

Sure Partners Limited

ARKLOW BANK WIND PARK
PHASE 2
**ONSHORE GRID
INFRASTRUCTURE**

VOLUME III

Chapter 12 APPENDICES

Appendix 12.6 DixonBrosnan Breeding
Bird Survey

ARUP

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Renewables

Appendix 12.6

Breeding Bird Survey

Breeding Bird Survey On Behalf of Arup



Arklow Bank Wind Park Phase 2 Onshore Grid Infrastructure

March 2021

Prepared by

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Project	Breeding Bird Survey at Arklow Bank Wind Park Phase 2 Onshore Grid Infrastructure, Co. Wicklow		
Client	Arup		
Project ref	Report no	Client ref	
2069	2069	-	
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12/03/21	2	2 nd Draft	Tara Challoner MSc
18/03/21	3	3 rd Draft	
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1. Introduction

1.1 Background

DixonBrosnan Environmental Consultants were commissioned by Arup on behalf of Sure Partners Limited (SPL) to undertake an ecological survey for breeding birds along the proposed corridors of the Onshore Grid Infrastructure (OGI) cable route and at the proposed substation site associated with connection of the onshore grid infrastructure to the electrical transmission network.

This report presents the results of breeding bird surveys conducted during the 2020 breeding season. The objective of the survey was to identify breeding bird activity within the planning (red line) boundary.

This report has been written in accordance with the Chartered Institute of Ecological and Environmental Management (CIEEM) *Guidelines for Ecological Report Writing* (CIEEM 2017).

The aim of the report is to provide a description of the bird survey methods used; to provide the results of breeding bird surveys; and to provide an interpretation of the results.

This Breeding Bird Report is intended to inform SPL’s Environmental Impact Assessment Report (EIAR) for the Arklow Bank Wind Park (ABWP) Phase 2 Onshore Grid Infrastructure. Detailed descriptions of the bird counts are included in **Appendix 1**.

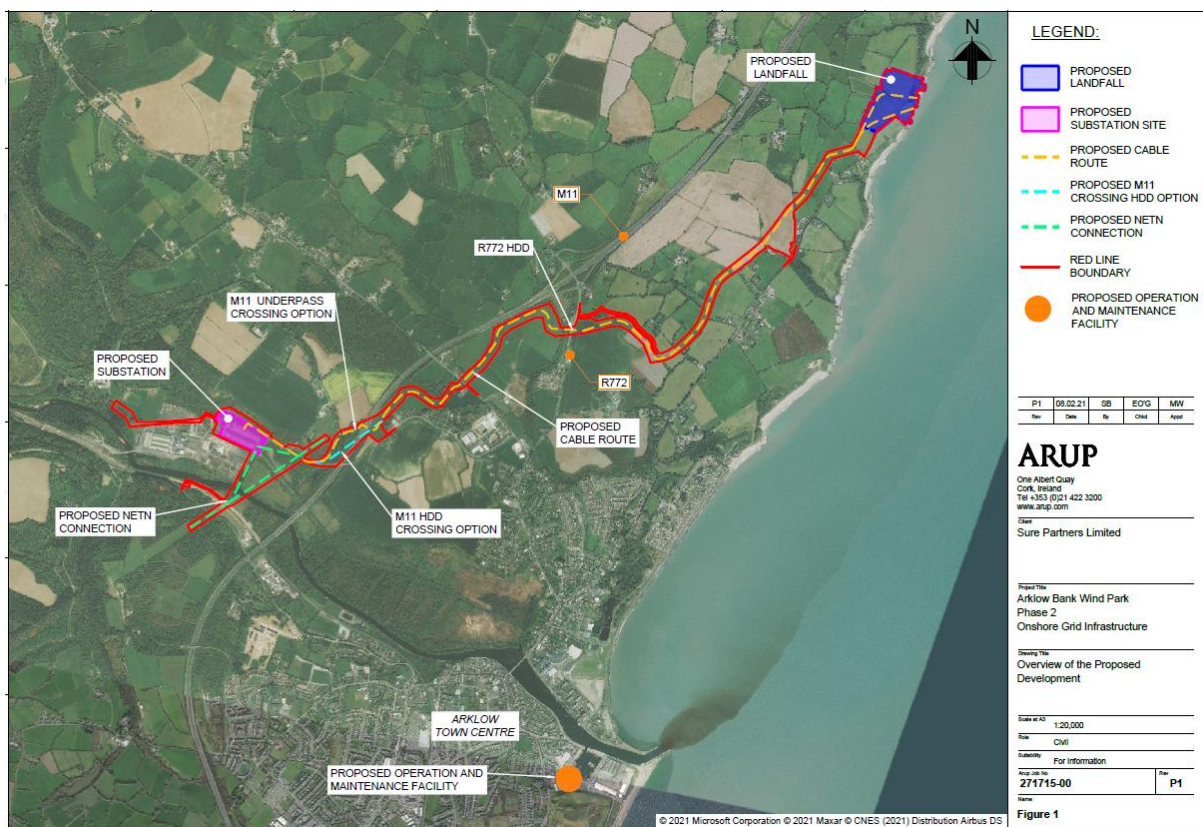


Figure 1. Overview of proposed development

1.2 Location

The proposed development will comprise the onshore grid infrastructure including 220kV onshore export cables and fibre optic cables, from the landfall of the offshore export cables at Johnstown North, Co. Wicklow, to a proposed onshore 220kV substation at Shelton Abbey and overhead line connection from the new substation to the National Electricity Transmission Network (NETN). An overview of the proposed development is shown in **Figure 1**.

1.3 Conservation Status

The survey area does not form part of any Natural Heritage Area (NHA), Special Protection Area (SPA), Special Area of Conservation (SAC) or candidate Special Area of Conservation (cSAC), Nature Reserve, or National Park.

The conservation status of bird species in Ireland can be assigned in relation to inclusion on various schedules or annexes of national or European legislation or on relevant conservation lists. A species is considered to be of "conservation concern" if it is included on one or more of the following:

- Annex I of the EU Birds Directive (2009/147/EC);
- Part 1 of the Fourth Schedule of the Wildlife Act 1976 (as amended), and
- Birds of Conservation Concern in Ireland (BoCCI) Red or Amber list (Colhoun and Cummins 2013).

1.4 Authors of Report

This report was prepared by Sorcha Sheehy PhD (Ecology/Ornithology). Surveys were carried out by Tara Challoner MSc (Ecology).

Sorcha Sheehy PhD (Ecology/Ornithology) is an experienced ecological consultant with over ten years' experience. She has worked on Screening/NISs for a range of small and large-scale projects with particular expertise in assessing impacts on birds. Recent projects include bird risk assessments for Dublin and Cork Airports, Waste to Energy Facility Ringaskiddy and Water Storage Schemes for Irish Water.

Tara Challoner MSc (Ecology) is an experienced ecologist and has worked on Screening/NISs for a range of small and large-scale projects with expertise in surveying habitats and plants in particular, as well as bird and mammal surveys. She has carried out ecological surveys and prepared AA/NIS reports for a range of projects including quarries, industrial developments, pipelines, and landfill sites.

2. Methodology

2.1 Breeding bird surveys

The breeding bird survey carried out was a scaled down version of the BTO Common Bird Census (CBC) methodology (Bibby *et al.*, 2000 and Gilbert *et al.*, 1998) which aims to capture a snapshot of breeding bird activity within the survey area. It is noted that breeding bird surveys were also carried out in 2019 and the results of this survey have been included as an appendix

in the EIAR (RPS 2019). Both the 2019 and 2020 bird surveys followed the same survey methodology.

The survey area followed two potential cable routes being considered at the time of survey. The aim of the breeding bird surveys was to identify any valuable bird habitats along the proposed cable routes and to get a representation of birds present within the surrounding landscape. This survey site encompassed terrestrial habitats along the survey route including hedgerows, treelines, agricultural fields and woodland. No coastal habitats were included within the survey area.

Breeding bird surveys were carried out over five days between the 21st of May and the 30th of July 2020 (**Table 1**). The ornithological surveyor slowly walked the proposed routes and sites being considered, stopping at regular intervals to scan with binoculars and to listen for bird calls or song. A map illustrating the routes followed and sites visited for the purposes of survey can be found in **Appendix 1** of this report.

Survey visits were made in the early morning to coincide with the peak period of bird activity and all species seen or heard in the survey area and immediate environs were recorded including those in flight. Visits were made during favourable weather conditions.

All species encountered during the survey were mapped and coded using standard BTO species codes (**Appendix 1**) and activity recorded using the BTO codes for breeding evidence (**Appendix 2**). In an effort to minimise potential disturbance, no attempts were made to locate nests as such behaviours are generally sufficient to determine probable or confirmed breeding.

3. Results

3.1 Breeding Bird Survey

Dates, times and weather conditions for the surveys are included in **Table 1**. All species seen or heard were recorded including those in flight over the site (**Table 2**). Maps of the survey location are included in **Appendix 1**.

Table 1. Weather conditions during Breeding Bird Survey

Date	Start	End	Location surveyed	Temp	Cloud	Wind	Visibility	Precipitation
21/05/20	0900	1300	Maps 4b, 5B 7,8	14°C	Scattered cloud	15km/hr	good	Dry 67% humidity
18/06/20	0900	1300	Maps 1,2 3B, 4A	15°C	Broken cloud	15km/hr	good	Dry 94% humidity
25/06/20	0900	1500	Maps 4b, 5B 7,8, 1,2 3B, 4A	17°C	Broken cloud, partly sunny	7km/hr	good	Dry 85% humidity
21/07/20	0900	1300	Maps 5A,6	17°C	Partly sunny	14km/hr	good	Dry 56% humidity
30/07/20	0900	1300	Map 3A	20°C	Partly sunny	13km/hr	good	Dry 78% humidity

A total of 34 species were recorded along the survey route. Nine species were classified as “probable” or “confirmed” breeding, of which two species are considered to be of conservation concern in Ireland.

Only species which are red or amber listed for their breeding populations in Ireland (Colhoun and Cummins 2013) are considered as species of conservation concern and listed as such in **Table 2** as part of this assessment.

Table 2. Breeding bird survey results 2020

Common name	Breeding status	Highest breeding evidence	Conservation status
Blackbird	Confirmed	Recently fledged young	
Blackcap	Confirmed	Female carrying food	
Blue tit	Possible	Singing male	
Buzzard	Non breeding		
Chaffinch	Confirmed	Recently fledged young	
Chiffchaff	Possible	Singing male	
Dipper	Possible	Patrolling territory	
Duncock	Possible	Singing male	
Garden warbler	Possible	Singing male	
Goldfinch	Possible	Singing male	
Great tit	Confirmed	Recently fledged young	
Grey wagtail	Non breeding		
Hooded crow	Non breeding		
House sparrow	Possible	Singing male	Amber listed
Jackdaw	Non breeding		
Kestrel	Non breeding		Amber listed
Linnet	Non breeding		Amber listed
Mallard	Possible	Family group	
Meadow pipit	Possible	Territorial flight display	Red listed
Mistle thrush	Possible	Suitable habitat	Amber listed
Pheasant	possible	Suitable habitat	
Pied wagtail	Possible	Male display flight	

Common name	Breeding status	Highest breeding evidence	Conservation status
Red kite	Non breeding		Amber listed
Robin	Confirmed	Recently fledged young	Amber listed
Rook	Possible		
Skylark	Possible	Males singing	Amber listed
Songthrush	Confirmed	Recently fledged young	
Spotted flycatcher	Probable	Parents with chick	Amber listed
Starling	Possible		Amber listed
Swallow	Possible		Amber listed
Willow warbler	Confirmed	Male carrying food	
Woodpigeon	Possible		
Wren	Confirmed	Recently fledged young	
Yellowhammer	Possible	Suitable habitat	Red listed

4. Conclusion

Overall, the proposed cable route and substation site is not considered of high value for breeding birds. The site is dominated by common farmland and woodland edge species. No Annex I species were recorded during the site surveys. Two red-listed species were recorded i.e., Yellowhammer and Meadow Pipit. Kingfisher, an Annex I species, is known to breed on the Avoca River. However, no signs of Kingfisher were recorded during site surveys.

References

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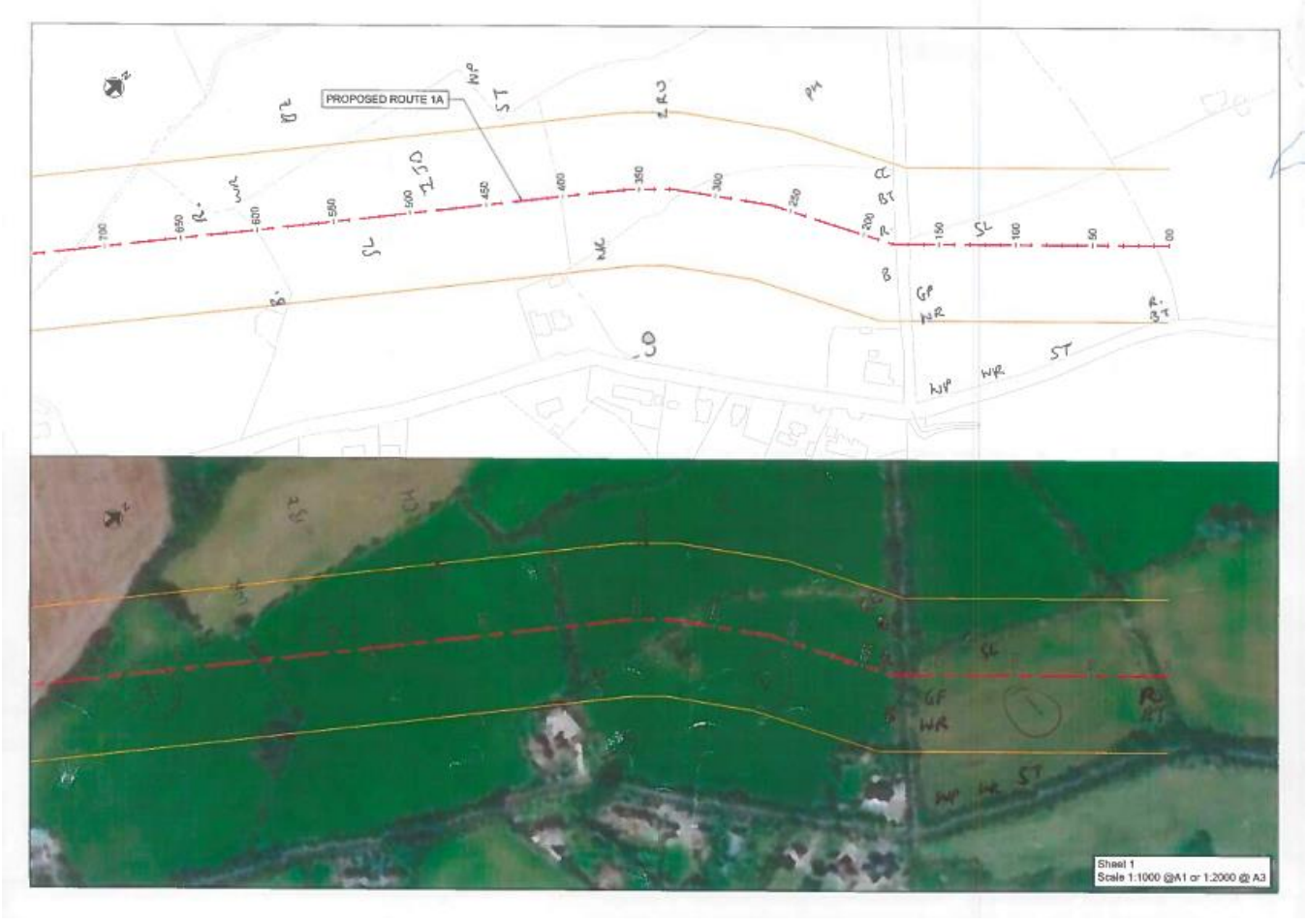
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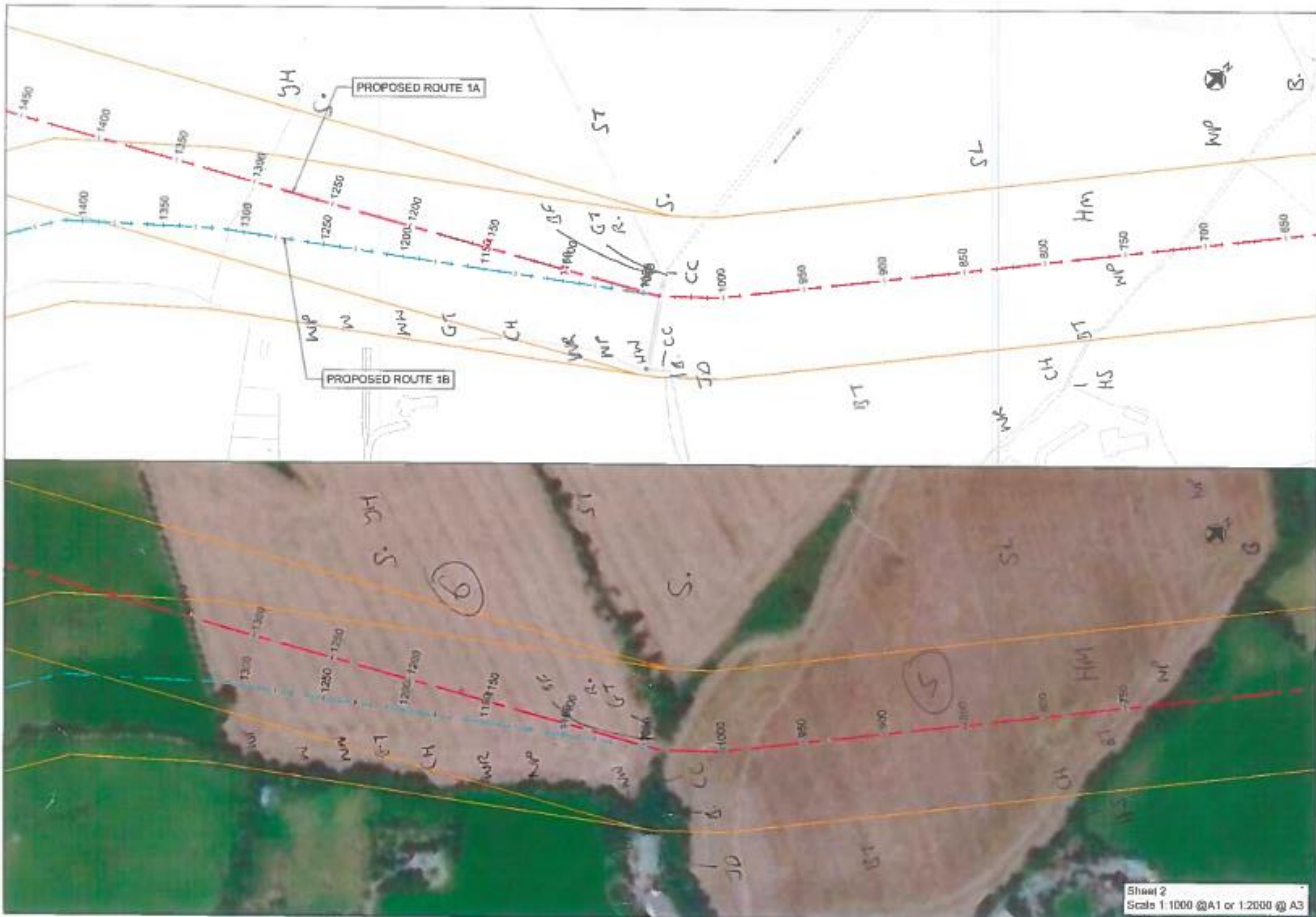
Appendix 1. Field Survey Notes



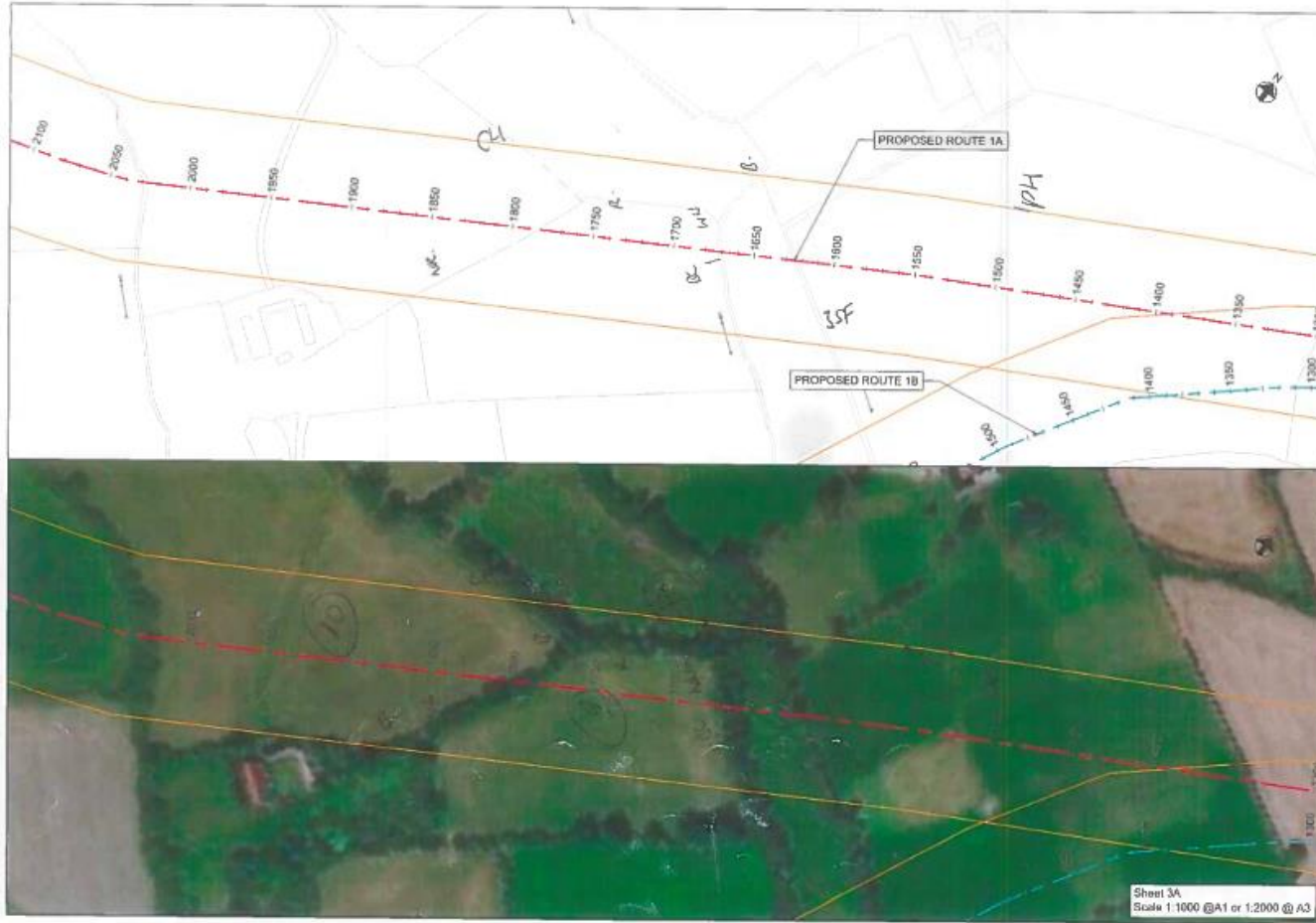
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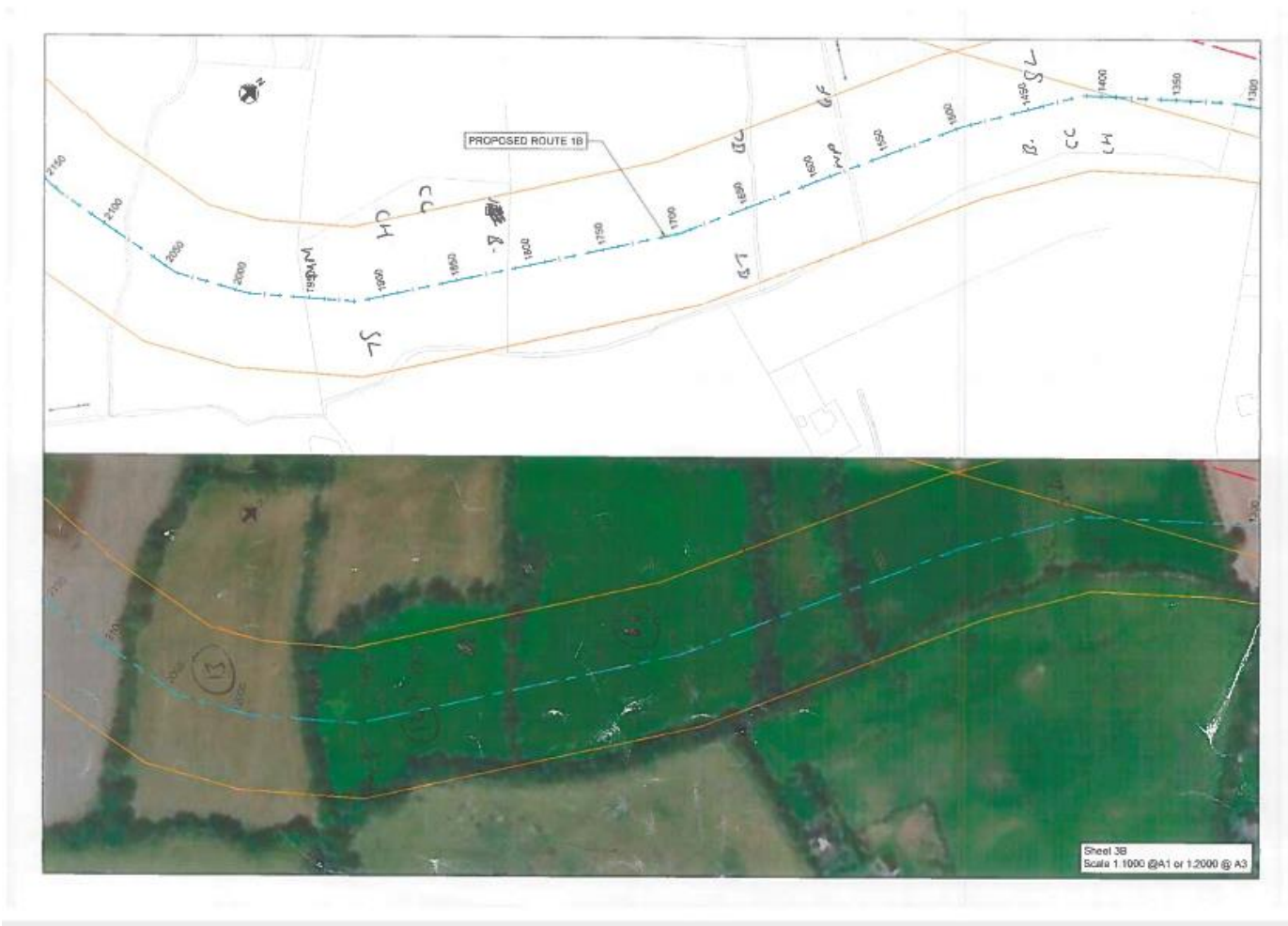
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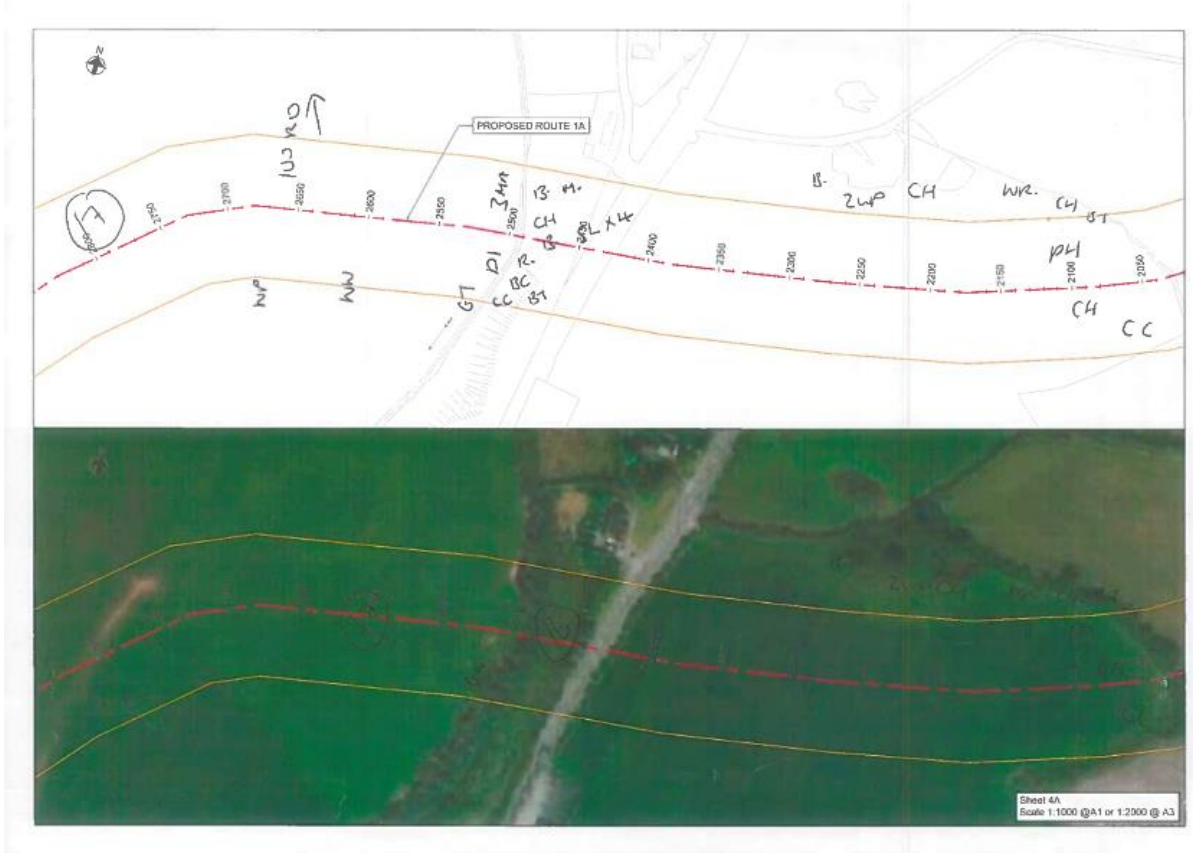
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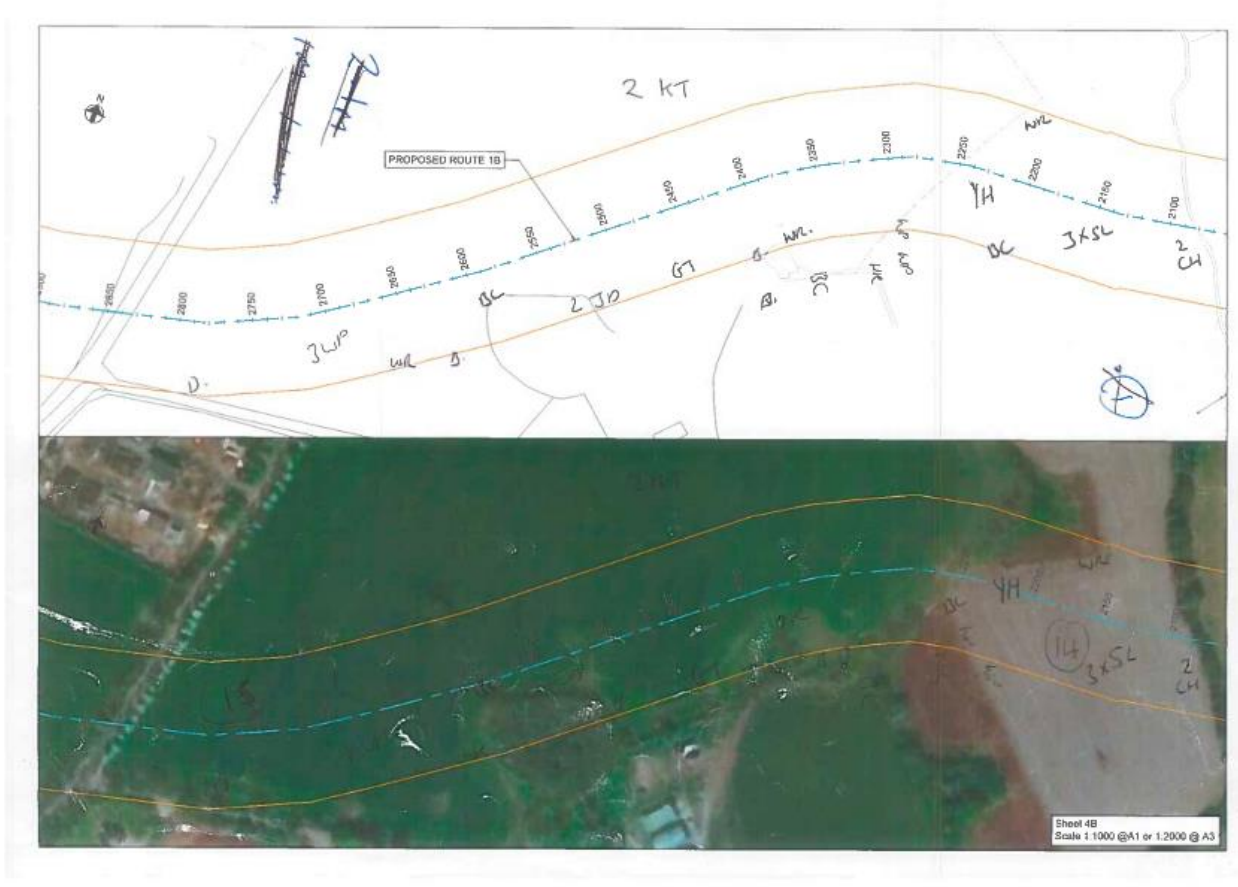
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Sheet 3B.



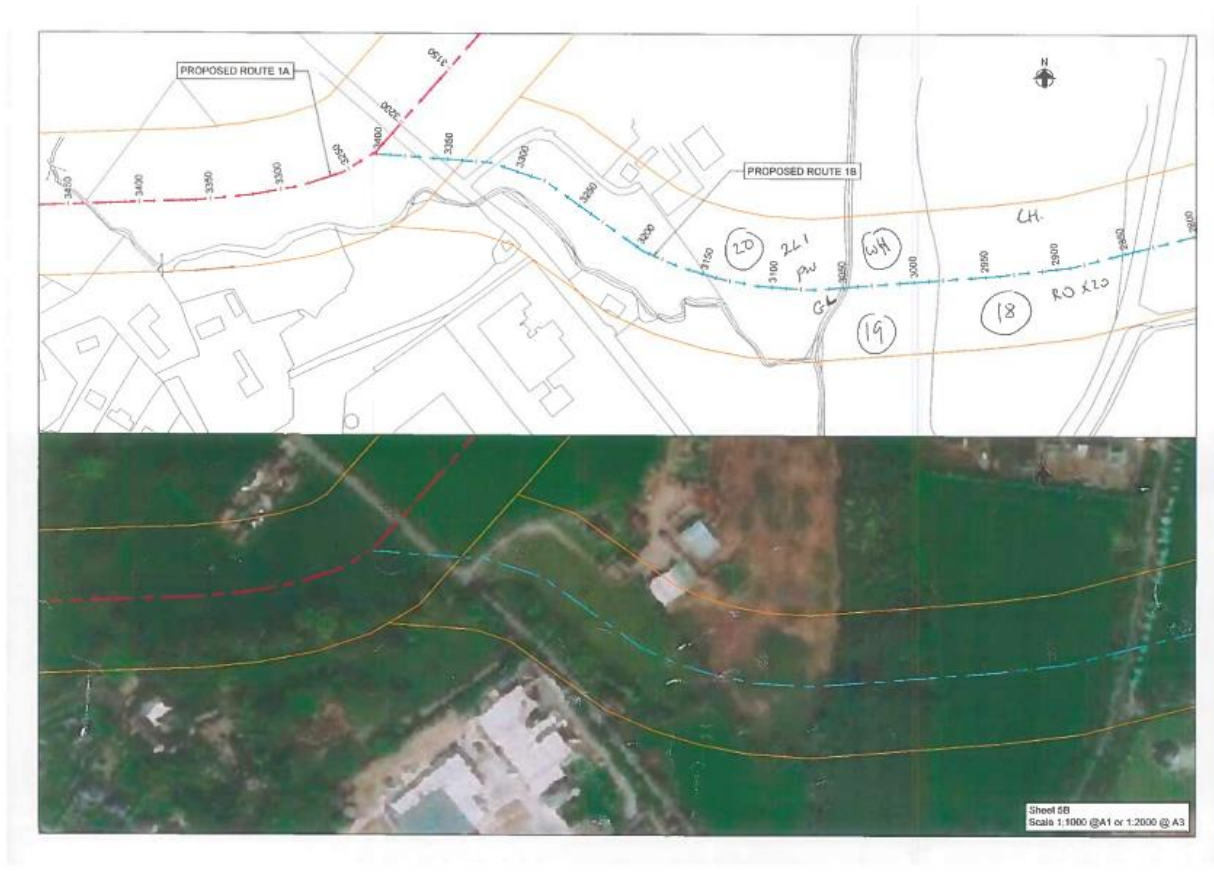
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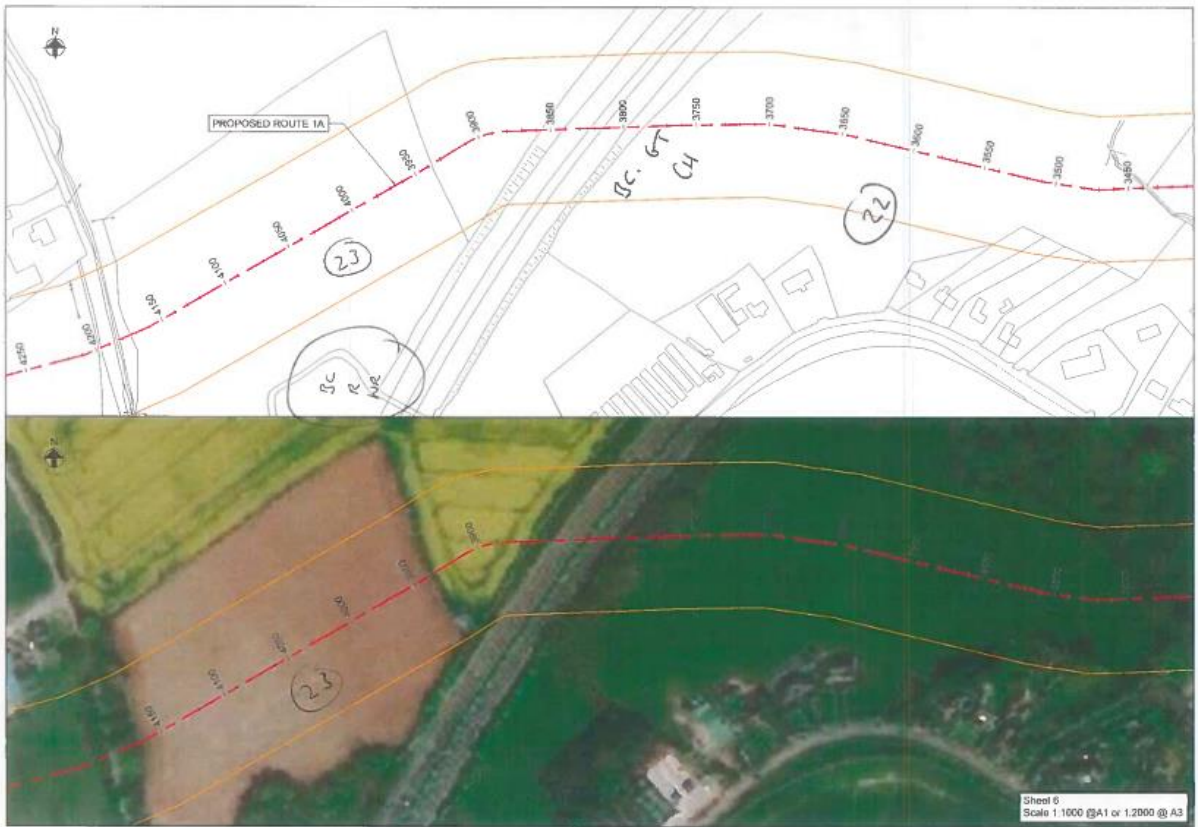
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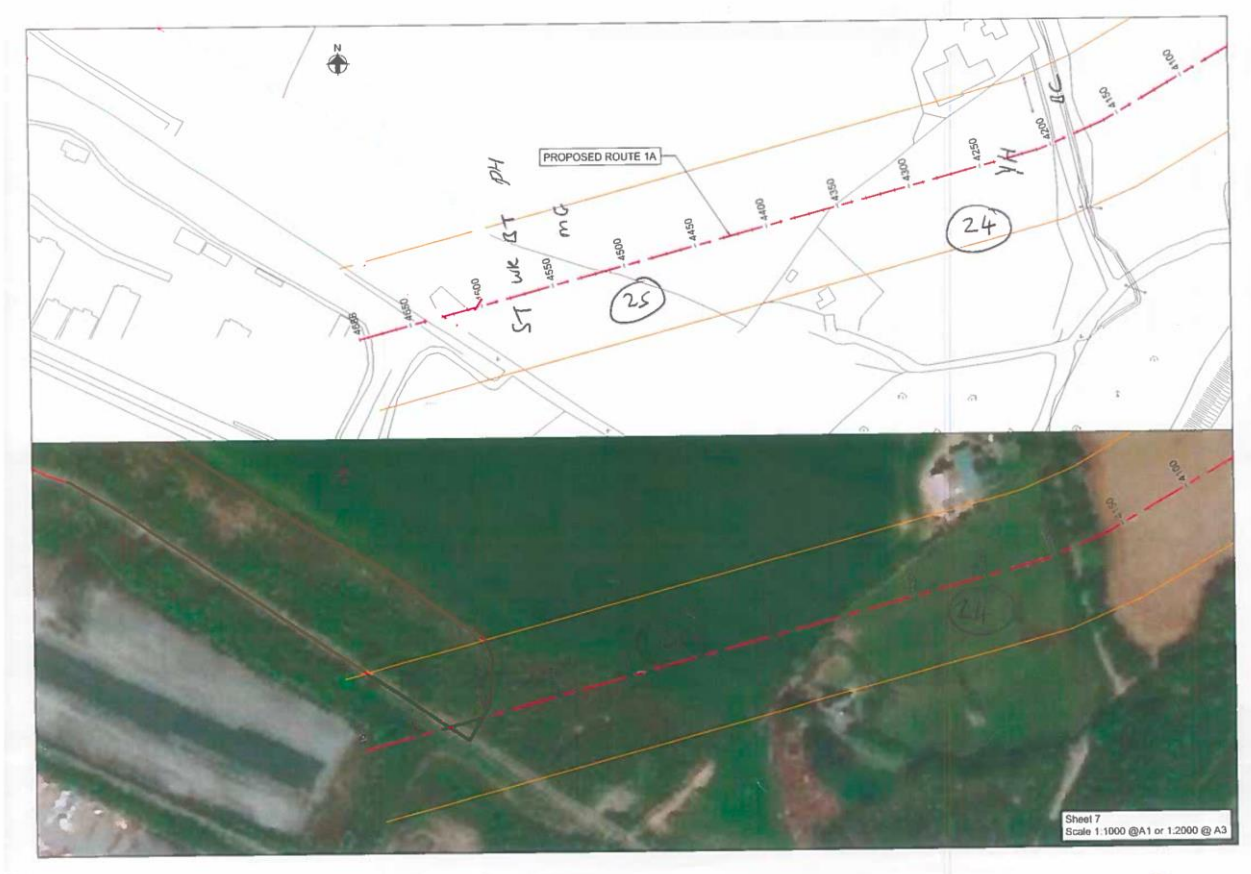
Sheet 5A.



Sheet 5B



Sheet 6.



Sheet 7.



Sheet 8.

Appendix 2. Species codes

BTO SPECIES CODES

AC	Arctic Skua	GA	Gadwall	LE	Long-eared Owl	SM	Sand Martin
AE	Arctic Tern	GX	Gannet	LT	Long-tailed Tit	SS	Sanderling
AV	Avocet	GW	Garden Warbler	MG	Maggie	TE	Sandwich Tern
BO	Barn Owl	GY	Garganey	MA	Mallard	VI	Savi's Warbler
BY	Barnacle Goose	GC	Goldcrest	MN	Mandarin Duck	SQ	Scarlet Rosefinch
BA	Bar-tailed Godwit	EA	Golden Eagle	MX	Manx Shearwater	SP	Scaup
BR	Bearded Tit	OL	Golden Oriole	MR	Marsh Harrier	CY	Scottish Crossbill
BS	Berwick's Swan	GF	Golden Pheasant	MT	Marsh Tit	SW	Sedge Warbler
BI	Bittern	GP	Golden Plover	MW	Marsh Warbler	NS	Serin
BK	Black Grouse	GN	Goldeneye	MP	Meadow Pipit	SA	Shag
TY	Black Guillemot	GO	Goldfinch	MU	Mediterranean Gull	SU	Shelduck
BX	Black Redstart	GD	Goosander	ML	Merlin	SX	Shorelark
BJ	Black Tern	GI	Goshawk	M	Mistle Thrush	SE	Short-eared Owl
B	Blackbird	GH	Grasshopper Warbler	MO	Montagu's Harrier	SV	Shoveler
BC	Blackcap	GB	Great Black-backed Gull	MH	Moorhen	SK	Siskin
BH	Black-headed Gull	GG	Great Crested Grebe	MS	Mute Swan	S	Skylark
BN	Black-necked Grebe	ND	Great Northern Diver	N	Nightingale	SZ	Slavonian Grebe
BW	Black-tailed Godwit	NX	Great Skua	NJ	Nightjar	SN	Snipe
BV	Black-throated Diver	GS	Great Spotted Woodpecker	NH	Nuthatch	SB	Snow Bunting
BT	Blue Tit	GT	Great Tit	OP	Osprey	ST	Song Thrush
BU	Bluethroat	GE	Green Sandpiper	OC	Oystercatcher	SH	Sparrowhawk
BL	Brambling	G	Green Woodpecker	PX	Peafowl/Peacock	AK	Spotted Crake
BG	Brent Goose	GR	Greenfinch	PE	Peregrine	SF	Spotted Flycatcher
BF	Bullfinch	GK	Greenshank	PH	Pheasant	DR	Spotted Redshank
BZ	Buzzard	H	Grey Heron	PF	Pied Flycatcher	SG	Starling
CG	Canada Goose	P	Grey Partridge	PW	Pied Wagtail	SD	Stock Dove
CP	Capercaillie	GV	Grey Plover	PG	Pink-footed Goose	SC	Stonechat
C	Carrión Crow	GL	Grey Wagtail	PT	Pintail	TN	Stone-curlew
CW	Cetti's Warbler	GJ	Greylag Goose	PO	Pochard	TM	Storm Petrel
CH	Chaffinch	GU	Guillemot	PM	Ptarmigan	SL	Swallow
CC	Chiffchaff	FW	Guineafowl (Helmeted)	PU	Puffin	SI	Swift
CF	Chough	HF	Hawfinch	PS	Purple Sandpiper	TO	Tawny Owl
CL	Cirl Bunting	HH	Hen Harrier	Q	Quail	T	Teal
CT	Coal Tit	HG	Herring Gull	RN	Raven	TK	Temminck's Stint
CD	Collared Dove	HY	Hobby	RA	Razorbill	TP	Tree Pipit
CM	Common Gull	HZ	Honey Buzzard	RG	Red Grouse	TS	Tree Sparrow
CS	Common Sandpiper	HC	Hooded Crow	KT	Red Kite	TC	Treecreeper
CX	Common Scoter	HP	Hoopoe	ED	Red-backed Shrike	TU	Tufted Duck
CN	Common Tern	HM	House Martin	RM	Red-breasted Merganser	TT	Turnstone
CO	Coot	HS	House Sparrow	RQ	Red-crested Pochard	TD	Turtle Dove
CA	Cormorant	JD	Jackdaw	FV	Red-footed Falcon	TW	Twite
CB	Corn Bunting	J	Jay	RL	Red-legged Partridge	WA	Water Rail
CE	Corncrake	K	Kestrel	NK	Red-necked Phalarope	W	Wheatear
CI	Crested Tit	KF	Kingfisher	LR	Redpoll (Lesser)	WM	Whimbrel
CR	Crossbill (Common)	KI	Kittiwake	RK	Redshank	WC	Whinchat
CK	Cuckoo	KN	Knot	RT	Redstart	WG	White-fronted Goose
CU	Curlew	LM	Lady Amherst's Pheasant	RH	Red-throated Diver	WH	Whitethroat
DW	Dartford Warbler	LA	Lapland Bunting	RE	Redwing	WS	Whooper Swan
DI	Dipper	L	Lapwing	RB	Reed Bunting	WN	Wigeon
DO	Dottrel	TL	Leach's Petrel	RW	Reed Warbler	WT	Willow Tit
DN	Dunlin	LB	Lesser Black-backed Gull	RZ	Ring Ouzel	WW	Willow Warbler
D	Duncock	LS	Lesser Spotted Woodpecker	RP	Ringed Plover	OD	Wood Sandpiper
EG	Egyptian Goose	LW	Lesser Whitethroat	RI	Ring-necked Parakeet	WO	Wood Warbler
E	Eider	LI	Linnet	R	Robin	WK	Woodcock
FP	Feral Pigeon	ET	Little Egret	DV	Rock Dove (not feral)	WL	Woodlark
ZL	Feral/hybrid goose	LG	Little Grebe	RC	Rock Pipit	WP	Woodpigeon
ZF	Feral/hybrid mallard type	LU	Little Gull	RO	Rook	WR	Wren
FF	Fieldfare	LO	Little Owl	RS	Roseate Tern	WY	Wryneck
FC	Firecrest	LP	Little Ringed Plover	RY	Ruddy Duck	YW	Yellow Wagtail
F	Fulmar	AF	Little Tern	RU	Ruff	Y	Yellowhammer

If you are not submitting your data electronically using BBS-Online, please return your Field Recording Sheets to your Regional Organiser with your other BBS forms. If you would like to submit your results on BBS-Online, please inform your RO, then visit www.bto.org/bbs.