

The Sizewell C Project

9.21 Bird Survey Report - Two Village Bypass

Revision: 2.0

Applicable Regulation: Regulation 5(2)(q)

PINS Reference Number: EN010012

June 2021

Planning Act 2008 Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009





NOT PROTECTIVELY MARKED

CONTENTS

January 2021 Surveys

February 2021 Surveys

1	SUMMARY	1
1.1	Receptor Status 2020/2021 Summary Overview	1
2	OVERVIEW	1
2.1	The Aims of the Surveys	1
2.2	Wintering Bird Surveys 2020/2021	1
3	METHODS	2
3.1	Desk Study	2
3.2	Field Surveys	2
3.3	Limitations	3
4	RESULTS	3
5	CONCLUSION	7
REFE	RENCES	9
TABL	ES	
Table 4	4.1: Notable species recorded at two village bypass	3
Table	1: Survey details for wintering bird surveys at two village bypass1	1
	2: Peak counts of species of no special conservation concern recorded the survey areas1	2
FIGU	RES	
Figure	1: Wintering Bird Survey Transect Route 2020/2021	
_	2: Schedule 1 and Species of Local & National Importance Recorded in the substitution of the substitution	
	3: Schedule 1 and Species of Local & National Importance Recorded in other 2020 Surveys	
Figure	4: Schedule 1 and Species of Local & National Importance Recorded in	

NNB Generation Company (SZC) Limited. Registered in England and Wales. Registered No. 6937084. Registered office: 90 Whitfield Street, London W1T 4EZ

Figure 5: Schedule 1 and Species of Local & National Importance Recorded in



NOT PROTECTIVELY MARKED

Figure 6: Schedule 1 and Species of Local & National Importance Recorded in March 2021 Surveys

APPENDICES

APPENDIX A: DRAWINGS	10
APPENDIX B: SURVEY DETAILS AND WEATHE	ER CONDITIONS11
APPENDIX C: SPECIES LIST – BIRDS WITH NO CONCERN	



NOT PROTECTIVELY MARKED

1 SUMMARY

1.1 Receptor Status 2020/2021 Summary Overview

- 1.1.1 This report presents the findings of the 2020/2021 wintering bird surveys undertaken at two village bypass, part of the associated development sites of the proposed Sizewell C Nuclear Power Station project (hereafter referred to as 'Sizewell C project').
- 1.1.2 The surveys are part of on-going ecological surveys of two village bypass, following previous ecological surveys undertaken on the site [APP-425] and APP-426].
- 1.1.3 The site is approximately 2km in length, and is located approximately 0.25km south and east of the village of Farnham, adjacent south of the A12. Habitats on the site comprised arable fields bordered by hedgerows and are typical of the surrounding landscape. The site location is presented in **Figure 1** in **Appendix A**.
- 1.1.4 The 2020/2021 surveys identify that the habitats within the two village bypass site supported a diverse assemblage of bird species including eight Schedule 1 species, 16 red listed species, 19 amber listed species and 30 species of no conservation concern.
- 1.1.5 The main habitats within the site comprise arable fields, hedgerows along field boundaries and sparsely distributed areas of broadleaved woodland. Also, a newly created body of water was present within the site. The winter 2020/2021 surveys identified that the habitats identified within the site supported a diverse assemblage of bird species.

2 OVERVIEW

2.1 The Aims of the Surveys

- 2.1.1 The aim of the surveys was to determine the wintering bird assemblage and to gather spatial data regarding numbers and distribution of birds within the two village bypass area of the Sizewell C project.
- 2.2 Wintering Bird Surveys 2020/2021
- 2.2.1 The surveys took place between 24th November 2020 and 16th March 2021, following designated transects to record the wintering bird assemblage, numbers and spatial distribution. The surveys were undertaken within the two village bypass area.



- 2.2.2 The 2020/2021 surveys identified that the proposed two village bypass site supported a small number of waterfowl species, as well as a range of other bird species of conservation concern associated with habitats identified within the site.
- 2.2.3 The distribution of birds recorded was fairly evenly spread throughout the site, although the main areas supporting passerine wintering birds were field boundary hedgerows and small areas of woodland.
- 2.2.4 The gull and waterfowl species recorded favoured a newly created reservoir 0.75km south of Farnham (approximate grid reference TM 36697 59394). It should be noted that a large assemblage of wintering birds and waterfowl were recorded foraging and loafing on flooded fields approximately 0.5km south of the site.
- 3 **METHODS**
- 3.1 Desk Study
- 3.1.1 Desk study information is fully detailed within the ES (Ref 1 and Ref 2).
- 3.2 Field Surveys
- 3.2.1 Transect surveys for wintering bird survey visits were undertaken monthly from November 2020 to March 2021 (inclusive), to record species observed or heard within the two village bypass site and adjacent habitats. Surveyors walked a predefined transect route once per month. The location and transect route are detailed on Figure 1 in Appendix A.
- 3.2.2 The surveys were undertaken by two teams of two surveyors, led by
 - , all of whom are competent ornithologists.
- 3.2.3 The surveyors were equipped with binoculars and telescopes to aid identification. Observations were entered onto iPads, with the focus of the surveys being wintering birds and waterfowl. Sightings of all species of importance were recorded and mapped, using standard British Trust for Ornithology (BTO) species codes. Species of importance included:
 - Species listed on Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended) (Ref 3).
 - Red and Amber listed Birds of Conservation Concern (BOCC) (Ref 4).



NOT PROTECTIVELY MARKED

- Species of Principal Importance listed under Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act. 2006 (Ref 5).
- 3.2.4 Species of no conservation concern were also recorded but were not mapped.
- 3.2.5 See **Table 1** in **Appendix B** for the full survey details, including surveys dates and times, surveyors and weather conditions.

3.3 Limitations

3.3.1 During the survey visit on 16th December 2020, gunshots were heard close to the western extent of the site (approximate grid reference TM 35793 59247). For health and safety reasons surveyors did not access the adjacent fields and scanned the area from the farm track to the north

4 RESULTS

- 4.1.1 During the 2020/2021 surveys, 52 bird species were recorded. Of these species, eight were listed as Schedule 1 (Ref. 1), 16 were included on the BoCC (Ref. 2) red list and 19 on the amber list. Additionally, 14 species were listed under S41 of the NERC Act (Ref. 3) and 30 species of no special conservation concern were recorded. Birds may fall into multiple categories of the above, and as such do not contribute to the total count of species recorded.
- 4.1.2 The results of the surveys are detailed in Table 4.1 below, Table 2 in Appendix C and in Figure 2 to Figure 6 in Appendix A.

Table 4.1: Notable species recorded at two village bypass.

Common Name	Scientific Name	Conser -vation Status	Sch 1	S41 NER C	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021
Barn owl	Tyto alba	Green	√		0	0	0	1	0
Black-headed gull	Chroicocephalus ridibundus	Amber			510	187	1206	59	66
Brambling	Fringilla montifringilla	Green	\		4	8	0	0	0
Bullfinch	Pyrrhula pyrrhula	Amber		✓	2	1	0	2	1



NOT PROTECTIVELY MARKED

Common Name	Scientific Name	Conser -vation Status	Sch 1	S41 NER C	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021
Common gull	Larus canus	Amber			60	6	74	27	0
Curlew	Numenius arquata	Red		√	11	13	0	0	0
Dunnock	Prunella modularis	Amber		✓	9	2	7	5	20
Fieldfare	Turdus pilaris	Red	√		34	70	87	0	70
Great black- backed gull	Larus marinus	Amber			6	2	10	0	2
Greylag goose	Anser anser	Amber			0	0	0	0	4
Grey wagtail	Motacilla cinerea	Red			1	1	0	0	0
Herring gull	Larus argentatus	Red		✓	125	52	421	8	176
House sparrow	Passer domesticus	Red		✓	25	2	26	0	23
Kestrel	Falco tinnunculus	Amber			4	4	2	1	2
Kingfisher	Alcedo atthis	Amber	√		0	1	0	0	0
Lapwing	Vanellus vanellus	Red		✓	0	0	450	60	0
Lesser black- backed gull	Larus fuscus	Amber			19	1	10	0	0
Lesser redpoll	Carduelis cabaret	Red		✓	2	0	1	1	3
Linnet	Linaria cannabina	Red		✓	74	6	8	45	4
Mallard	Anas platyrhynchos	Amber			3	42	107	12	113
Marsh harrier	Circus aeruginosus	Amber	✓		1	0	0	0	0



NOT PROTECTIVELY MARKED

Common Name	Scientific Name	Conser -vation Status	Sch 1	S41 NER C	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021
Marsh tit	Poecile palustris	Red		>	3	1	0	1	1
Meadow pipit	Anthus pratensis	Amber			7	2	18	34	8
Mediterranean gull	Ichthyaetus melanocephalu s	Amber	\		0	0	0	1	0
Mistle thrush	Turdus viscivorus	Red			3	1	1	3	3
Mute swan	Cygnus olor	Amber			17	11	11	0	10
Red kite	Milvus milvus	Green	√		1	0	0	1	2
Redshank	Tringa totanus	Amber			0	2	0	0	0
Redwing	Turdus iliacus	Red	√		25	12	108	4	17
Reed bunting	Emberiza schoeniclus	Amber		√	1	0	0	8	1
Shelduck	Tadorna tadorna	Amber			0	0	23	0	1
Skylark	Alauda arvensis	Red		√	8	3	10	18	6
Snipe	Gallinago gallinago	Amber			0	0	0	0	1
Song thrush	Turdus philomelos	Red		✓	6	4	7	4	9
Starling	Sturnus vulgaris	Red		✓	0	15	311	0	9
Stock dove	Columba oenas	Amber			7	7	6	2	7
Woodcock	Scolopax rusticola	Red			0	0	0	1	0
Yellowhammer	Emberiza citronella	Red		√	2	0	2	5	0



- The distribution of wintering birds recorded was fairly evenly spread 4.1.3 throughout the site, however a key area supporting waterfowl and gulls adiacent to the site was a newly created reservoir 0.75km south of Farnham (approximate grid reference TM 36697 59394).
- 4.1.4 All of the curlews and redshanks observed were foraging within flooded fields approximately 0.5km south of the site, as shown in Figure 2 and Figure 3 in Appendix A.
- 4.1.5 450 lapwings were recorded foraging and roosting on flooded fields approximately 0.5km south of the site (see Figure 4 in Appendix A). A flock of 60 lapwings was observed roosting within an arable field in the centre of the site (see Figure 5 in Appendix A).
- 4.1.6 Fieldfares and redwings were recorded throughout the surveys, and were most frequently observed roosting and feeding within hedgerows and areas of woodland. During the January survey, a combined flock of 100 redwings and 58 fieldfares was observed feeding within a stubble field at the eastern extent of the site (see Figure 4 in Appendix A). 11 starlings were also observed feeding within this flock.
- 4.1.7 Gulls were recorded throughout the surveys foraging and loafing within arable fields within and adjacent to the site. Flocks (the largest of which comprised 800 black-headed gulls, see Figure 4 in Appendix A) were recorded on flooded fields approximately 0.5km south of the site. Gulls and mallards were also observed throughout the surveys loafing on the newly created body of water adjacent south of the site.
- 4.1.8 22 shelduck were observed foraging and roosting within a flooded field approximately 0.5km south of the site (see Figure 2 in Appendix A). One male shelduck was observed roosting in an arable field adjacent south of the A12 at the eastern extent of the site (see **Figure 6** in **Appendix A**).
- 4.1.9 Song thrushes were recorded throughout the surveys, calling and singing (in March) from within the sparse areas of woodland and hedgerows within and adjacent to the site.
- 11 starlings were observed foraging within an arable field in the eastern area 4.1.10 of the site, and a flock of 300 were recorded foraging within a flooded field 0.5km south of the site (see **Figure 4** in **Appendix A**).
- 4.1.11 Skylarks were observed throughout the surveys foraging, roosting and singing (in March) within and above arable fields in and adjacent to the site.



NOT PROTECTIVELY MARKED

- 4.1.12 One kingfisher was heard calling from the River Alde in December (see Figure 3 in Appendix A).
- 4.1.13 One woodcock was recorded in February, flying through a woodland adjacent west of the site (see Figure 5 in Appendix A).
- 4.1.14 One marsh harrier was observed commuting south west above the site (see Figure 2 in Appendix A). No evidence of the species using the site was recorded during the surveys.
- 4.1.15 Three observations of red kites hunting above the west of the site were made during the surveys in November, February and March (see Figure 2, Figure 5 and Figure 6 in Appendix A, respectively). One red kite was observed in March roosting in a mature tree, south of the site. This may have been the same bird recorded hunting, during the same day.
- 4.1.16 One incidental sighting of a barn owl approximately 200m west of Farnham was made by surveyors whilst driving past the site (see Figure 5 in Appendix **A**).

5 CONCLUSION

- 5.1.1 The Two village bypass site supports a range of wintering bird species. Most passerines were recorded using and calling from hedgerows and woodland areas, however fieldfares, redwings and starling were observed foraging within an arable stubble field at the eastern extent of the site (see Figure 4 in **Appendix A**). Skylark were observed foraging, roosting and singing (in March) within and above arable fields in and adjacent to the site.
- 5.1.2 All curlews and redshanks observed were foraging within flooded fields approximately 0.5km south of the site, as shown in Figure 2 and Figure 3 in Appendix A.
- 5.1.3 22 shelduck were observed foraging and roosting within a flooded field approximately 0.5km south of the site (see Figure 2 in Appendix A). One male shelduck was observed roosting in an arable field adjacent south of the A12 at the eastern extent of the site (see Figure 6 in Appendix A).
- 5.1.4 Gulls were recorded throughout the surveys foraging and loafing within arable fields within and adjacent to the site. Flocks (the largest of which comprised 800 black-headed gulls, see Figure 4 in Appendix A) were recorded on flooded fields approximately 0.5km south of the site. Gulls and mallards were also observed throughout the surveys loafing on the newly created body of water adjacent south of the site.



- 5.1.5 One marsh harrier was observed commuting south west above the site (see Figure 2 in Appendix A). No evidence of the species using the site was recorded during the surveys.
- 5.1.6 Three observations of red kites hunting above the west of the site were made during the surveys in November, February and March (see Figure 2, Figure 5 and Figure 6 in Appendix A, respectively). One red kite was observed in March roosting in a mature tree, south of the site. This may have been the same bird recorded hunting, during the same day.
- 5.1.7 The main habitat for gulls, waders and waterfowl was a newly created reservoir adjacent south of the site and on flooded fields approximately 0.5km south of the site. Whilst these habitats are outside of the site boundary, birds recorded within these habitats may also use habitats within the site.
- 5.1.8 Lesser black-backed gull and marsh harrier (Alde-Ore SPA qualifying species) were both identified during the surveys, however neither species was using habitats within the site.
- 5.1.9 Overall, eight Schedule 1 species, 16 red listed species and 19 amber listed species were identified over the course of the surveys, with 30 species of no special conservation value recorded (as presented in **Appendix C**).
- 5.1.10 The results of the 2020/2021 surveys are largely consistent with those identified in the desk study [APP-425 and APP-426] results and do not affect the conclusions of the Environment Statement.



NOT PROTECTIVELY MARKED

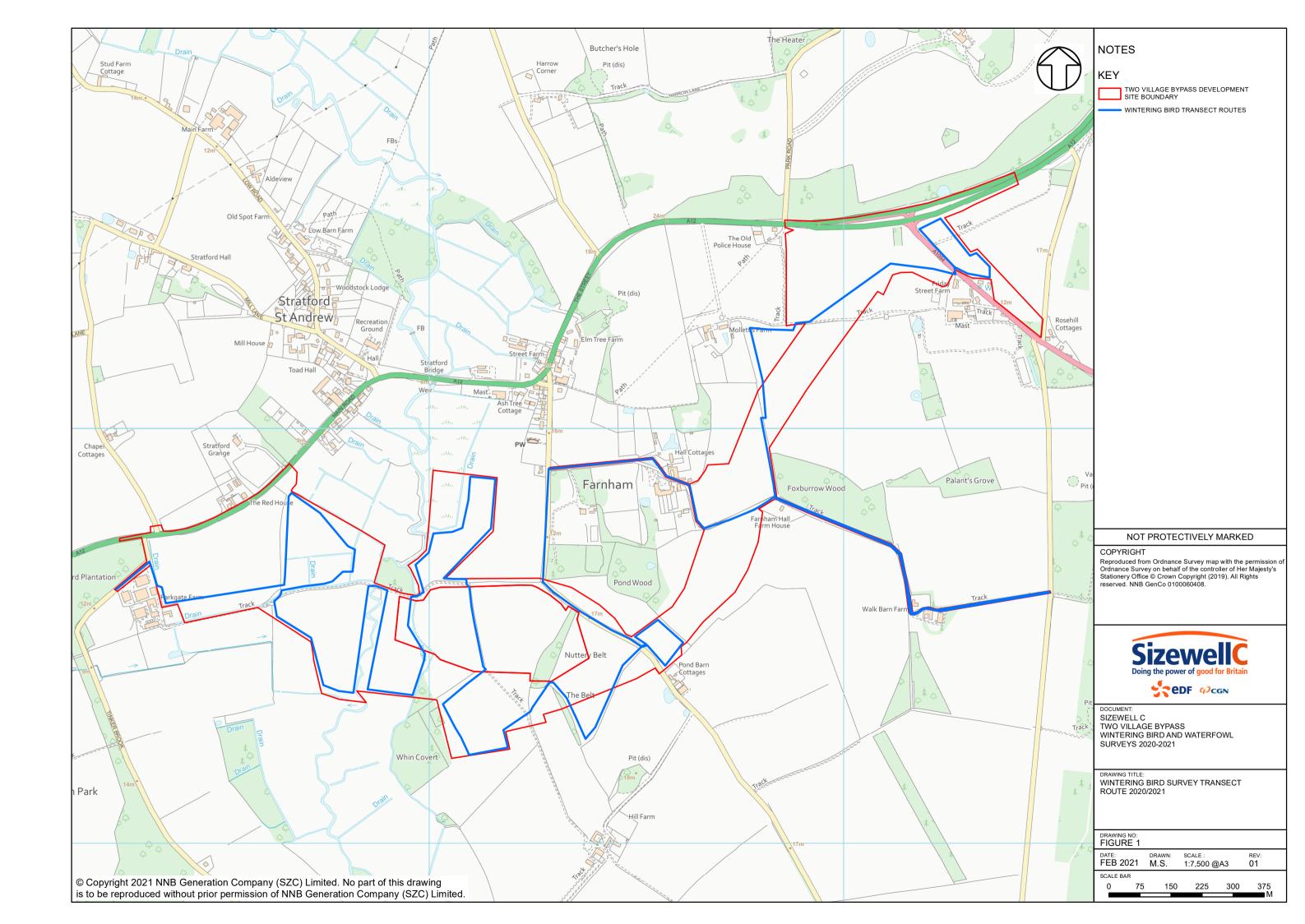
REFERENCES

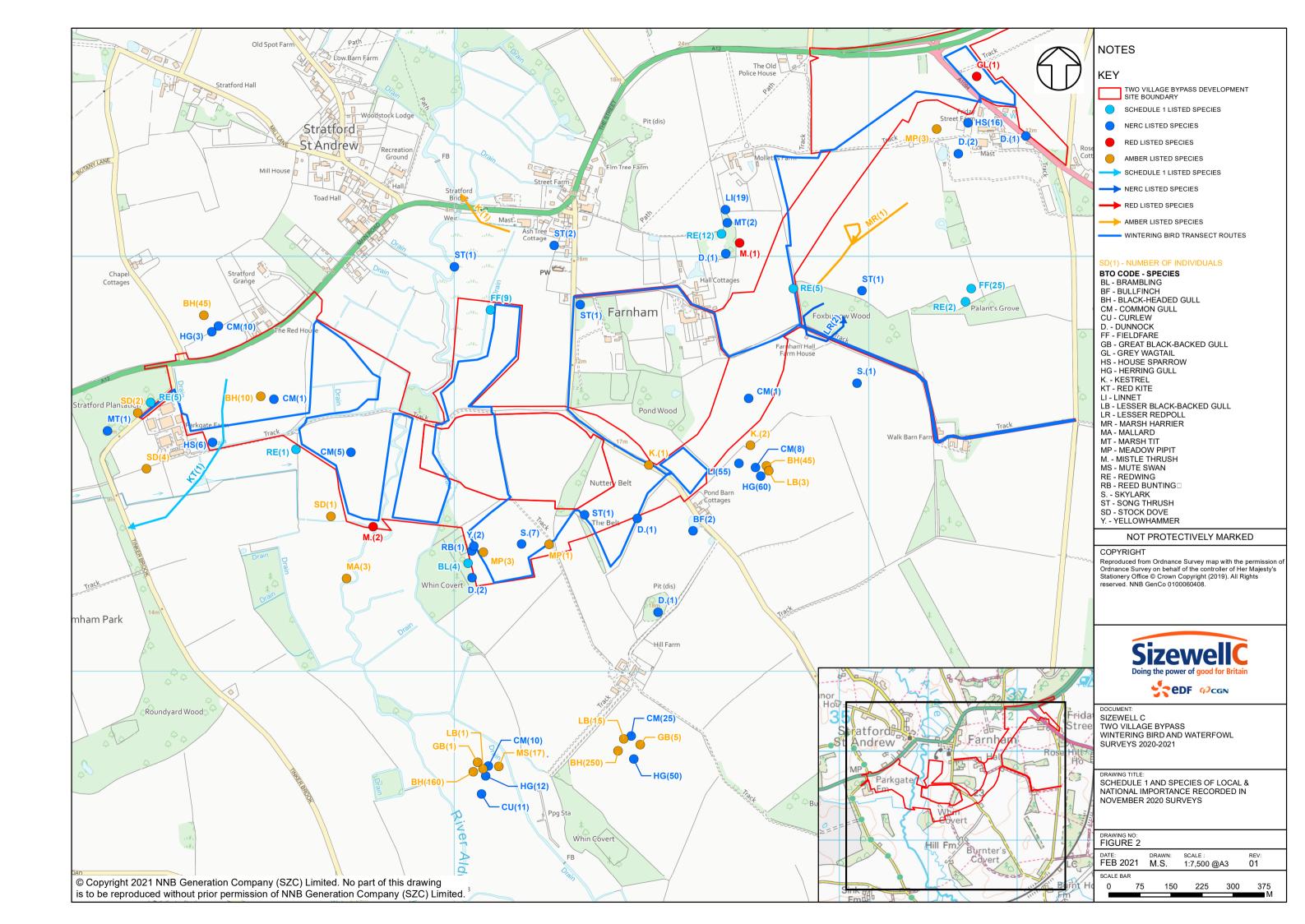
- Wildlife and Countryside Act, as amended. 1981. (Online) Available from: <u>http://www.legislation.gov.uk/ukpga/1981/69/contents</u> (Accessed 22 March 2021).
- 2. Eaton, M.A., Aebisher, N., Brown, A., Hearn, R., Lock, L., Musgrove, A., Noble, D., Stroud, D., and Gregory, R. 2015. BoCC 4: Population status of birds in the United Kingdom, Channel Islands and Isle of Man. British birds 108:708-746.
- Natural Environment and Rural Communities (NERC) Act. 2006. Section 41: Species of Principal Importance in England. (Online) Available from: http://www.legislation.gov.uk/ukpga/2006/16/section/41 (Accessed 22 March 2021).

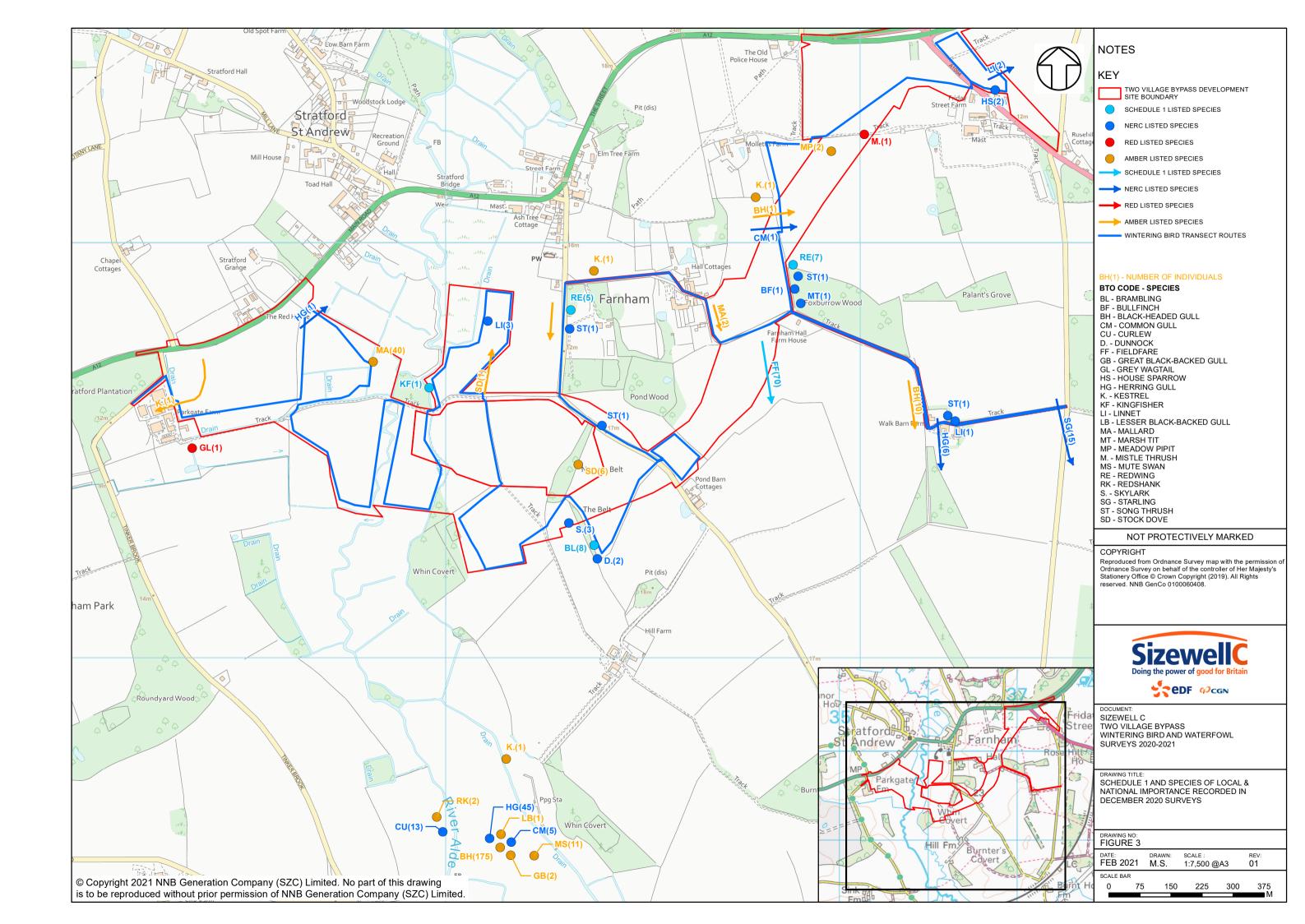


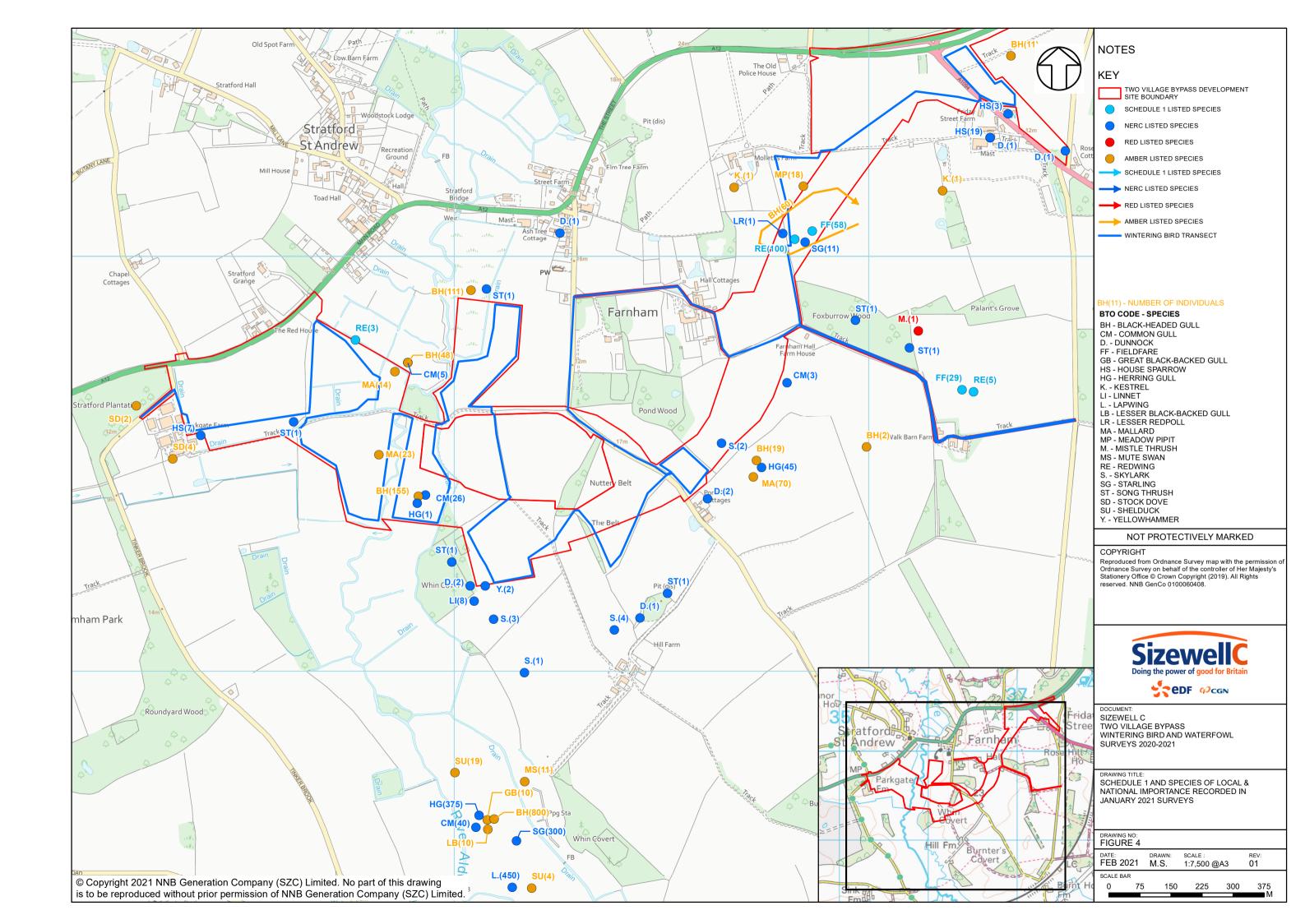
NOT PROTECTIVELY MARKED

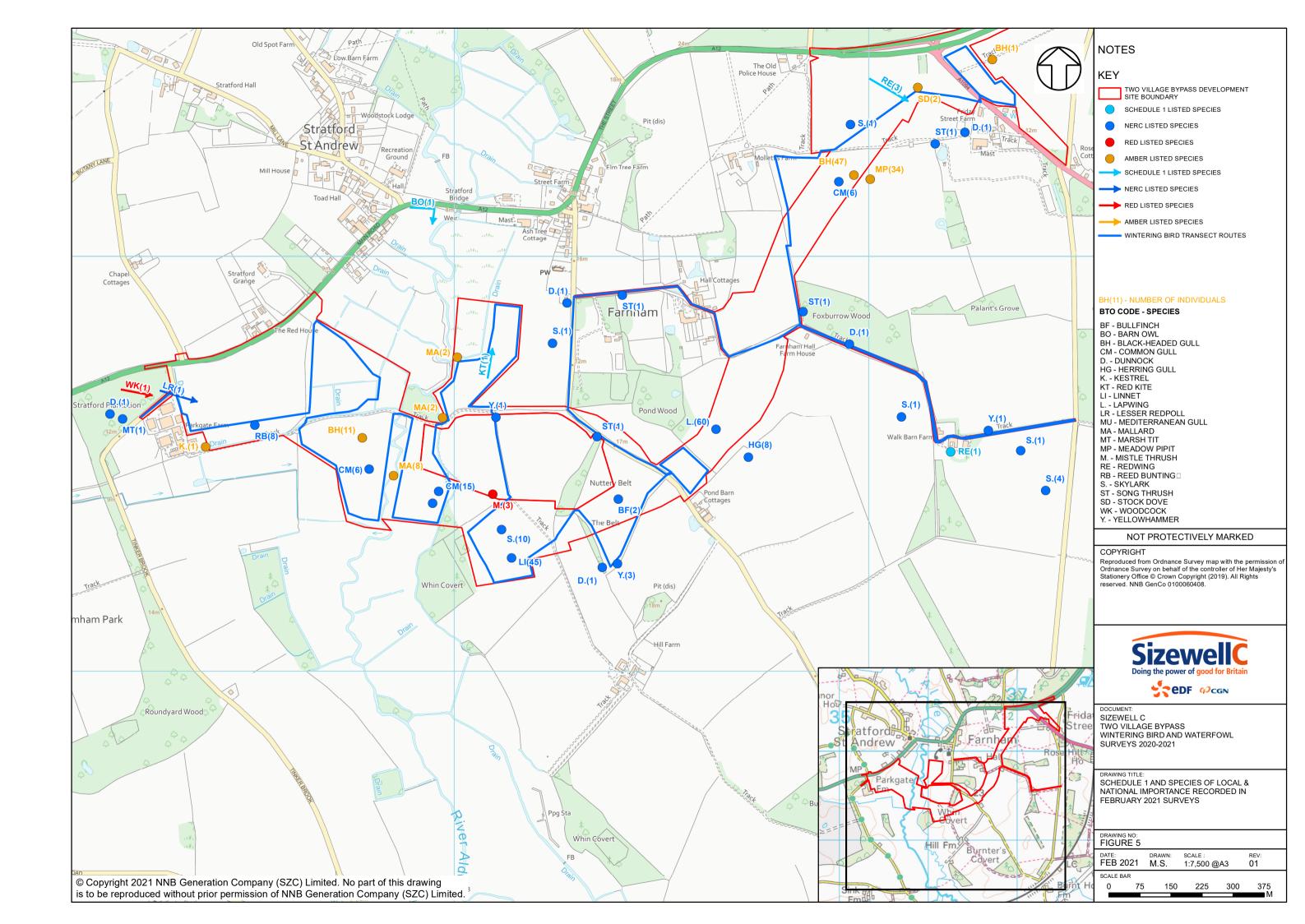
APPENDIX A: DRAWINGS

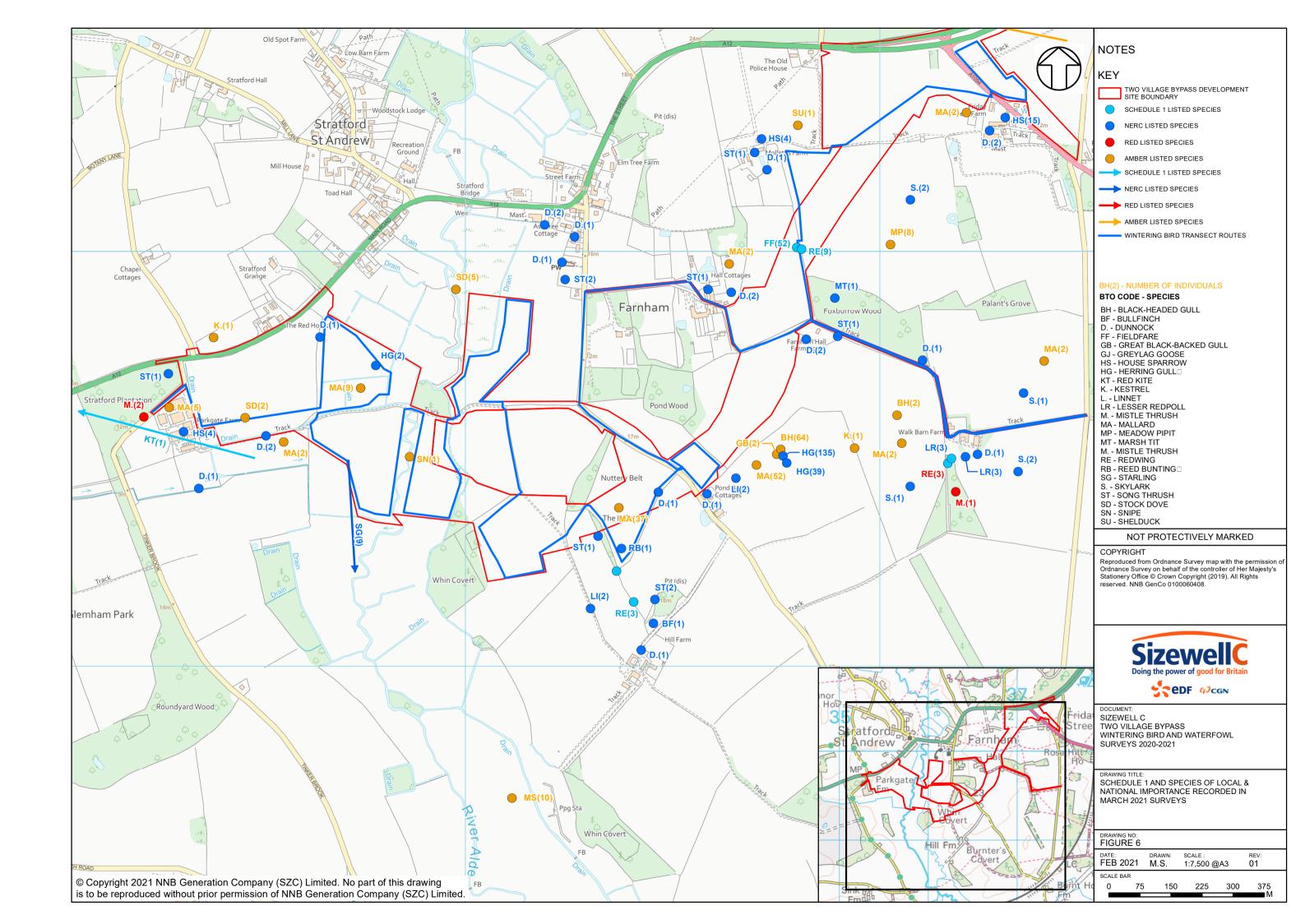














NOT PROTECTIVELY MARKED

APPENDIX B: SURVEY DETAILS AND WEATHER CONDITIONS

- B.1.1. Table 1 below details the survey timings and weather conditions during each survey at two village bypass. Temperature (T) is measured in Celsius, cloud cover (CC) is measured in Oktas and wind speed (WS) is measured using the Beaufort Scale.
- B.1.2. The surveys were undertaken by lead surveyors

Table 1: Survey details for wintering bird surveys at two village bypass.

Survey Details	November 2020	December 2020	January 2021	February 2021	March 2021
Date	24/11/2020	16/12/2020	19/01/2021	16/02/2021	16/03/2021
Survey timings	08:00 - 13:09	09:22 – 11:50	08:00 - 12:40	08:23 – 10:32	07:41 – 12:00
Surveyors					
Weather conditions	T: 10°C, CC: 7, WS/direction: 4 S, no rain, good visibility	T: 9°C, CC: 3, WS/direction: 2 SE, no rain, excellent visibility	T: 9°C, CC: 8, WS/direction: 2 S, intermittent light showers, good visibility	T: 7°C, CC: 8, WS/direction: 1 S, no rain, excellent visibility	T: 5°C, CC: 5, WS/direction: 2 SW, intermittent light showers, good visibility



NOT PROTECTIVELY MARKED

APPENDIX C: SPECIES LIST - BIRDS WITH NO SPECIAL **CONSERVATION CONCERN**

Table 2: Peak counts of species of no special conservation concern recorded across the survey areas.

Species	Scientific Name	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21
Blackbird	Turdus merula	15	3	12	5	5
Blue tit	Cyanistes caeruleus	29	7	37	24	41
Buzzard	Buteo buteo	4	6	9	3	5
Carrion crow	Corvus corone	18	0	9	2	0
Chaffinch	Fringilla coelebs	47	12	45	18	38
Collared dove	Streptopelia decaocto	3	1	1	1	1
Cormorant	Phalacrocorax carbo	0	0	1	1	2
Feral pigeon	Columba livia	19	0	0	0	0
Goldcrest	Regulus regulus	0	0	1	2	4
Goldfinch	Spinus tristis	25	0	29	1	26
Great spotted woodpecker	Dendrocopos major	1	1	1	2	4
Great tit	Parus major	11	4	8	7	19
Green woodpecker	Picus viridis	1	0	1	0	4
Greenfinch	Carduelis chloris	10	8	4	2	7
Grey heron	Ardea cinerea	2	0	0	0	0
Jackdaw	Corvus monedula	0	235	49	64	4
Jay	Cyanocitta cristata	2	0	4	2	7
Long-tailed tit	Aegithalos caudatus	9	5	11	5	10
Magpie	Pica pica	1	0	0	0	0
Moorhen	Gallinula chloropus	0	0	1	0	1
Pheasant	Phasianus colchicus	80	0	20	0	86
Pied wagtail	Motacilla alba	4	12	0	0	4
Red-legged partridge	Alectoris rufa	111	0	74	0	121



Species	Scientific Name	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21
Robin	Erithacus rubecula	12	2	16	4	3
Rook	Corvus frugilegus	6	235	0	40	16
Siskin	Carduelis spinus	4	0	15	0	0
Sparrowhawk	Accipiter nisus	0	0	1	0	0
Treecreeper	Certhia familiaris	0	0	1	4	0
Woodpigeon	Columba palumbus	56	0	62	34	61
Wren	Troglodytes troglodytes	4	2	8	1	7