



THE
ENVIRONMENT
PARTNERSHIP



BRYN LANE WREXHAM

BREEDING BIRD SURVEY TECHNICAL REPORT

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8304.010 Breeding Bird Survey Visit 1 - 15.04.2021
8304.011 Breeding Bird Survey Visit 2 - 13.05.2021
8304.012 Breeding Bird Survey Visit 3 - 10.06.2021

1.0 Introduction

- 1.1 The Environment Partnership (TEP) was commissioned in April 2021 by Overlord Ltd to undertake a breeding bird survey at Bryn Lane, Wrexham, hereafter referred to as 'the site'.
- 1.2 The breeding bird survey has been undertaken to inform a planning application for a proposed commercial development.

Site Description

- 1.3 The site incorporates three fields (arable and improved grassland), divided by hedgerows, with a strip of woodland along the whole southern boundary (bordering a watercourse) and a small area of poor semi-improved grassland/ tall ruderal/ scrub mosaic within the south eastern part of the site.
- 1.4 The site lies north east of Wrexham Industrial Estate, in North Wales. Ridley Wood Lane sits north of the site, where access onto the arable field can be obtained via a pre-existing gate off this B-road. The site, shown in Figure 1, is centred on grid reference SJ 39401 50794.

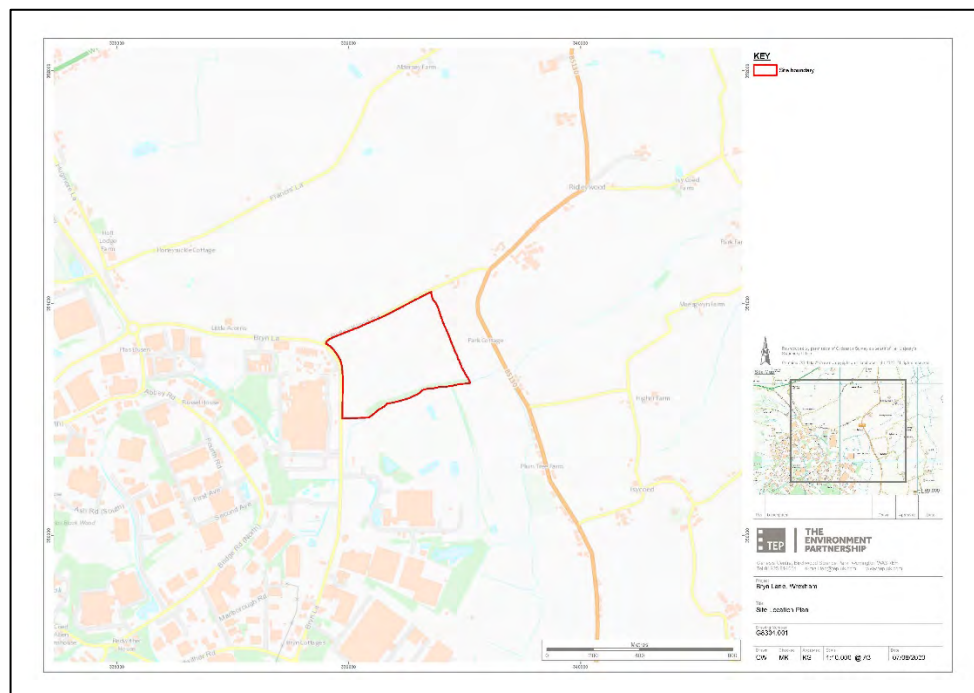


Figure 1 Site location within the context of the wider landscape

- 1.5 The drawings for the breeding bird survey include two boundaries, the site boundary (S) and a 100m offset buffer (SBU). Drawings G8304.010 to G8304.012 illustrate these boundaries as well as the results of each survey visit.

Pre-existing Site Data

Desk Study

- 1.6 Desktop records of protected or notable bird species recorded within a 1 km radius of the site were gathered from Cofnod in 2018. Bird species classed as notable are those listed on any of the following:
- Schedule 1 of the Wildlife and Countryside Act 1981, as amended (WCA1);
 - Species of principal importance under Section 7 of the Environment (Wales) Act 2016 (S7);
 - Red and Amber listed Bird of Conservation Concern (BoCC) species (Eaton et al. 2015) (BRd/ BAm); and
 - Red and Amber listed Bird of Conservation Concern (BoCC) in Wales (BRd/ BAm – Wales) (Johnstone & Bladwell, 2016).
- 1.7 There are historic records of nine notable bird species that have been recorded within 1 km of the site. The birds identified within these records included in Table 1 below.

Table 1: Notable bird species within 1km of the site

Name of Species	Conservation Status
House Martin	BAm
Grasshopper Warbler	S7, BRd
Jack Snipe	BAm - Wales
Curlew	S7, BRd
House Sparrow	S7, BRd
Green Woodpecker	BAm - Wales
Duncock	S7, BAm
Bullfinch	S7, BAm, BRd - Wales
Goldcrest	BAm - Wales

2.0 Method

- 2.1 The breeding bird survey was carried out applying methods based on the standard breeding bird survey and common bird census methods developed by the British Trust for Ornithology (BTO) (Gilbert *et al.* 1998).
- 2.2 Visits were carried out in the morning period, starting at least half an hour after dawn. Each survey visit was carried out approximately 4 weeks apart, over the period April to June 2021.
- 2.3 Bird species and activity patterns were recorded and mapped using standard BTO symbology.
- 2.4 Bird species within the 100 m surrounding the survey boundary were also recorded during the survey, as a proportion of the bird's foraging or nesting habitat is likely to be within the site.

3.0 Results

Table 2. 2021 Breeding bird survey details

Date(s)	Visit 1 - 14/04/21 Visit 2 - 13/05/21 Visit 3 - 10/06/21
Surveyor(s)	Lee Greenhough, Bill Aspin, Clare Gower
Weather	Visit 1 - Cold, dry and sunny with a light wind Visit 2 - Cloudy with light rain shower Visit 3 - Cloudy with a light wind
Seasonal Constraints	The survey was undertaken during the optimum breeding bird survey period. There are no constraints associated with the survey.
Drawing References	G8304.010 Breeding Bird Survey Visit 1 G8304.011 Breeding Bird Survey Visit 2 G8304.012 Breeding Bird Survey Visit 3
Survey Periods	Visit 1 – 06:30 to 09:30 hrs Visit 2 - 06:15 to 08:20 hrs Visit 3 - 06:15 to 09:02 hrs

Table 3. Counts of bird species recorded during the 2021 breeding bird season, including conservation and likely breeding status.

Species	Visit 1		Visit 2		Visit 3		Status	Likely Breeding Status (No. of pairs)	
	S	SB U	S	SB U	S	SB U		S	SB U
Barn Owl					1	1	WCA1	C (1)	C (1)
Blackbird	2	2	6	6	6	7		Pr (4)	Pr (4)
Blackcap		1	3	3	8	8		C (1) Pr (3)	C (1) Pr (3)
Blue Tit	4	4	1	1	12	14		C (2)	C (2)
Canada Goose			2	2				Pr (1)	Pr (1)
Carrion Crow	2	2	2	3	4	4		Pr (1)	Pr (1)
Chaffinch	3	3						Po	Po
Chiffchaff	1	2	3	5	4	4		Pr (2)	C (1) Pr (2)
Coot			2	2				Pr (1)	Pr (1)
Duncock					2		S7, BAm	Po	Po
Goldcrest				1			BAm - Wales	Po	Po
Goldfinch			1	1	7	7		Pr (1)	Pr (1)

Species	Visit 1		Visit 2		Visit 3		Status	Likely Breeding Status (No. of pairs)	
	S	SB U	S	SB U	S	SB U		S	SB U
Great Spotted Woodpecker					1	1		Po	Po
Great Tit	2	2	5	6	12	12		C (4)	C (4)
Grey Heron			1	1			BAm - Wales	N	N
Herring Gull						1	S7, BRd	N	N
House Sparrow			1	2			S7, BRd	Po	Po
Jackdaw			3	3	12	12		C (1)	C (1)
Jay			1	1		1		Pr (1)	Pr (1)
Kestrel						1	S7, BAm, BRd - Wales	N	Po
Lesser Black-backed Gull			3	4			BAm	N	N
Linnet	20	20					S7, BRd	Po	Po
Magpie	2	2		1				Po	Po
Mallard			1	1			BAm	Po	Po
Moorhen			2	2	2	2		Pr (1)	Pr (1)
Pheasant			1	1				Po	Po
Reed Bunting			1	1	4	4	S7, BAm	Pr (1)	Pr (1)
Robin	1	2	5	8	6	6		Pr (5)	Pr (5)
Rook	1	1	33	33	18	18		C (Colony)	C (Colony)
Skylark					3	3	S7, BRd	Po	Po
Song Thrush			2	2	2	2	S7, BRd	Pr (1)	Pr (1)
Starling			1	1			S7, BRd	N	Po
Stock Dove			1	3	28	29	BAm	Pr (1)	Pr (1)
Swallow						2		N	N
Whitethroat	1	1	2	2	7	7	BRd - Wales	Pr (2)	Pr (2)
Willow Warbler				1			BAm, BRd - Wales	Po	Po
Woodpigeon	3	4		1	18	20		Pr (1)	Pr (2)
Wren	2	2	6	9	9	10		Pr (5)	Pr (8)

Species	Visit 1		Visit 2		Visit 3		Status	Likely Breeding Status (No. of pairs)	
	S	SB U	S	SB U	S	SB U		S	SBU
Total Species	13	14	25	30	21	25			

S: Site; SBU: Site including 100m buffer

Status Key: WCA1 = Schedule 1, S7 = Section 7; BRd = BoCC Red List; BAm = BoCC Amber List.

Likely Breeding Status Key: C = Confirmed, Pr = probably breeding within site, Po = possibly breeding within site, N = not breeding within site.

Results Summary

- 3.1 This breeding bird survey has been conducted to identify areas of importance for birds and any constraints concerning birds for any future proposals.
- 3.2 There are historic records of eight notable species that have been recorded within 1km of the site. Of these, the following species were recorded at the site and 100m survey buffer during the breeding bird survey:
 - Dunnock
 - Goldcrest
 - House sparrow
- 3.3 A total of 38 bird species were recorded within the site boundary and 100m buffer during the breeding bird survey; 14 species in visit one, 30 species in visit two and 25 species in visit three. Thirty three bird species were recorded within the site itself.
- 3.4 Seven bird species were confirmed to be breeding within the site boundary and 100m buffer with six bird species confirmed to be breeding within the site itself. Of the confirmed breeding bird species recorded during the survey barn owl is considered notable.
- 3.5 Fourteen bird species were assessed as probable breeding species within the site and 100m survey buffer. With fifteen bird species assessed as likely breeding within the site itself. Of the probable breeding bird species recorded during the survey; reed bunting, song thrush, stock dove and whitethroat are considered notable.

4.0 Evaluation and Recommendations

- 4.1 The 38 bird species recorded within the site boundary and 100m survey buffer represents a moderate species diversity with the majority of species recorded being commonplace and widespread. The 33 bird species recorded within the site itself also represents a moderate species diversity.
- 4.2 Fuller (1980) devised a method of classifying the ornithological interest of sites for conservation based on three site attributes: population size, rarity and diversity.
- 4.3 No significant breeding bird concentrations (i.e. 1% or more of the national breeding population) or nationally rare breeding bird species (i.e. between 1 and 1,000 breeding pairs) were recorded during the survey.
- 4.4 The total number of confirmed, probable and possible breeding bird species recorded within a site also indicates its significance. Table 4 includes the breeding diversity criteria devised by Fuller.

Table 4: Significance of the total number of breeding species recorded at a site

Local	County	Regional	National
25-49	50-69	70-84	85+

- 4.5 Based on the above criteria, the 34 confirmed, probable and possible breeding bird species recorded within the site and surrounding 100m buffer indicates that it is of local significance for breeding birds. The 32 confirmed, probable and possible breeding bird species were recorded within the site itself indicates that it is also of local significance for breeding birds.
- 4.6 An individual barn owl was noted exiting a barn owl nest box along the western site boundary during survey visit three on 10th June 2021. As barn owls are protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) it is an offence to intentionally or recklessly disturb an adult barn owl while it is nest-building or while it is at a nest containing eggs or young birds. It is also an offence to disturb dependent young barn owls. Reasonable measures should be taken during the construction and operational stages of the proposed development to avoid disturbance of this species.
- 4.7 The arable and grassland habitats at the site also offer foraging potential for barn owl that will be lost to the proposed development.
- 4.8 One pair of reed bunting likely nested along the margins of the pond in the centre of the site during the 2021 breeding season.
- 4.9 Although only noted during survey visit 3 on 10th June 2021, three skylark were recorded in the arable fields at the site, with one bird noted singing and therefore assessed as a possible onsite breeding species.

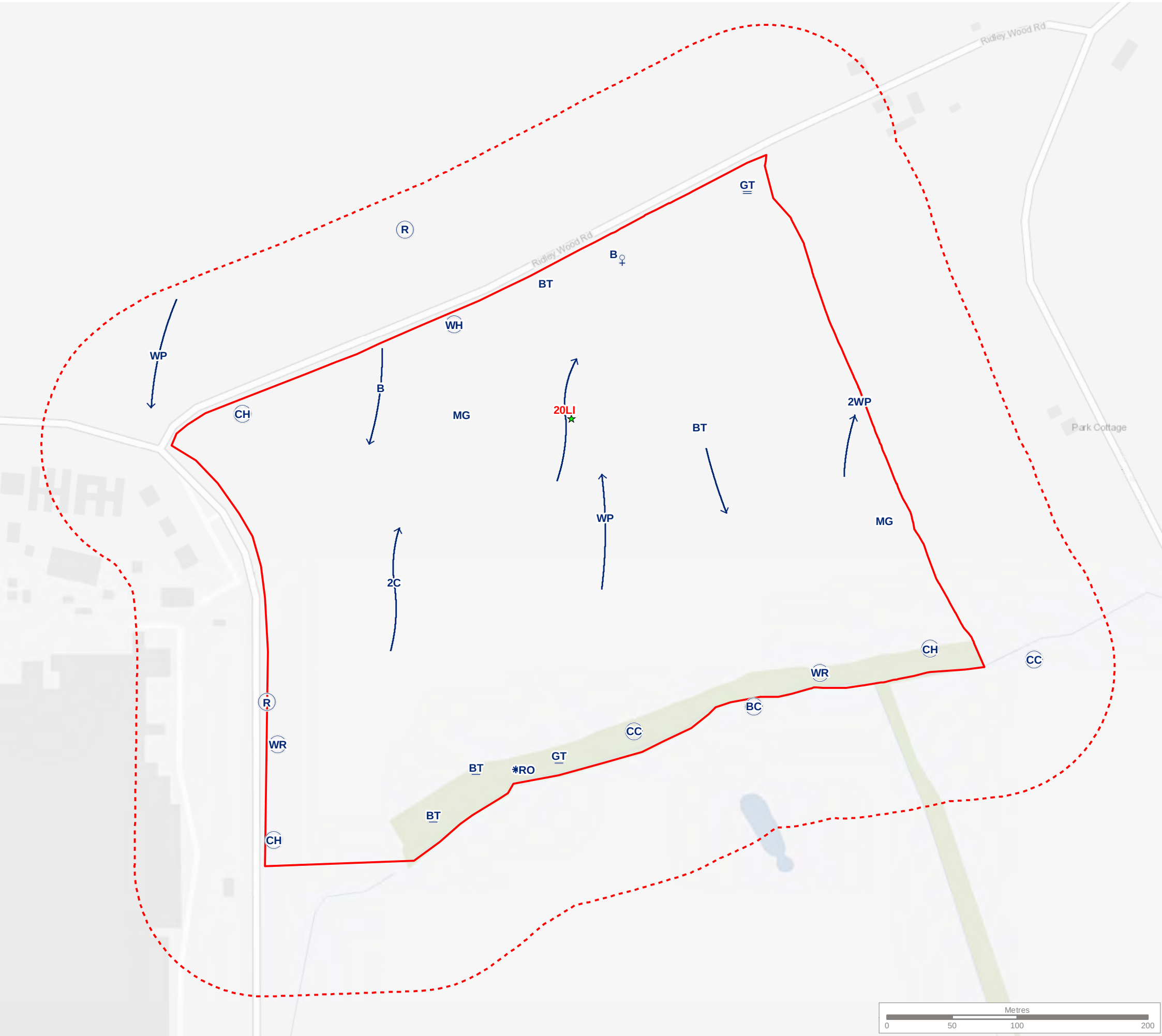
- 4.10 The proposed development will result in the loss of suitable nesting habitat for notable bird species reed bunting and skylark that will likely disperse and seek suitable nesting habitat in the wider area.
- 4.11 The woodland and scrub habitats within the site and 100m buffer provide suitable nesting habitat for notable bird species including song thrush (1 probable pair), stock dove (1 probable pair) and whitethroat (2 probable pairs). A rookery is also present in the woodland belt along the southern site boundary with 30 rook nests recorded during survey visit 2 on 13th May 2021.
- 4.12 If it is necessary to remove trees, scrub and hedgerow at the site, this would reduce and fragment the amount of breeding and nesting habitat available for birds. These habitats should therefore be retained and/or enhanced wherever possible. If trees, scrub and hedgerow are to be removed, they should be replaced using a range of native species to create a varied vegetation structure to suit a wide range of breeding bird species. Fruiting tree and shrub species and/or species that are attractive to insects will also provide additional foraging resources for numerous bird species. Nest boxes should also be included in the development proposals should there be any loss of woodland habitats at the site.
- 4.13 All wild birds and their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). It is recommended that all tree and vegetation clearance across site avoids the core breeding bird season, March to August inclusive; although bird nesting can take place outside this period. If vegetation clearance works are necessary during the core breeding bird season, or at any time when bird nesting is suspected, a nesting bird check of the affected area by an ecologist is required immediately prior to the clearance works taking place. Extensive clearance of potential bird nesting habitat is not always practical and development programmes should take this constraint into account.

References

- Eaton, M., Aebischer, N., Brown, A., Hearn, R., Lock, L., Musgrove, A., Noble, D., Stroud, D. and Gregory, R., 2015. *Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man*. *British Birds*, 108, pp.708-746.
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- Musgrove, A., Aebischer, N., Eaton, M., Hearn, R., Newson, S., Noble, D., Parsons, M., Risely, K. and Stroud, D., 2013. *Population estimates of birds in Great Britain and the United Kingdom*. *British Birds*, 106, pp.64-100.

DRAWINGS

8304.010 Breeding Bird Survey Visit 1 - 15.04.2021
8304.011 Breeding Bird Survey Visit 2 - 13.05.2021
8304.012 Breeding Bird Survey Visit 3 - 10.06.2021



KEY

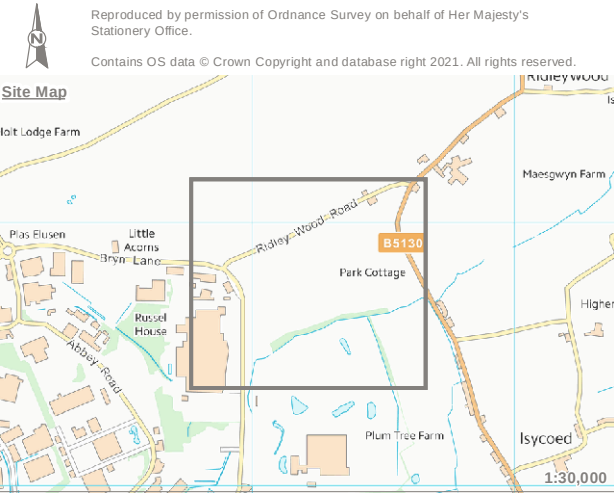
- Site boundary
- Site boundary 100m offset
- Section 7 species
- A female
- A bird calling
- A bird in song
- A bird repeatedly giving alarm-calls/other vocalisations
- A nest occupied with eggs/brood
- Directional flight line

Species Codes

- | | | | |
|----|---------------|----|-------------|
| B | Blackbird | MG | Maggie |
| BC | Blackcap | R | Robin |
| BT | Blue tit | RO | Rook |
| C | Carriion crow | WH | Whitethroat |
| CC | Chiffchaff | WP | Woodpigeon |
| CH | Chaffinch | WR | Wren |
| GT | Great tit | | |
| LI | Linnet | | |

Note

Red Red List Species Amber Amber List Species



Rev	Description	Drawn	Approved	Date



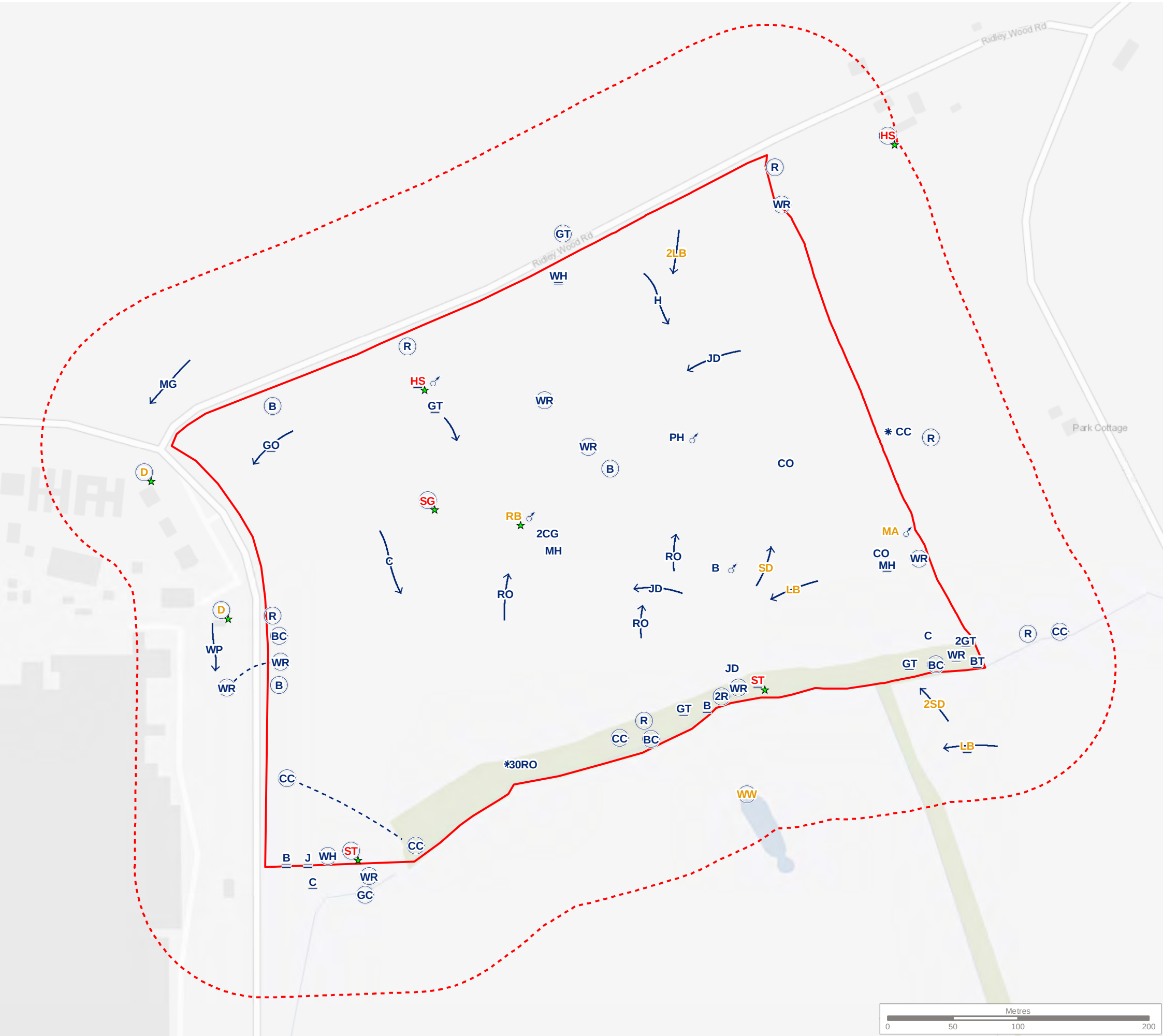
Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
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Project
Bryn Lane, Wrexham

Title
Breeding Bird Survey
Visit 1 - 15th April 2021

Drawing Number
G8304.010

Drawn	Checked	Approved	Scale	Date
MK	CW	LJ	1:3,000 @ A3	28/06/2021



KEY

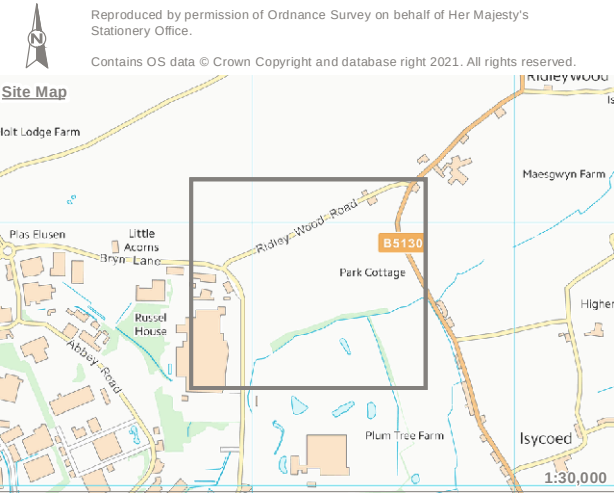
- Site boundary
- Site boundary 100m offset
- Section 7 species
- A male
- A bird calling
- A bird in song
- A bird repeatedly giving alarm-calls/other vocalisations
- A nest occupied with eggs/brood
- Directional flight line
- Simultaneous registration (different birds)

Species Codes

B	Blackbird	HS	House sparrow	SD	Stock dove
BC	Blackcap	J	Jay	SG	Starling
BT	Blue tit	JD	Jackdaw	ST	Song thrush
C	Carrion crow	LB	Lesser black-backed gull	WH	Whitethroat
CC	Chiffchaff	MA	Mallard	WP	Woodpigeon
CG	Canada goose	MG	Maggie	WR	Wren
CO	Coot	MH	Moorhen	WW	Willow warbler
D	Duncock	PH	Pheasant		
GC	Goldcrest	R	Robin		
GO	Goldfinch	RB	Reed bunting		
GT	Great tit	RO	Rook		
H	Grey heron				

Note

Red Red List Species Amber Amber List Species



Rev	Description	Drawn	Approved	Date

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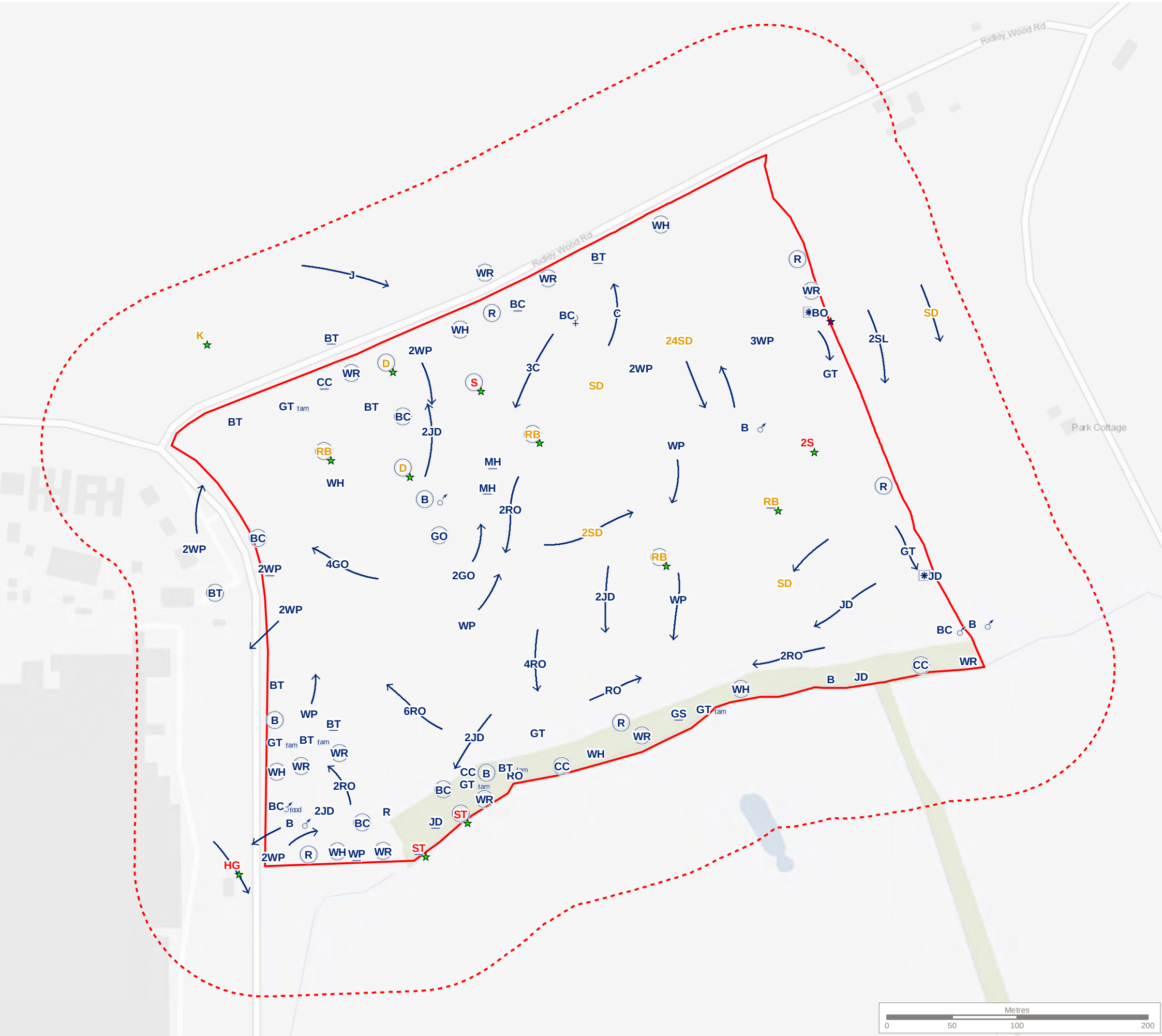
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Project
Bryn Lane, Wrexham

Title
Breeding Bird Survey
Visit 2 - 13th May 2021

Drawing Number
G8304.011

Drawn	Checked	Approved	Scale	Date
MK	CW	LJ	1:3,000 @ A3	28/06/2021



KEY

- Site boundary

Site boundary 100m offset

Section 7 species

Schedule 1 species

A female

A male

A colony of birds

Family group of birds

A bird calling

A bird carrying food

A bird in song

A nest box occupied with eggs/brood

Directional flight line

GO Goldfinch

GS Great spotted woodpecker

GT Great tit

HG Herring gull

J Jay

JD Jackdaw

K Kestrel

MH Moorhen

R Robin

RB Reed bunting

RO Rook

S Skylark

SD Stock dove

SL Swallow

ST Song thrush

WH Whitethroat

WP Woodpigeon

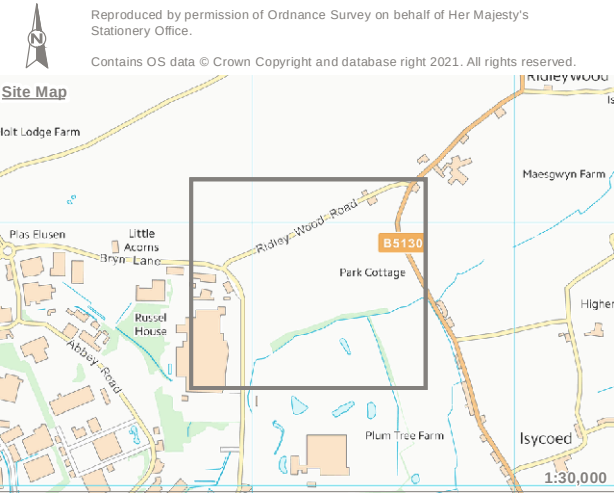
WR Wren

Species Codes

- B Blackbird
- BC Blackcap
- BO Barn owl
- BT Blue tit
- C Carrion crow
- CC Chiffchaff
- D Dunnock

Note

Red Red List Species Amber Amber List Species



Rev	Description	Drawn	Approved	Date

TBP

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Project
Bryn Lane, Wrexham

Title
Breeding Bird Survey
Visit 3 - 10th June 2021

Drawing Number
G8304.012

Drawn	Checked	Approved	Scale	Date
MK	SA	LJ	1:3,000 @ A3	29/06/2021



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