41
Tree sparrow	<i>Passer montanus</i>	BoCC – Red, NERCS41
Chiffchaff	<i>Phylloscopus collybita</i>	-
Whitethroat	<i>Sylvia communis</i>	BoCC – Amber
Blackcap	<i>Sylvia atricapilla</i>	-
Lesser whitethroat	<i>Curruca curruca</i>	-
Willow warbler	<i>Phylloscopus trochilus</i>	BoCC – Amber
Sedge warbler	<i>Acrocephalus schoenobaenus</i>	BoCC – Amber
Reed warbler	<i>Acrocephalus scirpaceus</i>	-
Long-tailed tit	<i>Aegithalos caudatus</i>	-
Blue tit	<i>Cyanistes caeruleus</i>	-
Great tit	<i>Parus major</i>	-
Reed bunting	<i>Emberiza schoeniclus</i>	BoCC – Amber, NERCS41

Common Name	Species Name	Conservation Status
Corn bunting	<i>Emberiza calandra</i>	BoCC – Red, NERCS41
Yellowhammer	<i>Emberiza citrinella</i>	BoCC – Red, NERCS41
Linnet	<i>Linaria cannabina</i>	BoCC – Red, NERCS41
Bullfinch	<i>Pyrrhula pyrrhula</i>	BoCC – Amber, NERCS41
Chaffinch	<i>Fringilla coelebs</i>	-
Goldfinch	<i>Carduelis carduelis</i>	-
Greenfinch	<i>Carduelis chloris</i>	BoCC - Red

APPENDIX 2: NON-BREEDING BIRD DATA

Table A2: Non Breeding Bird Results

Date	Target Species	Bird No.	Field No.
Jan-22	BH	10	19
Dec-21	BH	11	28
Mar-22	BH	4	28
Mar-22	BH	9	94
Jan-22	BH	41	97
Jan-22	BH	34	102
Jan-22	BH	12	103
Mar-22	BH	2	103
Feb-22	BH	36	130
Feb-22	BH	4	140
Feb-22	BH	2	141
Jan-22	CM	6	18
Jan-22	CM	14	19
Feb-22	CM	27	21
Feb-22	CM	2	25
Dec-21	CM	13	28
Mar-22	CM	4	28
Mar-22	CM	2	61
Dec-21	CM	11	69
Mar-22	CM	31	94
Jan-22	CM	9	97
Jan-22	CM	12	102
Jan-22	CM	8	103
Feb-22	CM	14	103
Mar-22	CM	26	103
Feb-22	CM	2	104
Mar-22	CM	4	104
Feb-22	CM	51	130
Feb-22	CM	38	134
Feb-22	CM	19	140
Feb-22	CM	24	141
Dec-21	ET	1	9
Dec-21	GJ	22	25
Feb-22	GP	60	35
Jan-22	GP	46	51

Date	Target Species	Bird No.	Field No.
Feb-22	GP	11	116
Feb-22	GP	800	130
Mar-22	GP	62	140
Dec-21	H.	1	25
Dec-21	H.	3	58
Mar-22	H.	1	58
Feb-22	H.	2	90
Feb-22	H.	1	110, ditch
Feb-22	L.	22	28
Mar-22	L.	2	31
Mar-22	L.	5	32
Mar-22	L.	16	34
Feb-22	L.	5	35
Feb-22	L.	1	114
Feb-22	L.	42	124
Feb-22	L.	59	130
Mar-22	L.	28	140
Feb-22	L.	19	155
Mar-22	L.	2	158
Mar-22	MA	2	25
Dec-21	MA	3	115, in ditch
Jan-22	MA	2	20, in ditch
Feb-22	MA	2	30, ditch
Feb-22	MA	2	57, ditch
Mar-22	MA	2	58, ditch
Dec-21	PG	34	30,34,35
Jan-22	T.	30	58 (ditch)
Feb-22	T.	64	58, ditch
Dec-21	T.	22	60, 61 (ditch between)
Jan-22	T.	6	89 (ditch)
Feb-23	BH	110	18
Dec-22/Early Jan-23	BH	53	30
Feb-23	BH	19	141
Mar-23	BH	21	141
Mar-23	BH	11	142
Mar-23	BH	29	197

Date	Target Species	Bird No.	Field No.
Mar-23	BH	6	198
Mar-23	BH	8	202
Dec-22	BH	2	217
Jan-23	BH	1	217
Mar-23	BH	17	218
Feb-23	BH	41	221
Jan-23	BH	13	103/104
Feb-23	CM	290	18
Jan-23	CM	2	20
Dec-22/Early Jan-23	CM	64	30
Feb-23	CM	32	141
Mar-23	CM	48	141
Mar-23	CM	49	142
Mar-23	CM	16	197
Mar-23	CM	2	198
Mar-23	CM	3	202
Jan-23	CM	2	216
Dec-22	CM	25	217
Jan-23	CM	5	217
Mar-23	CM	48	218
Jan-23	CM	6	220
Feb-23	CM	67	221
Jan-23	CM	84	103/104
Jan-23	ET	1	204
Mar-23	ET	2	222
Dec-22	GB	4	217
Jan-23	GB	3	217
Feb-23	GJ	2	58
Mar-23	GJ	2	102
Jan-23	GJ	12	141
Mar-23	GJ	1	141
Dec-22/Early Jan-23	GJ	52	141
Jan-23	GP	2	114
Jan-23	HG	20	28
Feb-23	HG	2	28
Dec-22/Early Jan-23	HG	7	30
Mar-23	HG	2	141
Mar-23	HG	4	142
Dec-22	HG	1	217
Jan-23	HG	1	217
Dec-22/Early Jan-23	L.	2	23
Dec-22/Early Jan-23	L.	2	29
Dec-22/Early Jan-23	L.	16	30
Mar-23	L.	2	40
Feb-23	L.	33	113
Jan-23	L.	8	114
Dec-22	L.	48	117

Date	Target Species	Bird No.	Field No.
Jan-23	L.	246	197
Jan-23	L.	450	200
Feb-23	L.	4	204
Mar-23	L.	1	204
Mar-23	L.	9	206
Mar-23	L.	2	218
Mar-23	L.	2	221
Mar-23	LB	4	141
Mar-23	MA	2	29
Mar-23	MA	2	32
Feb-23	MA	2	59
Jan-23	MA	4	67
Feb-23	MA	2	113
Feb-23	MA	3	193
Mar-23	MA	4	193
Feb-23	MA	2	205
Jan-23	MA	2	217
Mar-23	MA	2	108, ditch
Mar-23	MA	2	37, ditch
Jan-23	MA	4	46, ditch
Feb-23	MA	2	46, ditch
Mar-23	MA	6	58, ditch
Dec-22/Early Jan-23	MA	2	65, ditch
Mar-23	MA	7	84, ditch
Jan-23	MA	8	89, ditch
Dec-22/Early Jan-23	MA	18	90, ditch
Mar-23	MS	2	141
Dec-22	MS	2	202
Feb-23	MS	1	202
Jan-23	MS	21	215
Mar-23	MS	1	215
Mar-23	PG	6	52
Jan-23	PG	1	215
Feb-23	SN	2	84
Jan-23	T.	18	89, ditch
Dec-22/Early Jan-23	T.	13	90, ditch

APPENDIX 3: BREEDING BIRD SURVEY RESULTS

Table A3: Breeding Bird Results

Part of 'Site'	Notable Species	Estimated No. Terrs/Pairs	BoCC List (R- Red, A- Amber)
Area 1	S.	21	R
	L.	9	R
	LI	5	R
	LP	1	None - Mark as Sch1 Species of W&CA
	RB	10	A
	MP	2	A
	P.	2	R
	TS	1	R
	CK	1	R
	WH	4	A
	WW	3	A
	WR	6	A
	K.	1	A
	D.	1	A
Area 2	S.	4	R
	L.	1	R
	CB	1	R
	LP	1	None - Mark as Sch1 Species of W&CA
	GJ	1	A
	RB	2	A
	MH	1	A
	P.	1	R
	ST	8	A
	WR	15	A
	WW	1	A
	BF	1	A
	LI	4	R
	Y.	1	R
	GR	1	R
	D.	3	A
	WH	2	A
	SW	1	A
Area 3	S.	8	R
	WH	13	A
	RB	5	A
	LI	5	R
	WR	6	A
	SW	1	A
	Y.	9	R
	YW	1	R
	ST	1	A
	MH	1	A
	D.	1	A
Area 4	S.	12	R

Part of 'Site'	Notable Species	Estimated No. Terrs/Pairs	BoCC List (R- Red, A- Amber)
	WR	2	A
	MA	1	A
	L.	2	R
	SH	1	A
	LI	3	R
	K.	1	A
	Y.	4	R
	RB	3	A
	YW	1	R
	WH	1	A
Area 5	RB	10	A
	S.	10	R
	WR	14	A
	LI	5	R
	WH	13	A
	Y.	13	R
	D.	2	A
	P.	1	R
	WW	1	A
	ST	3	A
	L.	2	R
	TS	1 (colony)	R
	SW	1	A
	MA	1	A
Area 6	S.	21	R
	L.	1	R
	LI	9	R
	ST	5	A
	WR	19	A
	D.	5	A
	GJ	1	A
	Y.	10	R
	MP	1	A
	GR	1	R
	WH	21	A
	RB	11	A
	P.	2	R
	SD	1	A
	WW	2	A
	SW	1	A
Area 7	WR	7	A
	Y.	6	R
	WH	4	A
	D.	5	A
	P.	1	R
	S.	2	R
	RB	1	A

Part of 'Site'	Notable Species	Estimated No. Terrs/Pairs	BoCC List (R- Red, A- Amber)
	LI	2	R
	ST	1	A

RWE Renewables UK Limited

Windmill Hill Business Park,
Whitehill Way,
Swindon,
Wiltshire,
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SN5 6PB
www.rwe.com