



Appendix 7.10
Wintering Bird Survey Report

August 2019

Document Title	The Lanes Winter Bird Survey
Prepared for	Taylor Wimpey North West / Homes England
Prepared by	TEP - Warrington
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Author	Damian Young
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Checked	Mike Walker
Approved	Mike Walker

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4.0	06/08/19	LP	MW	Updated site description	Issued

CONTENTS	PAGE
1.0 Introduction	1
2.0 Method	3
3.0 Results	4
4.0 Conclusions.....	8

TABLES	PAGE
Table 1: Peak counts of wader, wildfowl, other waterbird, raptors, protected and BoCC species on the ground within 500m of the proposed development site boundary during the transect survey.....	5

FIGURES	PAGE
Figure 1: Survey Area Plan.....	2

APPENDICES

APPENDIX A: Designated Site Citations

DRAWINGS

G6900.019 WBS Transect Visit 1 - 27.09.17
G6900.020 WBS Transect Visit 2 - 03.10.17
G6900.021 WBS Transect Visit 3 - 11.10.17
G6900.022 WBS Transect Visit 4 - 25.10.17
G6900.023 WBS Transect Visit 5 - 06.12.17
G6900.024 WBS Transect Visit 6 - 21.12.17
G6900.025 WBS Transect Visit 7 - 26.01.18
G6900.026 WBS Transect Visit 8 - 14.02.18
G6900.027 WBS Transect Visit 9 - 23.01.18

1.0 Introduction

1.1 Taylor Wimpey and Homes England are seeking to obtain planning permission for residential-led mixed-use development and on land to the east of Penwortham Way known as 'The Lanes, Penwortham' (hereafter referred to as 'the site').

1.2 TEP was commissioned in September 2017 to determine the usage of the site by overwintering birds.

Description of Site

1.3 The central grid reference of the site is SD 53329 25884 and the location of the site is shown in Figure 1 below. Hatched areas within the red line site boundary in Figure 1 do not fall within the scope of the current planning application and these were not subject to surveys.

1.4 The site is irregular in shape and occupies approximately 53ha on land to the east of Penwortham Way to the south of the settlement of Penwortham.

1.5 The site is bound by Penwortham Way to the west, existing residential development south of Kingsfold Drive to the north, the West Coast mainline railway to the east and agricultural fields to the south.

1.6 The site comprises a mix of land uses including:

- Agricultural land separated into a number of fields by fences, hedgerows and trees;
- Pylon accommodation land;
- Pylon corridor; and
- Roads.

1.7 The site surrounds a number of residential dwellings and light industrial buildings which do not lie within the application boundary.

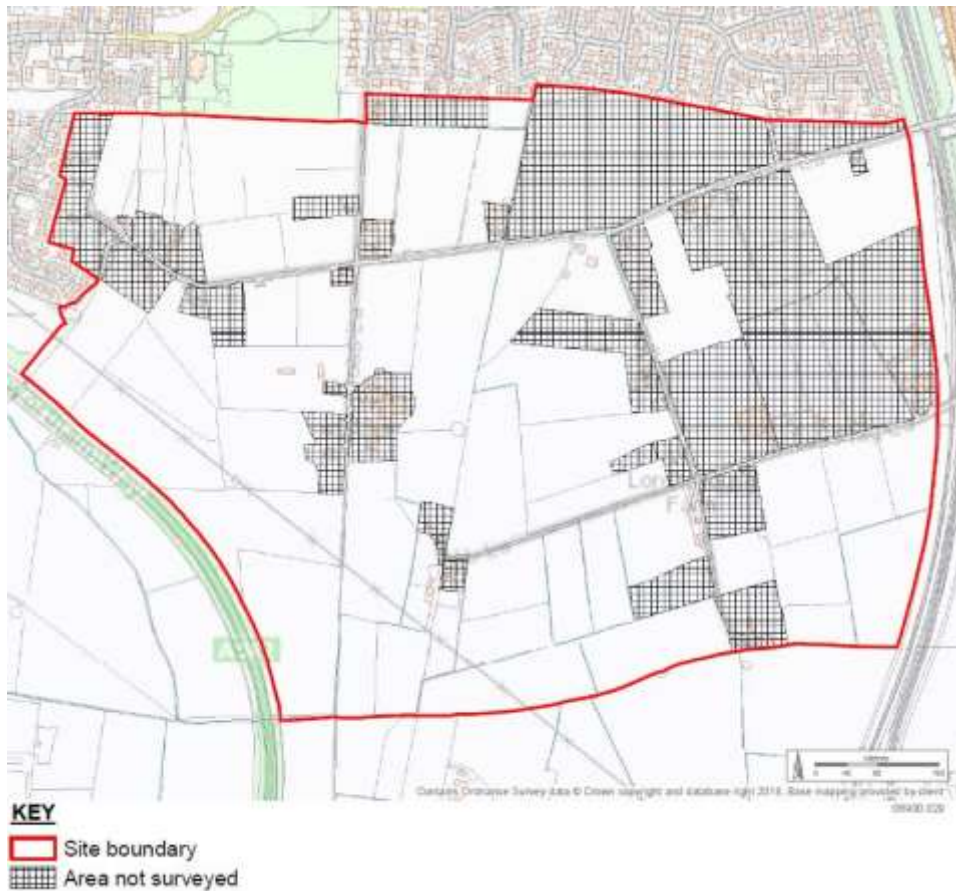


Figure 1: Site Location. Contains Ordnance Survey data © Crown copyright and database right 2018.

Site Suitability for Overwintering Birds

- 1.8 The arable and grassland habitats within the site provide suitable refuge and foraging opportunities for overwintering birds, particularly for waterfowl such as geese and ducks. Hedgerows throughout the site provide suitable foraging habitat for small passerine species.

2.0 Method

Winter Bird Survey

- 2.1 The winter bird survey comprised nine visits between September 2017 and February 2018. October to March forms the winter period where species of potential interest for this site associated with nearby European protected sites (e.g. Ribble and Alt Estuaries Special Protection Area (SPA)/ Ramsar and Martin Mere SPA/ Ramsar) are present in significant numbers in the wider area. The bird migration season also includes September and April.
- 2.2 During each survey visit a transect route was walked throughout the site and surrounding 500m buffer. The transect surveys lasted for between four and six hours.
- 2.3 Birds recorded during the transect survey included: all wader, wildfowl and raptor species; Birds of Conservation Concern (BoCC) Amber or Red List species; priority species listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006); and protected species listed on Schedule 1 of the Wildlife and Countryside Act (1981, as amended). Observations were recorded directly onto the survey map.
- 2.4 No limitations were encountered during the surveys.

3.0 Results

Designated Sites

- 3.1 There are four internationally designated sites in the area surrounding the proposed development site: the Ribble and Alt Estuaries SPA and Ramsar site is 6.79km west of the site and Martin Mere SPA and Ramsar site is 15km south west of the site. Citations for these designations are provided in Appendix A.

Ribble & Alt Estuaries SPA/Ramsar

- 3.2 This designated area covers 12,300 ha and comprises two estuaries (the Ribble estuary being by far the largest). It is dominated by mud and sand-flats, saltmarsh and coastal grazing marsh.

- 3.3 The SPA qualifies under Article 4.1 for being regularly used by 1% or more of the GB population of the following species:

- Common tern (breeding)
- Ruff (breeding)
- Bar-tailed godwit (over winter)
- Bewick's swan (over winter)
- Golden plover (over winter)
- Whooper swan (over winter)

- 3.4 The SPA also qualifies under Article 4.2 for supporting important populations of several wintering bird species, including pink-footed goose, black-tailed godwit, oystercatcher and shelduck.

Martin Mere SPA/Ramsar

- 3.5 This protected area covers 120 ha and is a restored wetland site with a complex of wetland habitats, including: open water, seasonally flooded marsh and damp neutral hay meadows.

- 3.6 This SPA qualifies under Article 4.1 for supporting populations of European importance of the following species:

- Bewick's swan
- Whooper swan

- 3.7 The SPA also qualifies under Article 4.2 for supporting wintering populations of the following species:

- Pink-footed goose

Winter Bird Survey

- 3.8 The results of the 2017-2018 winter bird survey are illustrated in Drawings G6900.019 to G6900.027. Counts for each species during each survey visit are presented in Table 1.

SPA/Ramsar Species

- 3.9 During the winter bird survey no SPA/Ramsar qualifying species for the nearby designated sites were recorded on the ground within 500m of the proposed site boundary, although a flock of five pink-footed geese were recorded flying over the site in a north westerly direction during visit four on the 25th October 2017.

Other Raptor, Waterbird, Protected and BoCC Species

- 3.10 Twenty one target species were recorded on the ground within 500m of the site during the winter bird survey.
- 3.11 The majority of bird species recorded during the survey were passerines. Species such as dunnock, house sparrow, bullfinch and redwing were recorded in hedgerows, trees and scrub along field boundaries and residential roads and gardens.
- 3.12 A flock of 58 linnet were recorded feeding in a stubble field within the site, during survey visit eight on the 14th February 2018.
- 3.13 Up to 12 tree sparrows were recorded during the last 5 visits foraging in hedgerows within the northern half of the site. A single yellowhammer was recorded on 14th February 2018.
- 3.14 Black-headed gulls were recorded during seven survey visits in a community playing field just beyond the north west corner of the site. A flock of 55 black-headed gull were also recorded on farmland in the south east of the site during visit two on the 3rd October 2017.
- 3.15 An individual snipe was recorded in farmland south of Nib Lane during survey visit three on the 11th October 2017.

Table 1: Peak counts of wader, wildfowl, other waterbird, raptors, protected and BoCC species on the ground within 500m of the proposed development site boundary during the transect survey.

Species	Site (S) / Site inc. 500m Buffer (SBU)	Visit Number									Peak Count (date recorded)
		1	2	3	4	5	6	7	8	9	
Black-headed Gull	S								50		50 (14/2/18)
	SBU		63	25	23	16	5	16	50		63 (3/10/18)
Bullfinch	S	4		3	1	5	3	2		3	5 (6/12/17)
	SBU	6		3	1						6 (27/09/17)
Buzzard	S				3						3 (25/10/17)
	SBU				3						3 (25/10/17)
Common Gull	S		1								1 (03/10/17)
	SBU		1								1 (03/10/17)
Dunnock	S	8	4	7	9	7	7	14	3	13	14 (26/01/18)

Species	Site (S) / Site inc. 500m Buffer (SBU)	Visit Number									Peak Count (date recorded)
		1	2	3	4	5	6	7	8	9	
	SBU	19	5	9	10	8	9	14	5	20	20 (23/03/2018)
Grey Wagtail	S							1			1 (26/01/18)
	SBU							1			1 (26/01/18)
Herring Gull	S							1			1 (26/01/18)
	SBU							1			1 (26/03/180)
House Sparrow	S	14	5	19	9	Col	col	14	6	26	26 (23/03/18)
	SBU	22	8	26	10	Col	Col	24	8	38	38 (23/03/18)
Kestrel	S				2	1					2 (25/10/17)
	SBU				2	1					2 (25/10/17)
Linnet	S				13				58		58 (14/02/18)
	SBU				13				58		58 (14/02/18)
Mallard	S									4	4 23/03/18
	SBU									4	4 (23/03/18)
Meadow Pipit	S					4					4 (06/12/17)
	SBU					4					4 (06/12/17)
Redwing	S			12	52	38	42	14	18		52 (25/10/17)
	SBU			12	52	52	42	39	18		52 (25/10/17)
Reed Bunting	S				1						1 (25/10/17)
	SBU				1						1 (25/10/17)
Skylark	S										
	SBU							1			1 (26?01/18)
Snipe	S			1							1 (11/10/17)
	SBU			1							1 (11/10/17)
Song Thrush	S			6	1	3	4	2	2	4	6 (11/10/17)
	SBU			6	1	3	4	3	2	5	6 (11/10/17)
Starling	S				10	8	55	14	94		94 (14/02/18)
	SBU				10	8	55	14	94	1	94 (14/02/18)

Species	Site (S) / Site inc. 500m Buffer (SBU)	Visit Number									Peak Count (date recorded)
		1	2	3	4	5	6	7	8	9	
Stock Dove	S										
	SBU					2	2				2 (06/12/17 and 21/02/18)
Tree Sparrow	S					3	4	8	1	12	12 (23/03/18)
	SBU					3	4	8	1	12	12 (23/03/18)
Yellow- hammer	S								1		1 (14/02/18)
	SBU								1		1 (14/02/18)

S: Site; SBU: Site including 500m buffer

Visit 1: 27th September 2017; Visit 2: 3rd October 2017; Visit 3: 11th October 2017; Visit 4: 25th October 2017
Visit 5: 6th December 2017; Visit 6: 21st December 2017; Visit 7: 26th January 2018; Visit 8: 14th February 2018;
Visit 9: 23rd March 2018

4.0 Conclusions

- 4.1 There are four internationally designated sites in the landscape surrounding the site: the Ribble and Alt Estuaries SPA and Ramsar site and Martin Mere SPA and Ramsar site.
- 4.2 Nine winter bird survey visits were conducted between September 2017 and March 2018 to ensure the whole winter bird season was covered.
- 4.3 During the winter bird survey no SPA or Ramsar qualifying species for the nearby designated sites were recorded on the ground within 500m of the site, although a small number of pink-footed geese were recorded flying over the site during one of the survey visits. Due to the lack of usage of the site by SPA or Ramsar species, the proposed development will not have any impact on these protected sites.
- 4.4 Twenty one other raptor, waterbird, protected and BoCC species were recorded on the ground within 500m of the site during the winter bird survey. The majority of these were BoCC passerine species supported by the hedgerows and open fields throughout the site.
- 4.5 Removal of hedgerows within the site would result in a reduction in sheltering and foraging opportunities for local bird populations.

5.0 Recommendations

- 5.1 Hedgerows within the site should be retained where possible and protected from development in accordance with the recommendations made in the Hedgerow Assessment Report (TEP Report Ref: 6900.003).

APPENDIX A: Designated Site Citations

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

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DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 28 November 1985

3. Country:

UK (England)

4. Name of the Ramsar site:

Martin Mere

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ☐;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

53 37 24 N 02 52 37 W

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Southport

Martin Mere lies between Ormskirk and Southport, close to the village of Burscough.

Administrative region: Lancashire

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 119.89

Min.	3
Max.	4
Mean	4

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Martin Mere occupies part of a former lake and mire which extended over some 1300 hectares of the Lancashire Coastal Plain during the 17th century. In 1972 the Wildfowl and Wetlands Trust purchased 147 hectares of the former Holcrofts Farm, consisting mainly of rough damp pasture, with the primary aim of providing grazing and roosting opportunities for wildfowl. Since acquisition the rough grazed pastures have been transformed by means of positive management into a wildfowl refuge of international importance. Areas of open water with associated muddy margins have been created, whilst maintaining seasonally flooded marsh and reed swamp habitats via water level control. In addition large areas of semi-improved damp grassland, unimproved species rich damp grassland and rush pasture have been maintained and enhanced via appropriate grazing management. Of the pastures the most botanically important are those species rich areas supporting whorled caraway, present here at one of very few sites in northern England. Such pastures are nationally important. However, the outstanding importance of Martin Mere is as a refuge for its large and diverse wintering, passage and breeding bird community. In September 2002, an additional 63 hectares of land were purchased on the southern most part of the refuge at Woodend Farm, with the aid of the Heritage Lottery Fund, to restore arable land to a variety of wetland habitats including seasonally flooded grassland, reedbed, wet woodland and open water habitats. These are all key Biodiversity Action Plan habitats within the Lancashire Plain and Valleys Natural Area.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

5, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 5

Assemblages of international importance:**Species with peak counts in winter:**

25306 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6 – species/populations occurring at levels of international importance.**Qualifying Species/populations (as identified at designation):****Species with peak counts in spring/autumn:**

Pink-footed goose , <i>Anser brachyrhynchus</i> , Greenland, Iceland/UK	8186 individuals, representing an average of 3.4% of the population (5 year peak mean 1998/9-2002/3)
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Species with peak counts in winter:

Tundra swan , <i>Cygnus columbianus bewickii</i> , NW Europe	61 individuals, representing an average of 0.7% of the GB population (5 year peak mean 1998/9- 2002/3)
Whooper swan , <i>Cygnus cygnus</i> , Iceland/UK/Ireland	1320 individuals, representing an average of 6.3% of the population (5 year peak mean 1998/9-2002/3)
Eurasian wigeon , <i>Anas penelope</i> , NW Europe	3062 individuals, representing an average of 0.7% of the GB population (5 year peak mean 1998/9-2002/3)
Northern pintail , <i>Anas acuta</i> , NW Europe	415 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9- 2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

Details of bird species occurring at levels of National importance are given in Section 22

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):
Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	acidic, sand, mud, clay, alluvium, peat, nutrient-poor, sedimentary, sandstone
Geomorphology and landscape	lowland, coastal, floodplain
Nutrient status	eutrophic, highly eutrophic
pH	alkaline, circumneutral
Salinity	fresh
Soil	mainly organic
Water permanence	usually permanent, usually seasonal / intermittent
Summary of main climatic features	Annual averages (Blackpool, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/blackpool.html) Max. daily temperature: 12.9° C Min. daily temperature: 6.4° C Days of air frost: 40.3 Rainfall: 871.3 mm Hrs. of sunshine: 1540.3

General description of the Physical Features:

Martin Mere comprises open water, seasonally-flooded marsh and damp, neutral hay meadows overlying deep peat.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

Martin Mere comprises open water, seasonally-flooded marsh and damp, neutral hay meadows overlying deep peat.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Other, Recharge and discharge of groundwater, Flood water storage / desynchronisation of flood peaks

19. Wetland types:

Human-made wetland, Inland wetland

Code	Name	% Area
Ts	Freshwater marshes / pools: seasonal / intermittent	78
O	Freshwater lakes: permanent	13.7
U	Peatlands (including peat bogs swamps, fens)	7.1
Xf	Freshwater, tree-dominated wetlands	1.2

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Large areas of open water with muddy margins associated with seasonally flooded grazing marsh and reed swamp. There are also large areas of surrounding damp species-rich grassland and semi-improved areas of damp grassland maintained by grazing.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site.**Higher Plants.**

Carum verticillatum, Rumex maritimus, Oenanthe fistulosa, Oenanthe aquatica, Lemna gibba

Lower Plants.

Leucagaricus serenus

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds**Species currently occurring at levels of national importance:****Species with peak counts in spring/autumn:**

Eurasian teal , <i>Anas crecca</i> , NW Europe	3494 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)
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Species with peak counts in winter:

Common shelduck , <i>Tadorna tadorna</i> , NW Europe	936 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)
Common pochard , <i>Aythya ferina</i> , NE & NW Europe	829 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)
Ruff , <i>Philomachus pugnax</i> , Europe/W Africa	139 individuals, representing an average of 19.8% of the GB population (5 year peak mean 1998/9-2002/3)
Spotted redshank , <i>Tringa erythropus</i> , Europe/W Africa	2 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1991/92-1995/96)

Species Information

None reported

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic

Aquatic vegetation (e.g. reeds, willows, seaweed)
 Archaeological/historical site
 Environmental education/ interpretation
 Livestock grazing
 Non-consumptive recreation
 Scientific research
 Tourism

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	
Private		+
Other	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Current scientific research	+	+
Arable agriculture (unspecified)		+
Permanent arable agriculture		+
Grazing (unspecified)	+	+
Rough or shifting grazing	+	+
Permanent pastoral agriculture	+	+
Flood control		+

26. Factors (past, present or potential) adversely affecting the site’s ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. *Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.*
2. *Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.*

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
No factors reported	NA				

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Is the site subject to adverse ecological change? NO

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Site management statement/plan implemented	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Fauna.

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl &

Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Considerable amounts of research continues to undertaken by the Wildfowl and Wetlands Trust at Martin Mere on the feeding/breeding and behavioural ecology of individual species of wildfowl, in addition to fresh water grazing marsh management.

Environment.

Daily weather records, water level and water quality monitoring is undertaken by wardening staff.

Habitat.

Invertebrate and plant species records are collected by volunteers on a regular basis.

Miscellaneous.

Visitor and educational usage of the Refuge is monitored on a daily basis at this extremely popular and well visited Wildfowl & Wetlands Trust Refuge.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

WWT employs a number of warden-teacher staff who undertake environmental education work and escort large numbers of school parties around the refuge throughout most of the year. Various educational programmes have also been run for adults in recent years. WWT has excellent visitor and schoolroom facilities as part of its Interpretative Centre on the Refuge.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

The WWT Refuge at Martin Mere has excellent bird watching and interpretative facilities, including toilets a tea room/restaurant and shop for the selling of WWT goods and other commodities, as well as educational/interpretative materials and an adventure playground based on a bird theme. In addition its waterfowl collection allows close contact with many species of duck, goose and swan from all over the world.

The latter compliments large areas of refuge which remain free from disturbance for wintering, passage and breeding wildfowl and wading birds. The latter being overlooked from many well constructed tower hides. The Refuge including its waterfowl gardens are extremely well visited throughout the year by large numbers of visitors and parties of school children alike. The Refuge features in tourist literature and is well known throughout the country. People management is of the highest order and from a tourist point of view is sustainable without causing detrimental effects upon the wildlife interest of the refuge.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,
European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol,
BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House,
Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

Phase I Habitat Survey

Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge

Environment Agency (1997) *Martin Mere Water Level Management Plan*. Environment Agency

Forshaw, DW (****) *Wild geese and swans in Lancashire 1995–1998*

Gray, LC (1980) *Environmental bibliography of north-west England (vice-counties 59, 60, 69 and 70) 1850–1979*. University of Lancaster Library, Lancaster (Library Occasional Paper, No. 10)

Hale, WG (1985) *Martin Mere. Its history and natural history*. Causeway Press, Ormskirk

Huddart, D & Glasser, NF (2002) *Quaternary of northern England*. Joint Nature Conservation Committee, Peterborough (Geological Conservation Review Series, No. 25)

Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge.
www.wwt.org.uk/publications/default.asp?PubID=14

Nature Conservancy Council (1987) *Invertebrate Site Register – Lancashire*. Nature Conservancy Council

Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.)
www.jncc.gov.uk/UKSPA/default.htm

Wildfowl and Wetlands Trust (****) *Draft Management Plan*. Wildfowl and Wetlands Trust

Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: ramsar@ramsar.org

This citation / map relates to a site entered in
the Register of European sites for Great Britain.
Register reference number UK 02511
Date of registration 30 JAN 1996

Signed Bull
on behalf of the Secretary of State for the Environment

File Ref: SD 41/2

COUNTY: LANCASHIRE

SITE NAME: MARTIN MERE, BURSCOUGH

DISTRICT: WEST LANCASHIRE

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of
the Wildlife and Countryside Act 1981

Local Planning Authority: West Lancashire District Council

National Grid Reference: SD 420146 Area: 119.3 (ha.) 294.8 (ac.)

Ordnance Survey Sheet 1:50,000: 108 1:10,000: SD 41 NW, SW

Date Notified (Under 1949 Act): 1979 Date of Last Revision: -

Date Notified (Under 1981 Act): 1984 Date of Last Revision: 1984

Other Information:

1. The site boundary has been amended by minor corrections. The area has also been corrected as the acreage given on the 1979 notification was incorrect.
2. This is a Wildfowl Trust Reserve.

Reasons for Notification:

Martin Mere is a low-lying wetland complex of open-water, marsh and grassland habitats overlying deep peat. It is situated to the north of Burscough and occupies part of the site of the old Martin Mere which, prior to drainage, was probably the largest lake in Lancashire. Following acquisition by the Wildfowl Trust in 1974, the rough-grazed pasture of a decade ago has been transformed by positive management techniques into a reserve of international importance for waterfowl.

The principal interest of the site lies in the numbers of migrant birds which it supports during the winter months, with overall numbers of wildfowl regularly in excess of 10,000 and over 100 different species using the Mere as a wintering ground. Of particular importance are the wintering populations of pink-footed geese (up to 18,000), teal (5,000-10,000) and pintail (1000-2500) which, by representing more than 1% of their total NW European populations, reinforce the international status of this site.

Martin Mere also supports nationally important numbers of Bewick's swan, gadwall, mallard, whooper swan and shoveler with numbers regularly well in excess of 1% of the total British wintering population. Nationally exceptional numbers of snipe, Lapwing and black-tailed godwit have been recorded and the wintering flock of ruff (350 on average) is believed to be the largest in Britain.

The breeding community is diverse, totalling over 35 species, and includes important breeding populations of greylag goose (representing over 1% of the British breeding population), gadwall, mallard and snipe.

In total, over 150 species of birds have been recorded at the site and this includes several unusual species, such as avocet, lesser yellowlegs, pratincole, marsh sandpiper and white-winged black tern which have been recorded on passage. Martin Mere is, thus, of exceptional value for the wealth and diversity of its avifauna.

Additional scientific interest is provided by the presence of two locally important plant species: water dropwort (Oenanthe fistulosa) which is regionally scarce and whorled caraway (Carum verticillatum) found here in abundance in its only Lancashire locality and one of very few sites in the north of England.



European Site Conservation Objectives for Martin Mere Special Protection Area Site Code: UK9005111

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)

A038 *Cygnus cygnus*; Whooper swan (Non-breeding)

A040 *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)

A052 *Anas crecca*; Eurasian teal (Non-breeding)

A054 *Anas acuta*; Northern pintail (Non-breeding)

Waterbird assemblage

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the “Habitats Regulations”) and Article 6(3) of the Habitats Directive. They must be considered when a competent authority is required to make a ‘Habitats Regulations Assessment’ including an Appropriate Assessment, under the relevant parts of this legislation.

These Conservation Objectives and the accompanying Supplementary Advice (where this is available) will also provide a framework to inform the management of the European Site under the provisions of Articles 4(1) and 4(2) of the Wild Birds Directive, and the prevention of deterioration of habitats and significant disturbance of its qualifying features required under Article 6(2) of the Habitats Directive.

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 30 June 2014 (Version 2). This document updates and replaces an earlier version dated 29 May 2012 to reflect Natural England’s Strategic Standard on European Site Conservation Objectives 2014. Previous references to additional features identified in the 2001 UK SPA Review have also been removed.

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

FOR OFFICE USE ONLY.

DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 16 February 1995

3. Country:

UK (England)

4. Name of the Ramsar site:

Ribble and Alt Estuaries

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinates (latitude/longitude):

53 42 41 N 02 58 44 W

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Preston

The site occupies a stretch of coastline between Liverpool and Preston on the north-west coast of England. It lies between the Mersey estuary and Morecambe Bay.

Administrative region: Lancashire; Merseyside; Sefton

10. Elevation (average and/or max. & min.) (metres): **11. Area** (hectares): 13464.1

Min.	-2
Max.	19
Mean	1

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

A large area including two estuaries which form part of the chain of west coast sites which fringe the Irish Sea. The site is formed by extensive sand and mudflats backed, in the north, by the saltmarsh of the Ribble Estuary and, to the south, the sand dunes of the Sefton Coast. The tidal flats and saltmarsh support internationally important populations of waterfowl in winter and the sand dunes support vegetation communities and amphibian populations of international importance.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

2, 5, 6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 2

This site supports up to 40% of the Great Britain population of natterjack toads *Bufo calamita*.

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

222038 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species regularly supported during the breeding season:

Lesser black-backed gull , *Larus fuscus graellsii*, 4108 apparently occupied nests, representing an average of 2.7% of the breeding population (Seabird 2000 Census)
W Europe/Mediterranean/W Africa

Species with peak counts in spring/autumn:

Ringed plover , <i>Charadrius hiaticula</i> , Europe/Northwest Africa	3761 individuals, representing an average of 5.1% of the population (5 year peak mean 1998/9-2002/3 - spring peak)
Grey plover , <i>Pluvialis squatarola</i> , E Atlantic/W Africa -wintering	11021 individuals, representing an average of 4.4% of the population (5 year peak mean 1998/9-2002/3 - spring peak)
Red knot , <i>Calidris canutus islandica</i> , W & Southern Africa (wintering)	42692 individuals, representing an average of 9.4% of the population (5 year peak mean 1998/9-2002/3)
Sanderling , <i>Calidris alba</i> , Eastern Atlantic	7401 individuals, representing an average of 6% of the population (5 year peak mean 1998/9-2002/3 - spring peak)
Dunlin , <i>Calidris alpina alpina</i> , W Siberia/W Europe	38196 individuals, representing an average of 2.8% of the population (5 year peak mean 1998/9-2002/3 - spring peak)
Black-tailed godwit , <i>Limosa limosa islandica</i> , Iceland/W Europe	3323 individuals, representing an average of 9.4% of the population (5 year peak mean 1998/9-2002/3)
Common redshank , <i>Tringa totanus totanus</i> ,	4465 individuals, representing an average of 1.7% of the population (5 year peak mean 1998/9-2002/3)
Lesser black-backed gull , <i>Larus fuscus graellsii</i> ,	1747 individuals, representing an average of 2.8% of the GB population (5 year peak mean 1998/9-2002/3)
Species with peak counts in winter:	
Tundra swan , <i>Cygnus columbianus bewickii</i> , NW Europe	230 individuals, representing an average of 2.8% of the GB population (5 year peak mean 1998/9-2002/3)
Whooper swan , <i>Cygnus cygnus</i> , Iceland/UK/Ireland	211 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)
Pink-footed goose , <i>Anser brachyrhynchus</i> , Greenland, Iceland/UK	6552 individuals, representing an average of 2.7% of the population (5 year peak mean 1998/9-2002/3)

Common shelduck , <i>Tadorna tadorna</i> , NW Europe	2944 individuals, representing an average of 3.7% of the GB population (5 year peak mean 1998/9-2002/3)
Eurasian wigeon , <i>Anas penelope</i> , NW Europe	69841 individuals, representing an average of 4.6% of the population (5 year peak mean 1998/9-2002/3)
Eurasian teal , <i>Anas crecca</i> , NW Europe	5107 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9-2002/3)
Northern pintail , <i>Anas acuta</i> , NW Europe	1497 individuals, representing an average of 2.4% of the population (5 year peak mean 1998/9-2002/3)
Eurasian oystercatcher , <i>Haematopus ostralegus ostralegus</i> , Europe & NW Africa -wintering	18926 individuals, representing an average of 1.8% of the population (5 year peak mean 1998/9-2002/3)
Bar-tailed godwit , <i>Limosa lapponica lapponica</i> , W Palearctic	13935 individuals, representing an average of 11.6% of the population (5 year peak mean 1998/9-2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

Details of bird species occurring at levels of National importance are given in Section 22

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	basic, neutral, sand, alluvium, sedimentary
Geomorphology and landscape	lowland, coastal, intertidal sediments (including sandflat/mudflat), open coast (including bay), estuary
Nutrient status	mesotrophic
pH	alkaline, circumneutral
Salinity	brackish / mixosaline, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Blackpool, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/blackpool.html) Max. daily temperature: 12.9° C Min. daily temperature: 6.4° C Days of air frost: 40.3 Rainfall: 871.3 mm Hrs. of sunshine: 1540.3

General description of the Physical Features:

The Ribble and Alt Estuaries lie on the Irish Sea coast of north-west England. The site comprises two estuaries, of which the Ribble Estuary is by far the larger, together with an extensive area of sandy foreshore along the Sefton Coast. The site consists of extensive sand- and mud-flats and, particularly in the Ribble Estuary, large areas of saltmarsh. There are also areas of coastal grazing marsh located behind the sea embankments.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The Ribble and Alt Estuaries lie on the Irish Sea coast of north-west England. The site comprises two estuaries, of which the Ribble Estuary is by far the larger, together with an extensive area of sandy foreshore along the Sefton Coast. The site consists of extensive sand- and mud-flats and, particularly in the Ribble Estuary, large areas of saltmarsh. There are also areas of coastal grazing marsh located behind the sea embankments.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping

19. Wetland types:

Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	75
H	Salt marshes	16
E	Sand / shingle shores (including dune systems)	8
Ts	Freshwater marshes / pools: seasonal / intermittent	1

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The Ribble and Alt Estuaries contain extensive areas of intertidal sand and mudflats. These are backed by, on the Ribble, one of the most extensive areas of grazed saltmarsh in Britain and, along the Sefton Coast, the largest calcareous dune complex in north-western England.

The intertidal flats support internationally important populations of waterfowl which feed on a rich invertebrate fauna and *Enteromorpha* beds.

The saltmarsh supports a range of vegetation communities typical of north-west England maintained by stable grazing regimes. However, the estuary is accreting in response to large-scale land-claim, with *Spartina anglica* dominant in the pioneer stages with *Festuca rubra* and *Puccinellia maritima* dominating the grazed sward. Natural transitions are prevented by coastal defence structures. Small areas of saltmarsh also occur in discrete locations along the Sefton Coast.

The sand dunes display a full range of plant communities and habitat types from embryo to grey dunes with transitions to dune grassland and heath. Numerous species-rich slacks can be found throughout the dune transition but generally the extent of vegetation cover and species diversity increases with distance from the sea. *Elytrigia juncea* and *Elymus arenarius* dominate the embryo dunes (NVC SD5&7), being replaced by *Ammophila arenaria* in the mobile yellow dunes (SD6); large areas of bare sand are still present. Two distinct types of vegetation dominate the extensive grey dunes, the first a *Festuca rubra/Rubus caesius* dune pasture and a *Salix repens/R. caesius*/dwarf shrub (SD9

variants). These dunes also support two large coniferous plantations which support a distinctive flora. Elsewhere, and in the absence of management, smaller areas of secondary deciduous scrub/woodland remain including *Hippophae rhamnoides* and various *Populus* spp. Dune slacks are regularly found throughout the dune complex. Normally dominated by creeping willow, they also support a diverse flora including the nationally rare liverwort, *Petalophyllum ralfsii* and dune helleborine *Epipactis dunensis* (SD15&16). Dune grassland and heath occupy fragmented locations on the extreme eastern edge of the system with *Calluna vulgaris* and *Carex arenaria* both strong characteristics.

The dune system is a candidate Special Area of Conservation for the following Annex I habitats: dunes with creeping willow; shifting dunes; humid dune slacks; shifting dunes with marram; petalwort *Petalophyllum ralfsii*; great crested newt *Triturus cristatus*; coastal dune heathland; and dune grassland ('grey dunes'). The last two are priority habitat types under the EC Habitats Directive.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

International importance

Lower plants

Petalophyllum ralfsii Petalwort (Conservation status: European Red List: Vulnerable; Habitats Directive Annex II species (S1395))

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds

Species currently occurring at levels of national importance:

Species regularly supported during the breeding season:

Black-headed gull , <i>Larus ridibundus</i> , N & C Europe	14888 apparently occupied nests, representing an average of 11.6% of the GB population (Seabird 2000 Census)
Common tern , <i>Sterna hirundo hirundo</i> , N & E Europe	182 pairs, representing an average of 1.7% of the GB population (1996)

Species with peak counts in spring/autumn:

Ruff , <i>Philomachus pugnax</i> , Europe/W Africa	60 individuals, representing an average of 8.5% of the GB population (5 year peak mean 1998/9-2002/3)
Eurasian curlew , <i>Numenius arquata arquata</i> , N. a. <i>arquata</i> Europe (breeding)	2502 individuals, representing an average of 1.7% of the GB population (5 year peak mean 1998/9-2002/3)
Common greenshank , <i>Tringa nebularia</i> , Europe/W Africa	9 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Red-throated diver , <i>Gavia stellata</i> , NW Europe	56 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)
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Great cormorant , <i>Phalacrocorax carbo carbo</i> , NW Europe	463 individuals, representing an average of 2% of the GB population (5 year peak mean 1998/9- 2002/3)
Northern shoveler , <i>Anas clypeata</i> , NW & C Europe	200 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9- 2002/3)
Black (common) scoter , <i>Melanitta nigra nigra</i> ,	691 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9- 2002/3)
European golden plover , <i>Pluvialis apricaria</i> <i>apricaria</i> , P. a. altifrons Iceland & Faroes/E Atlantic	3588 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9- 2002/3)
Spotted redshank , <i>Tringa erythropus</i> , Europe/W Africa	2 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9- 2002/3)
Black-headed gull , <i>Larus ridibundus</i> , N & C Europe	16849 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9- 2002/3)

Species Information

Species occurring at levels of national importance:

Natterjack toad *Bufo calamita* (Habitats Directive Annex IV species (S1202)) (c. 40% GB population)

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

- Aesthetic
- Archaeological/historical site
- Environmental education/ interpretation
- Fisheries production
- Livestock grazing
- Non-consumptive recreation
- Scientific research
- Sport fishing
- Sport hunting
- Tourism
- Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	+
Local authority, municipality etc.	+	+
National/Crown Estate	+	+
Private	+	+
Public/communal	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	
Fishing: commercial	+	+
Fishing: recreational/sport	+	+
Gathering of shellfish	+	
Bait collection	+	
Permanent arable agriculture		+
Grazing (unspecified)	+	
Hunting: recreational/sport	+	
Industry	+	
Sewage treatment/disposal	+	+
Harbour/port		+
Flood control	+	+
Irrigation (incl. agricultural water supply)		+
Mineral exploration (excl. hydrocarbons)	+	
Oil/gas exploration		+
Oil/gas production		+
Transport route	+	+
Urban development		+
Military activities		+

26. Factors (past, present or potential) adversely affecting the site’s ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Erosion	2	Coastal erosion is a factor at Formby Point with an estimated loss of 4 metres per year. It is a concern because pine woodland on the sand dunes is causing coastal squeeze and therefore preventing sand dune habitats from rolling back; as such dune slack habitats for natterjack toads are declining/being lost.	+		+

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
 Erosion - At Ainsdale Sand Dunes National Nature Reserve English Nature have made efforts to restore dune habitat; an Environmental Impact Assessment has been carried out with a view to submitting a tree-felling application in February 2005.

Is the site subject to adverse ecological change? NO

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+
National Nature Reserve (NNR)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Management agreement	+	
Special Area of Conservation (SAC)	+	
Management plan in preparation	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Contemporary.

Fauna.

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Annual natterjack toad monitoring programme: Leisure Services, Metropolitan Borough of Sefton and English Nature Ainsdale NNR.

Completed.

Flora.

National sand dune survey. Sefton coast NCC Report (Edmondson *et al.* 1989)

Bryophyte surveys (various) of Sefton Coast (M Newton).

Ribble and Alt NVC saltmarsh survey 2002 (The Environment Partnership 2003)

Fauna.

Invertebrate surveys (numerous)

Documents held by various authorities on the coast including English Nature & Metropolitan Borough of Sefton.

For a full account of reports, papers etc, reference should be made to:

The sand dunes of the Sefton Coast (Atkinson & Houston 1993).

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

The Metropolitan Borough of Sefton, English Nature, National Trust and RSPB all lead guided walks onto suitable areas of the coast at all times of the year.

The entire site is reasonably well provided with fixed interpretation panels at many of the main public access points around the site.

The RSPB is developing educational/visitor facilities at its Reserve.

Southport Pier is developing into a major wildlife interpretation centre. English Nature, RSPB and Sefton Council are working on the project.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

Infrastructure developments

There are caravan parks adjacent to the site at Formby and moorings in the Alt. No major expansion anticipated.

Land-based recreation

There is intensive recreational use of the northern beaches (Southport & Ainsdale) where traditional activities are concentrated. These include beach car parking, and, during the summer months several large-scale events. Elsewhere, recreation is more informal and less intensive - but all beach activities

on the Sefton Coast are managed by the Beach Management Plan. The golf courses are heavily used; Royal Birkdale hosted the British Open Golf Championship in 1998.

Water-based recreation

Mainly a summer activity based on the beach at Southport. Becoming more common but has, in the past, included pleasure trips on hovercraft.

Airborne recreation

Some disturbance in winter months by micro-lights, particularly to pink-footed goose populations.

Wildfowling

Occurs on extensive areas of the Ribble including the NNR. Usually controlled by agreement.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,
European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol,
BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House,
Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

- Atkinson, D & Houston, J (eds.) (1993) *The sand dunes of the Sefton coast. Proceedings of the Sefton Coast Research Seminar, Liverpool, 31st May 1991*. National Museums and Galleries on Merseyside, Liverpool
- Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP & Davidson, NC (eds.) (1996) *Coasts and seas of the United Kingdom. Region 13. Northern Irish Sea: Colwyn Bay to Stranraer, including the Isle of Man*. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)
- Batten, LA, Bibby, CJ, Clement, P, Elliot, GD & Porter, RF (1990) *Red Data Birds in Britain. Action for rare, threatened and important species*. Poyser, London, for Nature Conservancy Council and Royal Society for the Protection of Birds
- Buck, AL (ed.) (1993) *An inventory of UK estuaries. Volume 3. North-west Britain*. Joint Nature Conservation Committee, Peterborough
- Burd, F (1989) *The saltmarsh survey of Great Britain. An inventory of British saltmarshes*. Nature Conservancy Council, Peterborough (Research & Survey in Nature Conservation, No. 17)
- Covey, R (1998) *Marine Nature Conservation Review Sector 11. Liverpool Bay and the Solway Firth: area summaries*. Joint Nature Conservation Committee, Peterborough (Coasts and seas of the United Kingdom. MNCR series)
- Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge
- Davies, LM (1991) Littoral survey of the coast from Crosby to Fleetwood. *Nature Conservancy Council. CSD Report, No. 1217*. (Marine Nature Conservation Review Report, No. MNCR/SR/017)
- Edmondson, SE, Gateley, PS & Nissenbaum, DA (1989). National sand dune vegetation survey. Sefton Coast, Merseyside. *Nature Conservancy Council. CSD Report, No. 917*
- George, N (1999) *Liverpool Bay coastal natural area. A nature conservation profile*. English Nature, Peterborough
- Gray, LC (1980) *Environmental bibliography of north-west England (vice-counties 59, 60, 69 and 70) 1850–1979*. University of Lancaster Library, Lancaster (Library Occasional Paper, No. 10)
- Huddart, D & Glasser, NF (2002) *Quaternary of northern England*. Joint Nature Conservation Committee, Peterborough (Geological Conservation Review Series, No. 25)
- May, VJ & Hansom, JD (eds.) (2003) *Coastal geomorphology of Great Britain*. Joint Nature Conservation Committee, Peterborough (Geological Conservation Review Series, No. 28)

- McLeod, CR, Yeo, M, Brown, AE, Burn, AJ, Hopkins, JJ & Way, SF (eds.) (2004) *The Habitats Directive: selection of Special Areas of Conservation in the UK*. 2nd edn. Joint Nature Conservation Committee, Peterborough.
www.jncc.gov.uk/SACselection
- Mills, DJL (1998) Chapter 11. Liverpool Bay to the Solway (Rhôs-on-Sea to the Mull of Galloway) (MNCR Sector 11). In: *Benthic marine ecosystems of Great Britain and the north-east Atlantic*, ed. by K. Hiscock, 315-338. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom. MNCR series)
- Musgrove, AJ, Langston, RHW, Baker, H & Ward, RM (eds.) (2003) *Estuarine waterbirds at low tide. The WeBS Low Tide Counts 1992–93 to 1998–99*. WSG/BTO/WWT/RSPB/JNCC, Thetford (International Wader Studies, No. 16)
- Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge.
www.wwt.org.uk/publications/default.asp?PubID=14
- Radley, GP (1994) *Sand dune vegetation survey of Great Britain: a national inventory. Part 1: England*. Joint Nature Conservation Committee, Peterborough
- Ratcliffe, DA (ed.) (1977) *A Nature Conservation Review. The selection of biological sites of national importance to nature conservation in Britain*. Cambridge University Press (for the Natural Environment Research Council and the Nature Conservancy Council), Cambridge (2 vols.)
- Ribble Estuary Strategy Steering Group (1997) *Ribble estuary strategy*. Lancashire County Planning Department, Lancaster
- Rose, PM & Scott, DA (1997) *Waterfowl population estimates*. 2nd edn. Wetlands International, Wageningen (Wetlands International Publication, No. 44) www.wetlands.org/IWC/wpe2/WPE2-toc.htm
- Simpson, D (2002) The fall and rise of Ainsdales's natterjacks. *British Wildlife*, **13**(3), 161-170
- Smith, PH (1999) *The sands of time. An introduction to the sand dunes of the Sefton coast*. National Museums and Galleries on Merseyside, Liverpool
- Smith, PH (2000) Classic wildlife sites – The Sefton Coast sand-dunes, Merseyside. *British Wildlife*, **12**(1), 28-36
- Stewart, NF (2004) *Important stonewort areas. An assessment of the best areas for stoneworts in the United Kingdom*. Plantlife International, Salisbury
- Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.)
www.jncc.gov.uk/UKSPA/default.htm
- Taylor, PM & Parker, JG (eds.) (1993) *The coast of north Wales & north west England. An environmental appraisal*. Hamilton Oil Company Ltd., London
- The Environment Partnership (2003) *Ribble and Alt Estuaries NVC Survey 2002*. The Environment Partnership, Warrington, for English Nature
- Weighell, AJ, Donnelly, AP & Calder, K (eds.) (2000) *Directory of the Celtic coasts and seas*. Joint Nature Conservation Committee, Peterborough

Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: ramsar@ramsar.org



European Site Conservation Objectives for Ribble and Alt Estuaries Special Protection Area Site Code: UK9005103

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- **The extent and distribution of the habitats of the qualifying features**
- **The structure and function of the habitats of the qualifying features**
- **The supporting processes on which the habitats of the qualifying features rely**
- **The population of each of the qualifying features, and,**
- **The distribution of the qualifying features within the site.**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

- A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
- A038 *Cygnus cygnus*; Whooper swan (Non-breeding)
- A040 *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)
- A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
- A050 *Anas penelope*; Eurasian wigeon (Non-breeding)
- A052 *Anas crecca*; Eurasian teal (Non-breeding)
- A054 *Anas acuta*; Northern pintail (Non-breeding)
- A130 *Haematopus ostralegus*; Eurasian oystercatcher (Non-breeding)
- A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)
- A140 *Pluvialis apricaria*; European golden plover (Non-breeding)
- A141 *Pluvialis squatarola*; Grey plover (Non-breeding)
- A143 *Calidris canutus*; Red knot (Non-breeding)

Contd/

- A144 *Calidris alba*; Sanderling (Non-breeding)
- A149 *Calidris alpina alpina*; Dunlin (Non-breeding)
- A151 *Philomachus pugnax*; Ruff (Breeding)
- A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
- A162 *Tringa totanus*; Common redshank (Non-breeding)
- A183 *Larus fuscus*; Lesser black-backed gull (Breeding)
- A193 *Sterna hirundo*; Common tern (Breeding)

Waterbird assemblage

Seabird assemblage

This is a European Marine Site

This SPA is a part of the Ribble and Alt Estuaries European Marine Site (EMS). These Conservation Objectives should be used in conjunction with the Regulation 35 Conservation Advice document for the EMS. For further details about this please visit the Natural England website at <http://www.naturalengland.org.uk/ourwork/marine/protectandmanage/mpa/europeansites.aspx> or contact Natural England's enquiry service at enquiries@naturalengland.org.uk or by phone on 0845 600 3078.

Explanatory Notes: European Site Conservation Objectives

These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and Article 6(3) of the Habitats Directive. They must be considered when a competent authority is required to make a 'Habitats Regulations Assessment' including an Appropriate Assessment, under the relevant parts of this legislation.

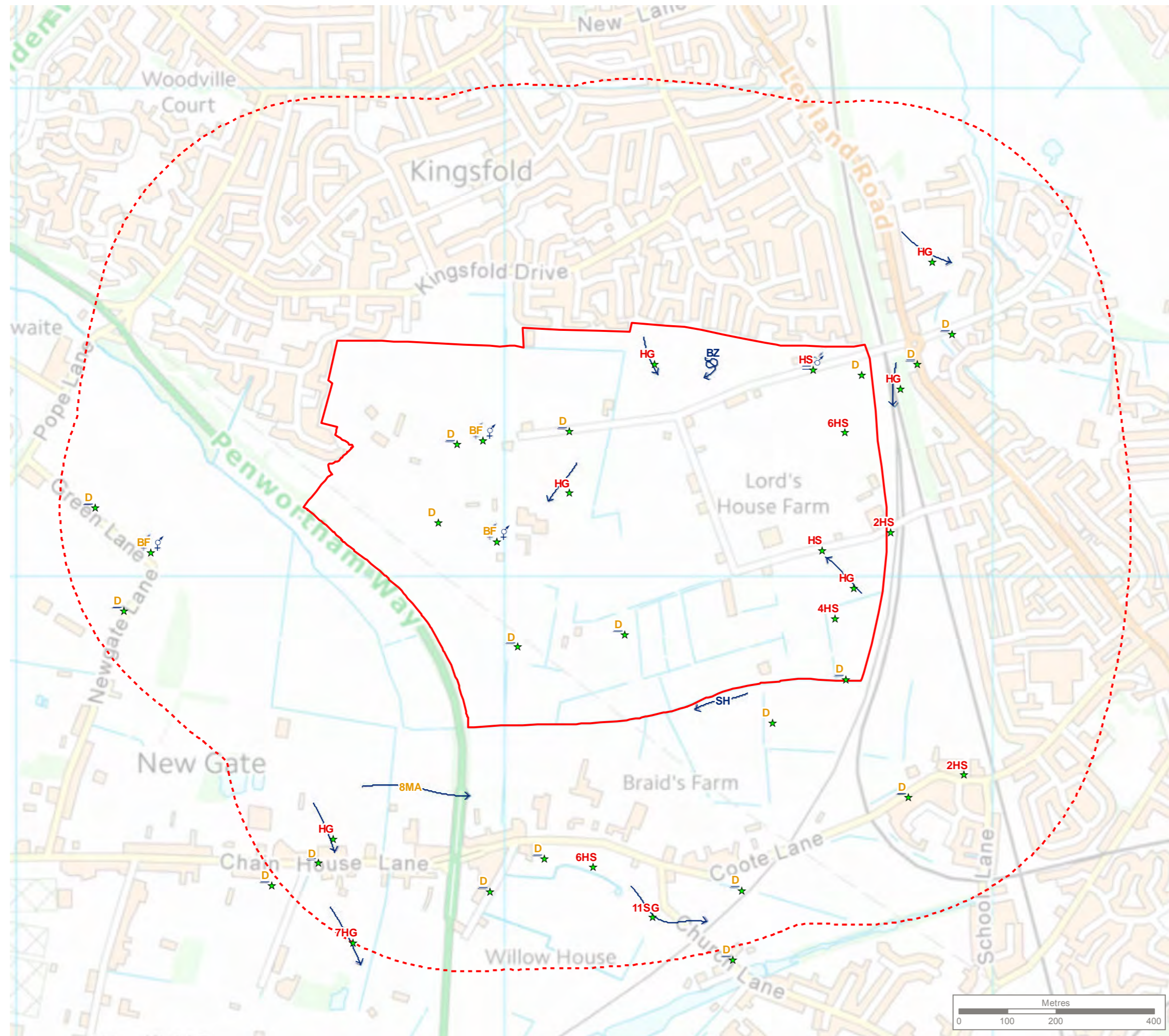
These Conservation Objectives and the accompanying Supplementary Advice (where available) will also provide a framework to inform the management of the European Site under the provisions of Articles 4(1) and 4(2) of the Wild Birds Directive and the prevention of deterioration or significant disturbance of its qualifying features under Article 6(2) of the Habitats Directive.

These Conservation Objectives are set for each bird feature for a [Special Protection Area \(SPA\)](#). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Wild Birds Directive.

Publication date: 30 June 2014 – version 3. This document updates and replaces an earlier version dated 31 March 2014. Previous references to the 2001 UK SPA Review have been removed.

DRAWINGS

G6900.019 WBS Transect Visit 1 - 27.09.17
G6900.020 WBS Transect Visit 2 - 03.10.17
G6900.021 WBS Transect Visit 3 - 11.10.17
G6900.022 WBS Transect Visit 4 - 25.10.17
G6900.023 WBS Transect Visit 5 - 06.12.17
G6900.024 WBS Transect Visit 6 - 21.12.17
G6900.025 WBS Transect Visit 7 - 26.01.18
G6900.026 WBS Transect Visit 8 - 14.02.18
G6900.027 WBS Transect Visit 9 - 23.01.18



KEY

- Site boundary
- Site boundary - 500m buffer
- ★ Section 41 species
- Calling
- ♂ ♀ Male and female
- ♂! Male alarm calling
- Directional flightline

Species Codes

- BF Bullfinch
- BZ Buzzard
- D Dunnock
- HG Herring gull
- HS House sparrow
- MA Mallard
- SG Starling
- SH Sparrowhawk

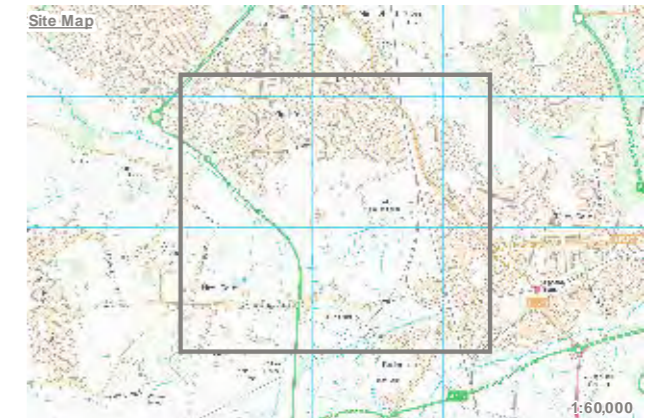
Note

- Red Red List Species
- Amber Amber List Species



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Rev	Description	Drawn	Approved	Date



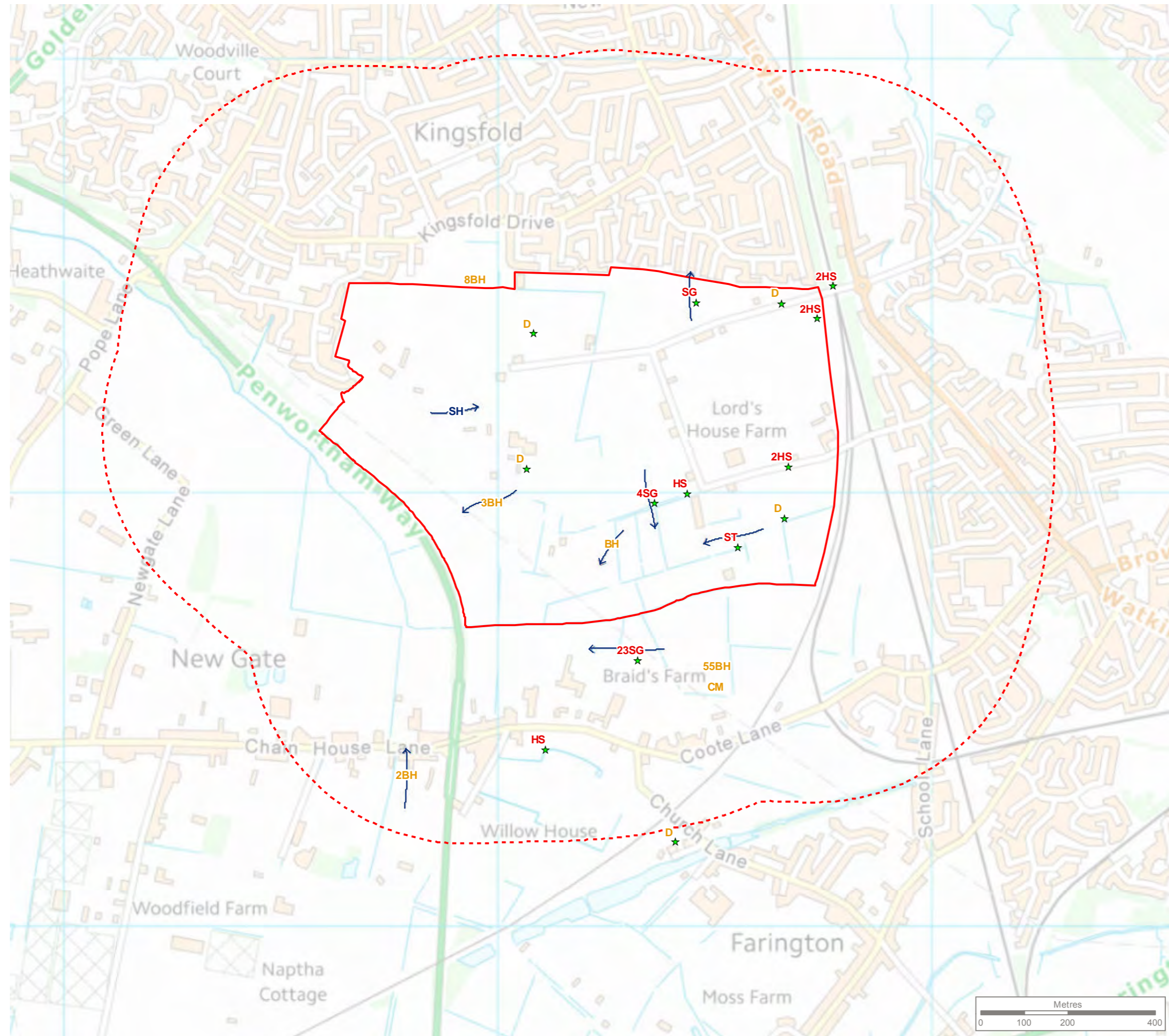
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Project
The Lanes, Penwortham

Title
Winter Bird Survey - Visit 1
27th September 2017

Drawing Number
G6900.019

Drawn	Checked	Approved	Scale	Date
MK	LJ	MW	1:8,000 @ A3	30/11/2018



KEY

- Site boundary
- Site boundary - 500m buffer
- ★ Section 41 species
- Directional flightline

Species Codes

- BH Black-headed gull
- CM Common gull
- D Dunnock
- HS House sparrow
- SG Starling
- ST Song thrush

Note

- ★ Red List Species
- ★ Amber List Species



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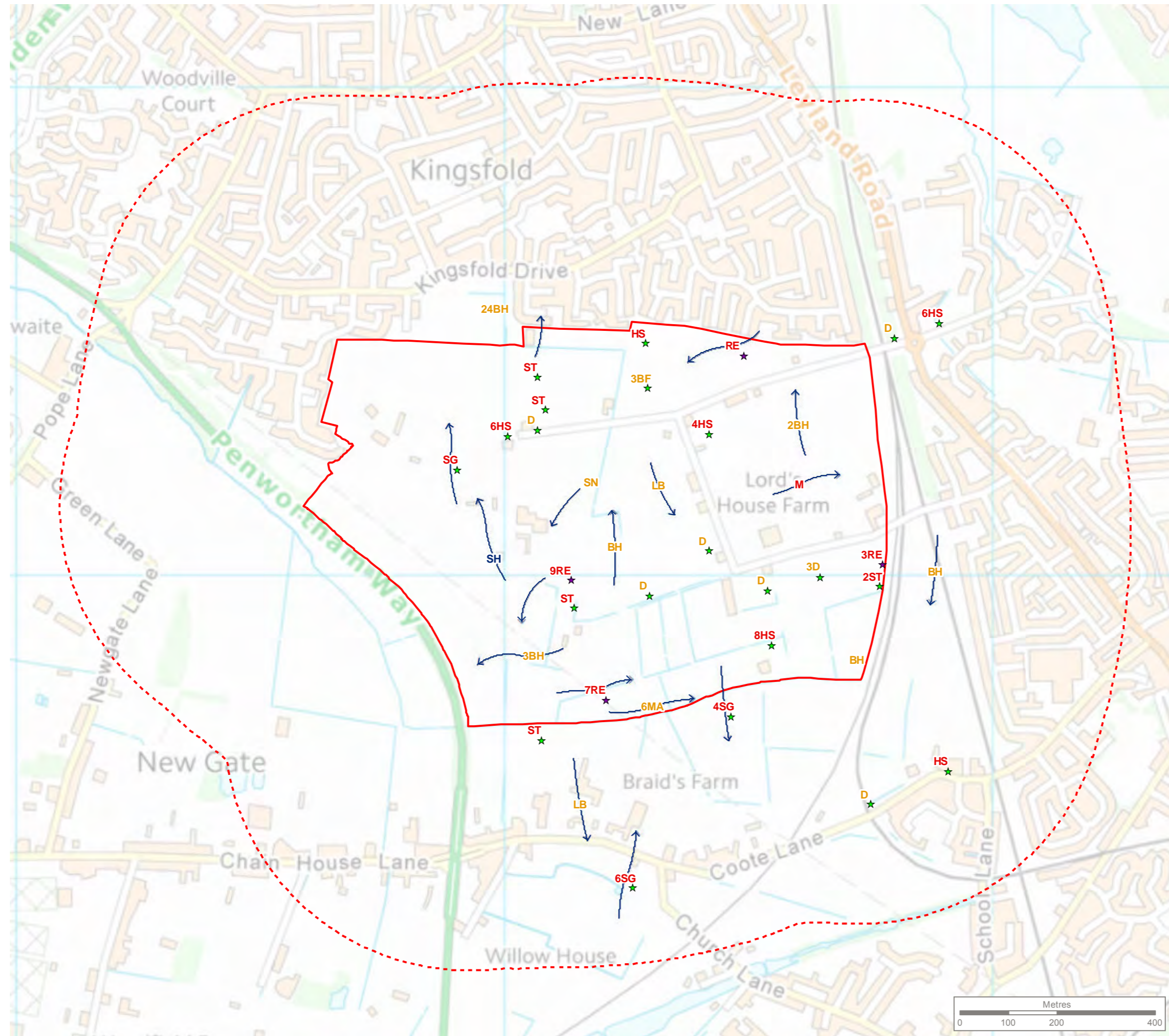
Project
The Lanes, Penwortham

Title
Winter Bird Survey - Visit 2
03rd October 2017

Drawing Number
G6900.020

Drawn	Checked	Approved	Scale	Date
MK	LJ	MW	1:9,000 @ A3	30/11/2018





KEY

- Site boundary
- Site boundary - 500m buffer
- ★ Section 41 species
- ★ Schedule 1 species
- Directional flightline

Species Codes

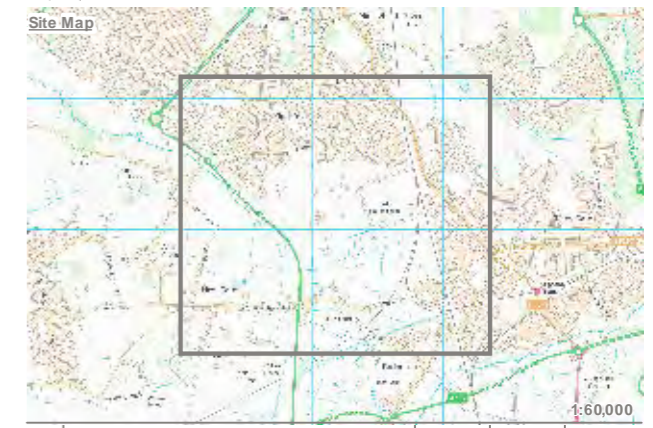
- BF Bullfinch
- BH Black-headed gull
- D Dunnock
- HS House sparrow
- LB Lesser black-backed gull
- M Mistle thrush
- MA Mallard
- RE Redwing
- SG Starling
- SN Snipe
- ST Song thrush

Note

- Red List Species
- Amber List Species



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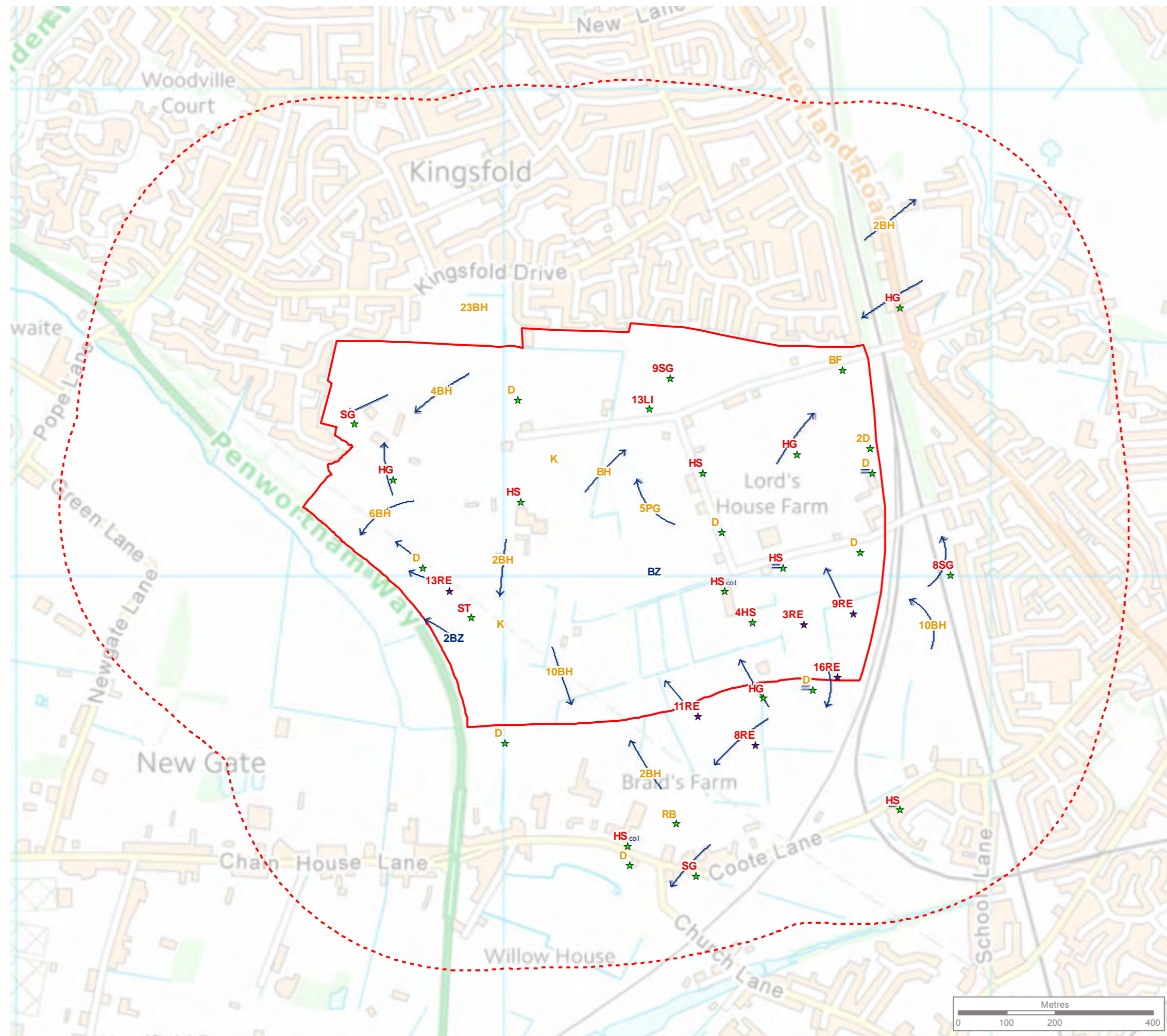
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Project: **The Lanes, Penwortham**

Title: **Winter Bird Survey - Visit 3
11th October 2017**

Drawing Number: **G6900.021**

Drawn	Checked	Approved	Scale	Date
MK	LJ	MW	1:8,000 @ A3	30/11/2018



KEY

- Site boundary
- Site boundary - 500m buffer
- ★ Section 41 species
- ★ Schedule 1 species
- ∞ Colony
- = Alarm call
- Calling
- Directional flightline

Species Codes

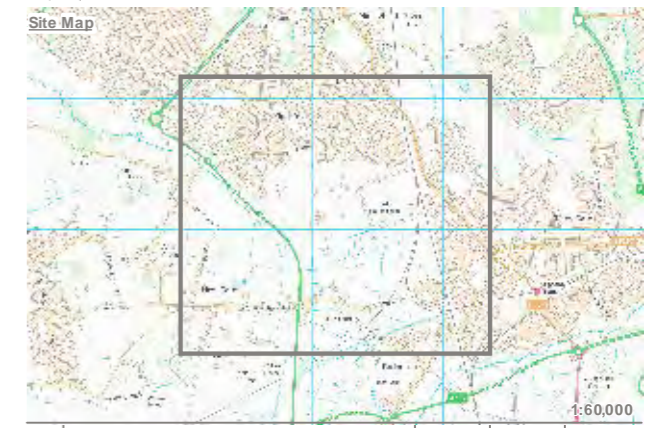
- BF Bullfinch
- BH Black-headed gull
- D Dunnock
- HG Herring gull
- HS House sparrow
- K Kestrel
- LI Linnet
- PG Pink-footed goose
- RB Reed bunting
- RE Redwing
- SG Starling
- ST Song thrush

Note

- ★ Red List Species
- ★ Amber List Species



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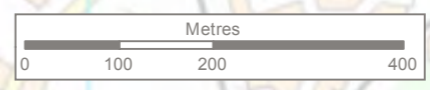
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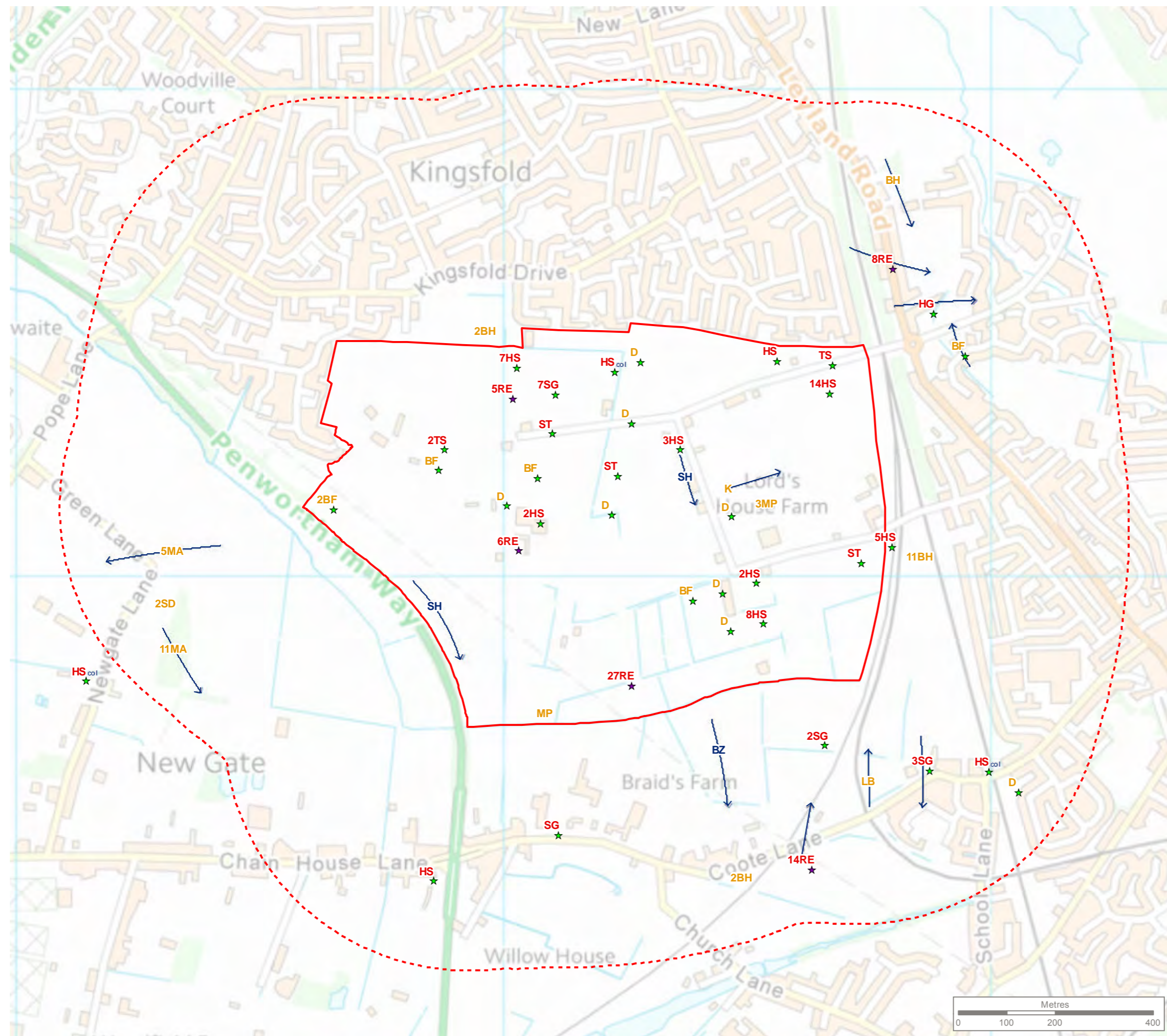
Project
The Lanes, Penwortham

Title
Winter Bird Survey - Visit 4
25th October 2017

Drawing Number
G6900.022

Drawn	Checked	Approved	Scale	Date
RH	JS	MW	1:8,000 @ A3	30/11/2018





KEY

- Site boundary
- Site boundary - 500m buffer
- ★ Section 41 species
- ★ Schedule 1 species
- col Colony
- Directional flightline

Species Codes

- BF Bullfinch
- BH Black-headed gull
- BZ Buzzard
- D Dunnock
- HG Herring gull
- HS House sparrow
- K Kestrel
- LB Lesser black-backed gull
- MA Mallard
- MP Meadow pipit
- RE Redwing
- SD Stock dove
- SG Starling
- SH Sparrowhawk
- ST Song thrush
- TS Tree sparrow

Note

- ★ Red List Species
- ★ Amber List Species



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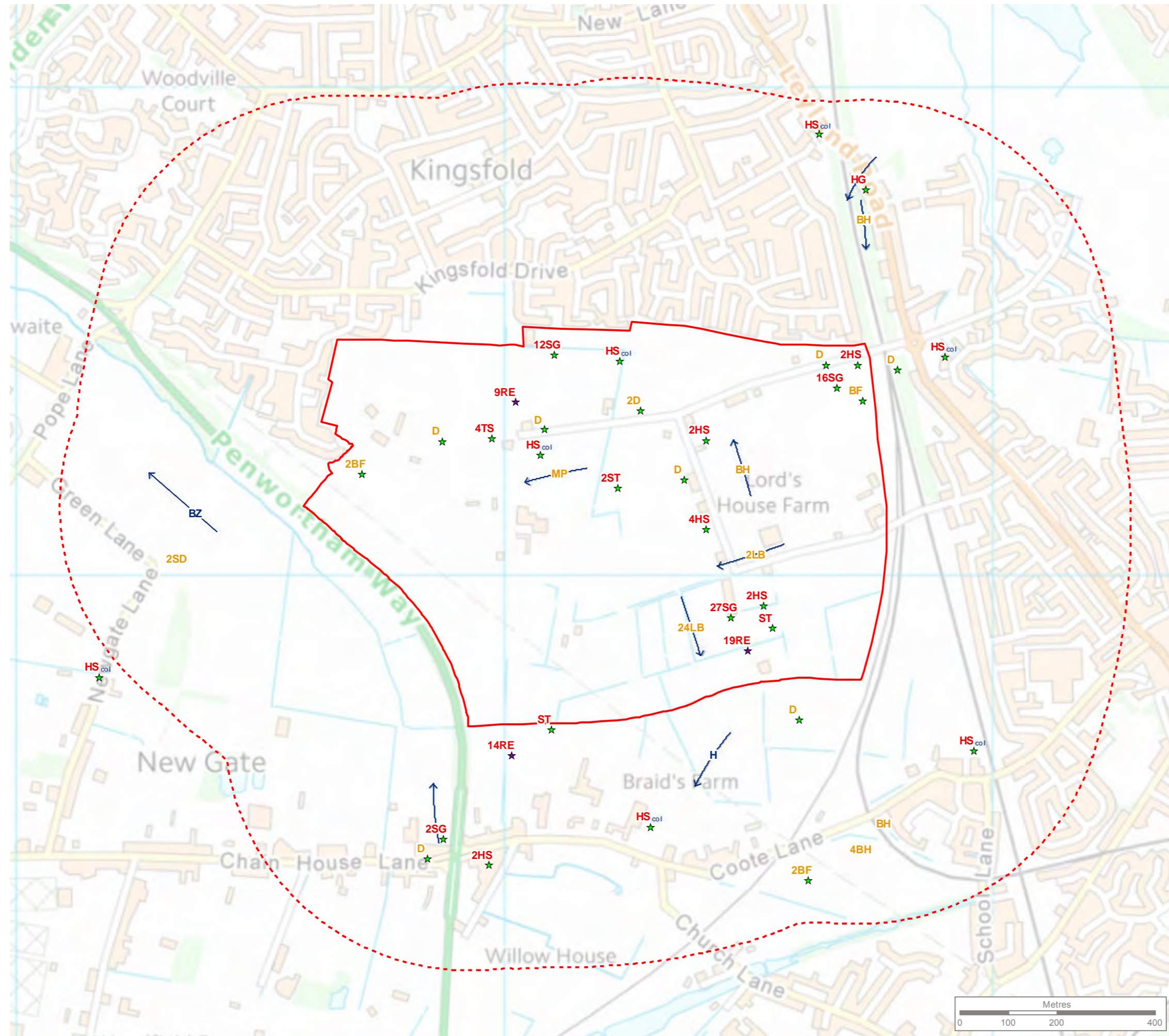
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Project
The Lanes, Penwortham

Title
**Winter Bird Survey - Visit 5
6th December 2017**

Drawing Number
G6900.023

Drawn	Checked	Approved	Scale	Date
RH	JS	MW	1:8,000 @ A3	30/11/2018



KEY

- Site boundary
- Site boundary - 500m buffer
- ★ Section 41 species
- ★ Schedule 1 species
- col Colony
- Directional flightline

Species Codes

- BF Bullfinch
- BH Black-headed gull
- BZ Buzzard
- D Dunnock
- H Grey heron
- HG Herring gull
- HS House sparrow
- LB Lesser black-backed gull
- MP Meadow pipit
- RE Redwing
- SD Stock dove
- SG Starling
- ST Song thrush
- TS Tree sparrow

Note

- Red Red List Species
- Amber Amber List Species



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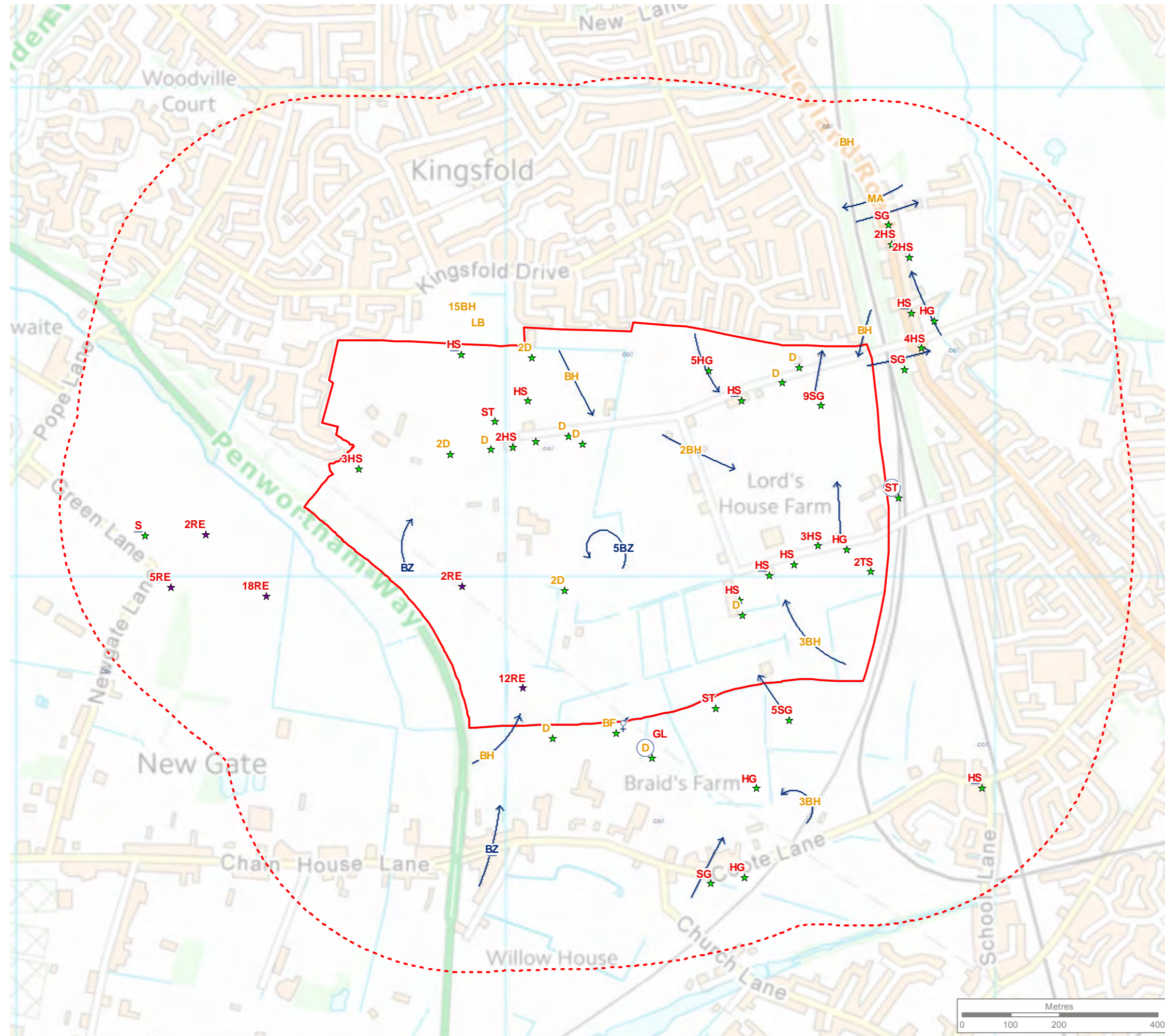
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Project
The Lanes, Penwortham

Title
Winter Bird Survey - Visit 6
21st December 2017

Drawing Number
G6900.024

Drawn	Checked	Approved	Scale	Date
RH	JS	MW	1:8,000 @ A3	30/11/2018



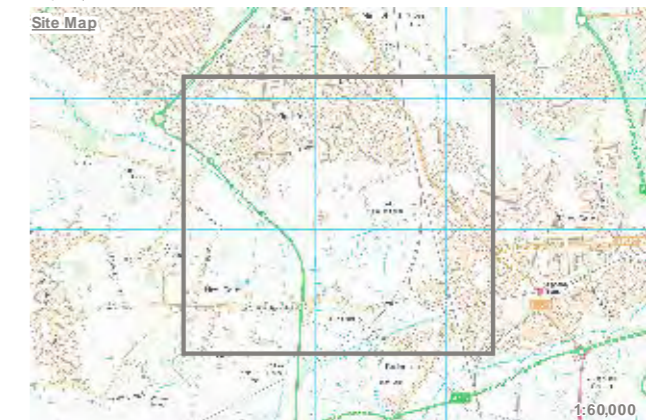
KEY

- Site boundary
- Site boundary - 500m buffer
- ★ Section 41 species
- ★ Schedule 1 species
- col Colony
- Directional flightline

- Species Codes**
- | | |
|----|--------------------------|
| LB | Lesser black-backed gull |
| BF | Bullfinch |
| BH | Black-headed gull |
| BZ | Buzzard |
| D | Dunnock |
| GL | Grey wagtail |
| HG | Herring gull |
| HS | House sparrow |
| MA | Mallard |
| RE | Redwing |
| S | Skylark |
| SG | Starling |
| ST | Song thrush |
| TS | Tree sparrow |

Note
★ Red List Species
★ Amber List Species

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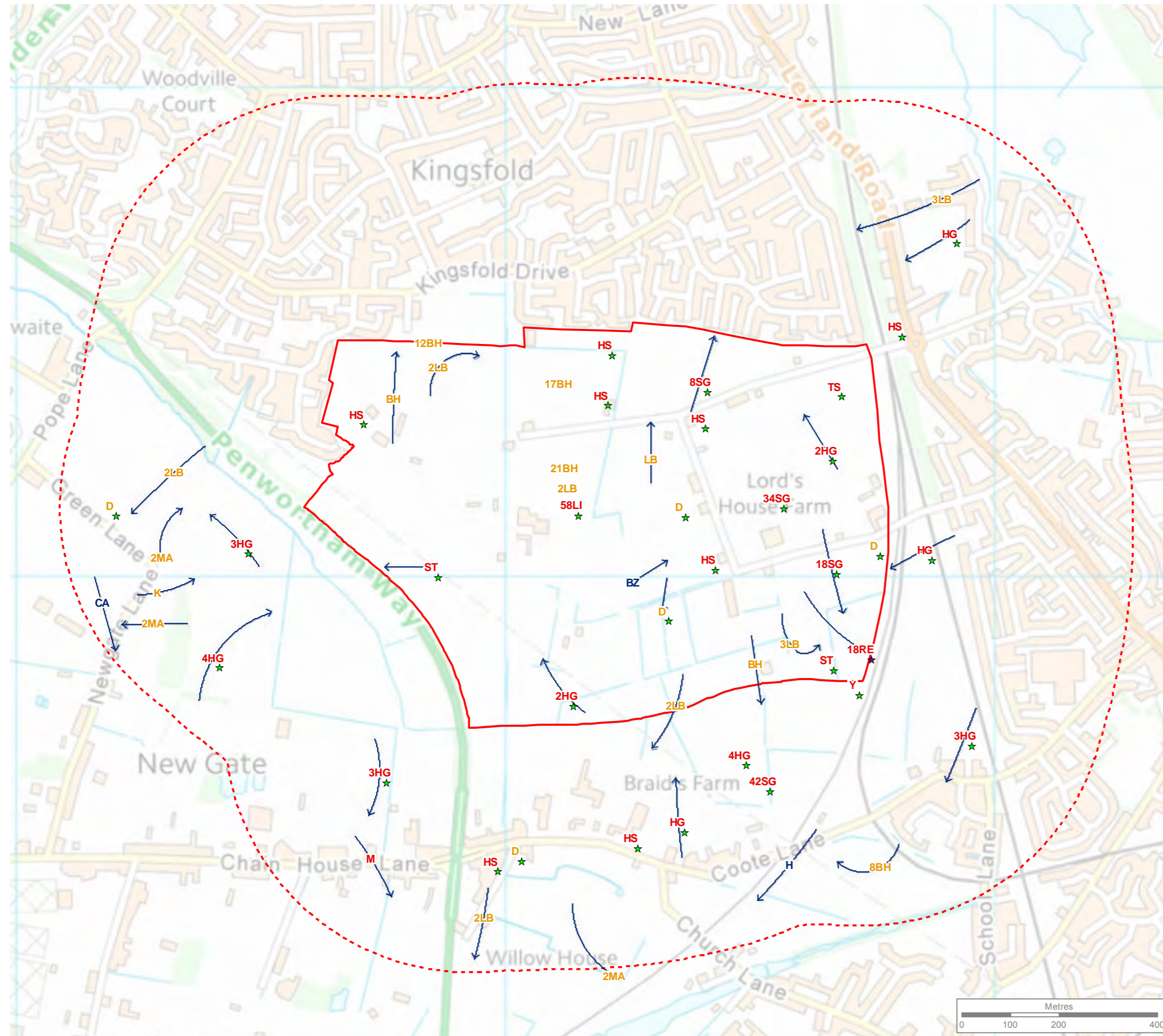
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 Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
The Lanes, Penwortham

Title
Winter Bird Survey - Visit 7
26th January 2018

Drawing Number
G6900.025

Drawn	Checked	Approved	Scale	Date
RH	MK	MW	1:8,000 @A3	30/11/2018



KEY

- Site boundary
- Site boundary - 500m buffer
- ★ Section 41 species
- ★ Schedule 1 species
- Directional flightline

Species Codes

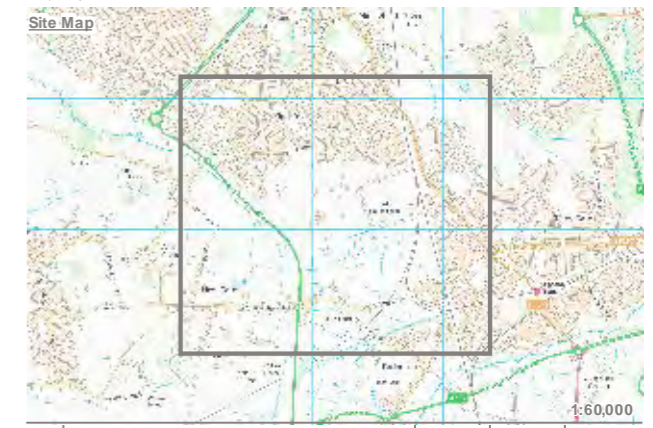
- BH Black-headed gull
- BZ Buzzard
- CA Comorant
- D Dunnock
- H Grey heron
- HG Herring gull
- HS House sparrow
- K Kestrel
- LB Lesser black-backed gull
- LI Linnet
- M Mistle thrush
- MA Mallard
- RE Redwing
- SG Starling
- ST Song thrush
- TS Tree sparrow
- Y Yellowhammer

Note

- Red Red List Species
- Amber Amber List Species



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Rev	Description	Drawn	Approved	Date



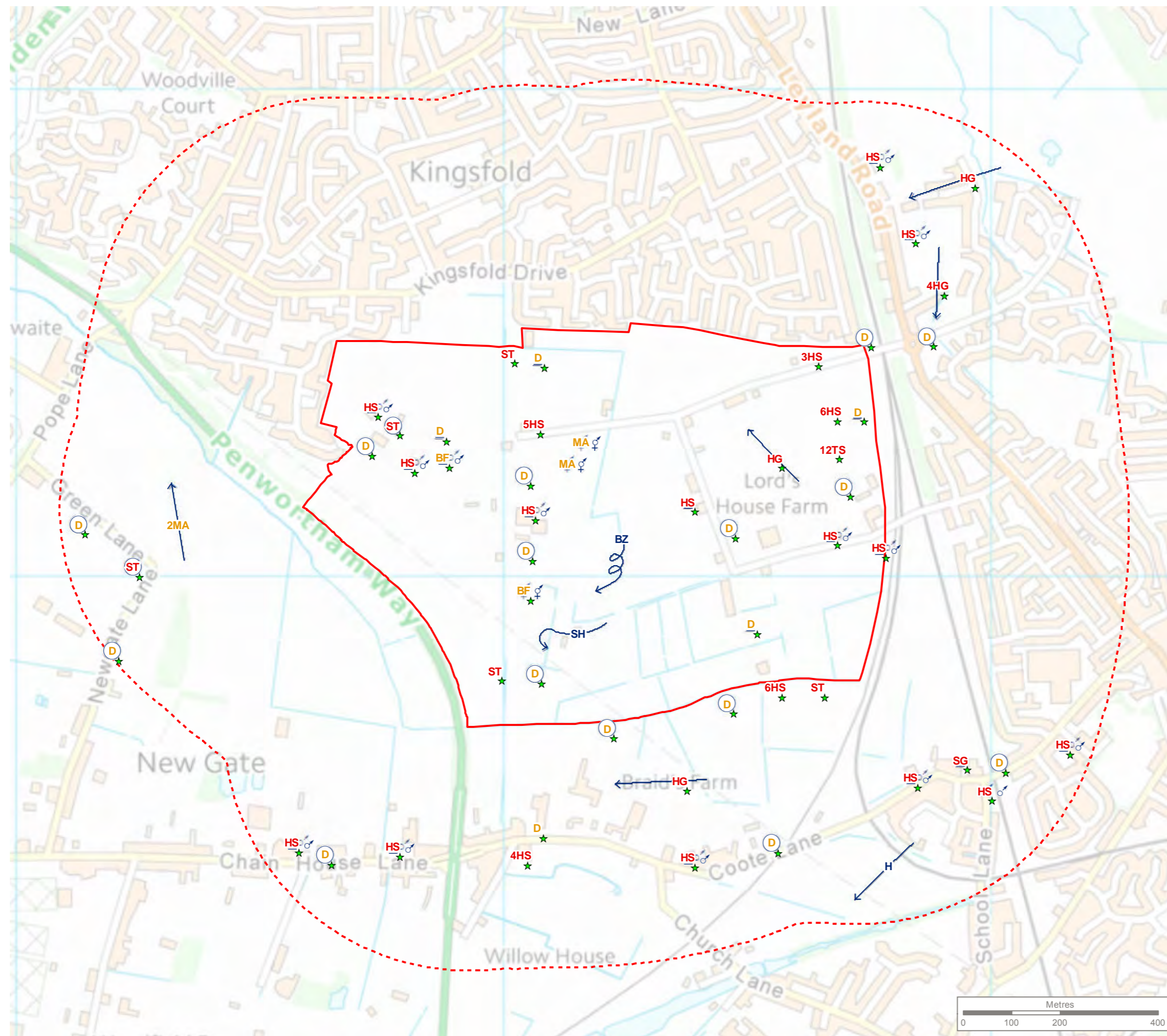
Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
The Lanes, Penwortham

Title
Winter Bird Survey - Visit 8
14th February 2018

Drawing Number
G6900.026

Drawn	Checked	Approved	Scale	Date
RH	JS	MW	1:8,000 @ A3	30/11/2018



KEY

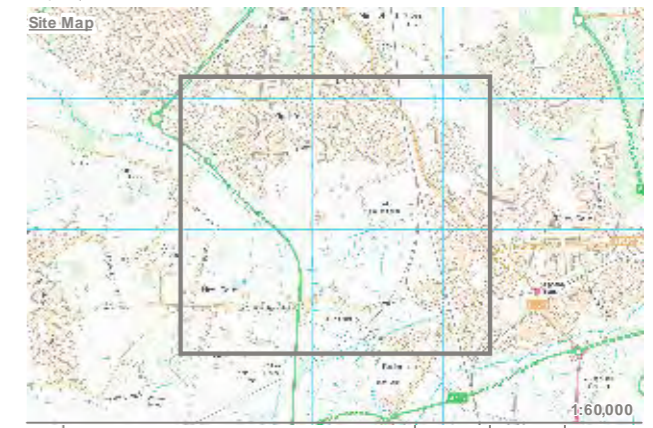
- Site boundary
- Site boundary - 500m buffer
- ★ Section 41 species
- Directional flightline
- Calling
- ♂ Male
- ♀ Male and female
- ♂ Male calling
- Singing

- Species Codes**
- SG Starling
 - BF Bullfinch
 - BZ Buzzard
 - D Dunnock
 - H Grey heron
 - HG Herring gull
 - HS House sparrow
 - MA Mallard
 - SH Sparrowhawk
 - ST Song thrush
 - TS Tree sparrow

Note
Red Red List Species
Amber Amber List Species



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Rev	Description	Drawn	Approved	Date

TEP | **THE ENVIRONMENT PARTNERSHIP**

Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
 Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
The Lanes, Penwortham

Title
Winter Bird Survey - Visit 9
 23rd March 2018

Drawing Number
G6900.027

Drawn	Checked	Approved	Scale	Date
RH	JS	MW	1:8,000 @ A3	30/11/2018



HEAD OFFICE

Genesis Centre,
Birchwood Science Park,
Warrington
WA3 7BH

Tel: 01925 844004
E-mail: tep@tep.uk.com

**MARKET
HARBOROUGH**

No. 1 The Chambers,
Bowden Business Village,
Market Harborough,
Leicestershire,
LE16 7SA

Tel: 01858 383120
E-mail: mh@tep.uk.com

GATESHEAD

Office 26, Gateshead
International Business
Centre,
Mulgrave Terrace,
Gateshead
NE8 1AN

Tel: 0191 605 3340
E-mail: gateshead@tep.uk.com

LONDON

8 Trinity Street,
London,
SE1 1DB

Tel: 020 3096 6050
E-mail: london@tep.uk.com

CORNWALL

4 Park Noweth,
Churchtown,
Cury,
Helston
Cornwall
TR12 7BW

Tel: 01326 240081
E-mail: cornwall@tep.uk.com
