



Breeding Bird Survey Report 2015

Land at Wenny Road, Chatteris, Cambridgeshire

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Notice to Interested Parties

To achieve the study objectives stated in this report, we were required to base our conclusions on the best information available during the period of the investigation and within the limits prescribed by our client in the agreement.

No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information. Thus, we cannot guarantee that the investigations completely defined the degree or extent of e.g. species abundances or habitat management efficacy described in the report.

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0 EXECUTIVE SUMMARY

- 0.1 On behalf of Cannon-Kirk (UK) Ltd, Cambridge Ecology Ltd was commissioned by Savills, Cambridge Ecology to carry out a Breeding Bird Survey on land at Wenny Road, Chatteris, Cambridgeshire. The survey was required to investigate the presence of breeding birds, which could be affected by the development proposals at the site.
- 0.2 It was considered that the survey conducted was robust and accurately recorded and observed the species present between March and June 2015 and provided an accurate indication of the bird species present, their abundance, territory location and their usage of the site.
- 0.3 A total of 48 bird species were recorded. The species recorded reflect an assemblage typical of the habitat present at the site. The habitats included hedgerows, tall ruderal vegetation, semi-mature and mature trees, bramble scrub, wet ditches, rough grassland and grazing pasture.
- 0.4 The breeding bird surveys indicated that 38 species recorded were confirmed and probable/possible breeding species. In terms of species diversity this number of breeding birds would rank the site of local importance only. None of the species found were considered rare, and none held specific legislative protection; being listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended).
- 0.5 Of the breeding/possible breeding species, the site supported eight bird species (Dunnock, Song Thrush, Starling, House Sparrow, Linnet, Bullfinch, Yellowhammer and Reed Bunting) that are recognised for their conservation value by being UK BAP listed species and Principal Species of Importance (Section 41 NERC Act 2006). As such, national species action plans have been created for these species to safeguard current populations and reverse population declines.
- 0.6 Five species (Song Thrush, Starling, House Sparrow, Linnet and Yellowhammer) are also listed on the BoCC Red List in recognition of their significant population decline (>50%) and consequently of conservation concern.
- 0.7 Sixteen species (Mallard, Snipe, Kestrel, Stock Dove, Barn Owl, Swift, Green Woodpecker, Swallow, House Martin, Meadow Pipit, Dunnock, Mistle Thrush, Whitethroat, Willow Warbler, Bullfinch and Reed Bunting) are listed on the BoCC Amber List in recognition of their moderate population decline (<50%) and consequently of conservation concern.
- 0.8 These species listed are all of particular conservation importance and their presence should be of material consideration when the design and management of the habitat creation proposals for the site.

- 0.9 Most nesting bird activity in the survey area was associated with the linear vegetation (hedgerows, wet ditch, woodland and scrub) and unmanaged grassland.
- 0.10 A number of measures have been recommended that should be incorporated into the scheme proposals that would limit the potential adverse impacts of the development scheme on the existing breeding bird assemblage. The provision of replacement nest sites and feeding areas for certain key species (e.g. those listed as being of conservation importance), would be necessary to ensure the development did not have a permanent adverse effect on these species locally.
- 0.11 Through the development proposals there will be an opportunity to provide habitat creation and biodiversity enhancement at the site.
- 0.12 To ensure that the measures implemented as part of the development proposals to limit the potential for adverse effects on the breeding bird assemblage within the new St Ives (West) Expansion site' an ecological management plan (EMP) for the site should be prepared in combination with the landscaping plan.

1 INTRODUCTION

Background to the study

- 1.1 On behalf of Cannon-Kirk (UK) Ltd, Cambridge Ecology Ltd was commissioned by Savills, Cambridge Ecology to carry out a Breeding Bird Survey on land at Wenny Road, Chatteris, Cambridgeshire. The survey was required to investigate the presence of breeding birds, which could be affected by the development proposals at the site.
- 1.2 An investigation of historical information during the Extended Phase 1 Habitat Survey (Cambridge Ecology 2014) showed that there were records of a variety of potential breeding birds in close proximity (within 2km) of the proposed development site, including Barn Owl. The results of the Extended Phase 1 Habitat Survey carried out in November 2014 identified habitats present within the proposed development site that had potential to support nesting birds. However, a Barn Owl survey carried out in January/February 2015 (Cambridge Ecology 2015) did not find any evidence of this species breeding within the area of the development site.
- 1.3 The site was located to the south of Chatteris, Cambridgeshire,. Figure 1.1 shows the location of the Wenny Road development site in context with the surrounding area.

Aims and objectives

- 1.4 Aims of the breeding bird survey were primarily to inform the planning application process pertaining to the development proposals on the land at Wenny Road, Chatteris, Cambridgeshire. The survey would be expected to:
- Identify the presence of key breeding bird species with recognised conservation value;
 - provide baseline information on the current assemblage and abundance of breeding birds within the study area;
 - provide information to evaluate the conservation value of the site to breeding birds within the study area;
 - provide information that could be used to help guide the development proposals for the site. To minimise any adverse effect and incorporate features that would maintain or enhance the site for birds (as required by National Planning Policy Framework 2012 (NPPF 2012).
- 1.5 This report summarises the background to the study and details the results and key findings of the 2015 Breeding Bird Survey. The up-to-date data may then be used to provide guidance on the need and design of any appropriate mitigation and enhancement measures. These measures may be necessary to minimise any potential adverse effects of the development

proposals on breeding birds and help the design of any appropriate ecological enhancement measures such as habitat creation and site management for the benefit of breeding birds.

Development Proposals

- 1.6 The development proposals for the site adjacent to Wenny Road, Chatteris, would be for various residential properties.
- 1.7 Details of the number and layout of the scheme were not available at the time of preparing this report. However it would be expected that the results of this ecology survey (and other species specific surveys in the future) would help provide details that would influence the layout of the scheme and especially the landscaping and habitat creation.
- 1.8 The Wenny Road development site was located approximately 1 kilometre to the south east of Chatteris town centre and is bordered to the north and west by residential properties, part of Chatteris town and the west and south by the A142 road as illustrated in Figure 1.1.
- 1.9 Chatteris lies approximately 28km north of the city of Cambridge. The centre of the site is situated at Grid Ref TL 400 856. The total area of the development site covers an area of approximately 26 hectares (ha).

Survey Area

- 1.10 The Breeding Bird Survey area was defined as the area within the red line boundary of the proposed development area located next to Wenny Road, Chatteris, as illustrated in Figure 1.2.
- 1.11 Where access was possible, observations of breeding bird activity were also made up to 100m from the boundary of the development site.
- 1.12 For clarity in this report reference to the 'development site' comprises the red line boundary of the proposed development site, while the survey area includes the area covered by the ecology survey, comprising the red line boundary of the proposed development site and the 100m zone of influence, where access was possible.
- 1.13 The land beyond the A142 on the east and southern boundary of the development site and in the wider area around Chatteris is primarily intensively farmed arable land. It was considered that this arable land would likely be of limited value to breeding birds and the main A142 road would act as a boundary between the arable land and the development site.
- 1.14 Within the survey area the habitats comprised:
 - Arable land
 - Dry/Wet Ditches
 - Ponds/Standing Water
 - Amenity/Improved grassland

- Scattered Scrub
- Scattered Trees/Parkland/Broadleaved Woodland
- Hedgerows
- Tall Ruderal
- Bare ground and Buildings

1.15 The development site and study area were primarily used for recreational dog walking and horse grazing.

Relevant Legislation

1.16 There are several pieces of legislation and government policy to be aware of with regard to carrying out and interpreting the results of birds surveys, these include: the Wildlife and Countryside Act 1981 (WCA 1981); the Countryside and Rights of Way Act 2000 (CRoW Act 2000); the EC Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive); the EC Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive); the Conservation of Habitats and Species Regulations 2010; The Natural Environment and Rural Communities Act (2006); and National Planning Policy Framework 2012 (NPPF 2012).

1.17 For wildlife legislation relating specifically to birds and its relevance to this project see Appendix B.

2 METHODS

Registration Mapping

- 2.1 The survey methodology involved standard territory (registration) mapping techniques as detailed in Bibby et al. (2000). This method is based on the observation that many species during the breeding season are territorial. This is found particularly amongst passerines, where territories are often marked by conspicuous song, display, and periodic disputes with neighbouring individuals. Registrations of birds, using standard British Trust for Ornithology (BTO) two letter species codes, were placed onto an appropriate field map (scale 1:5000). Specific codes were also used for singing, calling, movements between areas, flying, carrying food, nest building, aggressive encounters and other behaviour. The expected outcome of this technique is that mapped registrations fall into clusters, approximately coinciding with territories. Where a species has closely packed territories (e.g. Reed Warbler), the mapping of simultaneously singing birds becomes essential. Territory boundaries are taken to be between such birds.
- 2.2 The predicted breeding status of a species was determined if one or more of the following activities were recorded:
- Territorial/Alarm
 - Song
 - Aggressive Encounter
 - Occupied Nest / Nest Box / Sitting on Nest
 - Carrying Nest Material
 - Carrying Food
- 2.3 The study area was walked at a slow pace in appropriately fine weather (see Table 2.1) in order to locate and identify all individual birds. All field boundaries and suitable breeding habitats were walked. Visits were undertaken early in the morning, generally between 05:00 – 11:30. The whole survey area was covered during each survey visit, using suitable optical equipment (x10 binoculars) to observe bird behaviour. Survey routes were varied on each visit, to ensure that all areas were covered at various times of morning throughout the survey period.
- 2.4 Surveys were undertaken between March and June 2015. The survey dates were as follows:
- 19/03/2015
 - 15/04/2015
 - 23/04/2015
 - 11/05/2015
 - 27/05/2015
 - 11/06/2015

Table 2.1 Weather conditions recorded during the surveys

Date	Time	Temperature (°C)	Cloud Cover (%)	Wind Speed (mph)	Wind Direction	Visibility	Sun/Rain
19/03/2015	0615 - 1030	8	100	10	SW	Good	Dry
15/04/2015	0615 - 1030	12	10	5	SW	Good	Sunny & Dry
23/04/2015	0530 - 1030	8	90	3	E	Good	Dry
11/05/2015	0530 - 1030	10	90	15	S	Good	Dry
27/05/2015	0530 - 1030	11	70	5	W	Good	Dry
11/06/2015	0530 - 1030	13	10	11	NE	Good	Sunny & Dry

- 2.5 Observations of birds made in the field were recorded directly onto handheld computers. These devices displayed Ordnance Survey (OS) base maps and the location of the surveyor - using Global Positioning Systems (GPS) technology. This aided in the accurate location and recording of the birds positions. Upon completion of the surveys the data were then downloaded and used to create individual species master maps.
- 2.6 The data analyses followed procedures detailed in Gilbert et al. (1998). From species master maps, the number of territories for each species was calculated. If there were eight or fewer (as in this breeding bird survey) survey visits during the period when a species is expected to be present, it was necessary to include at least one-two registrations of a bird, in the same area, as the minimum required to assume a breeding territory.
- 2.7 For late arriving migrants, e.g. Spotted Flycatcher, for which fewer potential sightings were possible, only one registration was required, this method was also applied to inconspicuous species, e.g. Tawny Owl *Strix aluco*. A number of species were not territorial and were dealt with appropriately, e.g. Linnets, where data represent aggregations or loose colonies.
- 2.8 The conservation status of the species recorded as breeding were measured against the following criteria:
- Annex 1 of the EU Birds Directive (Directive 79/409/EEC);
 - Schedule 1 of the Wildlife and Countryside Act 1981, (as amended);
 - Birds of Conservation Concern (BoCC) Red List (Eaton et al., 2009);
 - Species of Principal Importance Natural Environment & Rural Communities Act (2006), (August 2010 update);
 - UK Biodiversity Action Plan (UK BAP) priority species (Anon, 2012);
- 2.9 Species master map production and territory assessment was only undertaken for those species that are covered by one or more of the above criteria.

Survey Limitations

- 2.10 The survey followed closely the standard method described in Bird Monitoring Methods (Gilbert et.al. 1998).
- 2.11 It was considered that the survey conducted was robust and accurately recorded and observed the species present between March and June 2015 and provided an accurate indication of the bird species present, their abundance, territory location and their usage of the site.

3 RESULTS AND EVALUATION

Breeding birds

- 3.1 A total of 48 bird species were recorded during the surveys at the site.
- 3.2 Of these 38 species were confirmed or considered probable/possible breeding within the survey area.
- 3.3 None of the species recorded during the surveys were recognised as having European conservation designation as defined by the EU Birds Directive Annex 1 list.
- 3.4 Two species (Barn Owl and Redwing), are listed as a Schedule 1 species on the Wildlife and Countryside Act 1981 (as amended). Although it was recognised that Redwing was a winter visitor.
- 3.5 Eight of the breeding/possible breeding species (Dunnock, Song Thrush, Starling, House Sparrow, Linnet, Bullfinch, Yellowhammer and Reed Bunting) present at the site are UK BAP listed species and Principal Species of Importance (Section 41 NERC Act 2006) and therefore of particular conservation value.
- 3.6 Song Thrush, Starling, House Sparrow, Linnet and Yellowhammer are also listed on the BoCC Red List in recognition of their significant population decline (>50%) and consequently of conservation concern.
- 3.7 Sixteen species (Mallard, Snipe, Kestrel, Stock Dove, Barn Owl, Swift, Green Woodpecker, Swallow, House Martin, Meadow Pipit, Dunnock, Mistle Thrush, Whitethroat, Willow Warbler, Bullfinch and Reed Bunting) are listed on the BoCC Amber List in recognition of their moderate population decline (<50%) and consequently of conservation concern.
- 3.8 Most nesting bird activity was associated with the linear vegetation (hedgerows, drainage ditches, mature broadleaved woodland and scrub) located throughout the site. See species territory maps for details Figures 3.1 to 3.8.
- 3.9 A summary of all the species recorded, their conservation and breeding status on site is detailed in Table 3.1

Table 3.1 Bird species recorded in the survey area

Species	Predicted breeding status	Annex 1 EU Birds Directive ¹	Schedule 1 Wildlife & Countryside Act 1981 ²	Birds of Conservation Concern ³	UK BAP Priority Species ⁴	NERC ACT Principle species of Importance ⁵
Mallard	Non-breeding			Amber		
Sparrowhawk	Possible					
Kestrel	Possible			Amber		

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Species	Predicted breeding status	Annex 1 EU Birds Directive ¹	Schedule 1 Wildlife & Countryside Act 1981 ²	Birds of Conservation Concern ³	UK BAP Priority Species ⁴	NERC ACT Principle species of Importance ⁵
Red-legged Partridge	Possible					
Moorhen	Breeding					
Snipe	Non-breeding			Amber		
Stock Dove	Breeding			Amber		
Woodpigeon	Breeding					
Collared Dove	Breeding					
Barn Owl	Non-breeding breeding on adjacent site		X	Amber		
Tawny Owl	Probable					
Swift	Non-breeding			Amber		
Green Woodpecker	Breeding			Amber		
Great Spotted Woodpecker	Breeding					
Swallow	Non-breeding breeding on adjacent site			Amber		
House Martin	Non-breeding breeding on adjacent site			Amber		
Meadow Pipit	Non-breeding			Amber		
Pied Wagtail	Non-breeding breeding on adjacent site					
Wren	Breeding					
Dunnock	Breeding			Amber	X	X
Robin	Breeding					
Blackbird	Breeding					
Song Thrush	Breeding			Red	X	X
Redwing	Non-breeding		X	Red		
Mistle Thrush	Breeding			Amber		
Lesser Whitethroat	Breeding					
Whitethroat	Breeding			Amber		
Garden Warbler	Breeding					
Blackcap	Breeding					
Chiffchaff	Breeding					
Willow Warbler	Breeding			Amber		
Long-tailed Tit	Breeding					
Blue Tit	Breeding					
Great Tit	Breeding					
Jay	Breeding					
Magpie	Breeding					
Jackdaw	Breeding					

Species	Predicted breeding status	Annex 1 EU Birds Directive ¹	Schedule 1 Wildlife & Countryside Act 1981 ²	Birds of Conservation Concern ³	UK BAP Priority Species ⁴	NERC ACT Principle species of Importance ⁵
Rook	Breeding					
Carrion Crow (black forms)	Breeding					
Starling	Breeding			Red	X	X
House Sparrow	Breeding			Red	X	X
Chaffinch	Breeding					
Greenfinch	Breeding					
Goldfinch	Breeding					
Linnet	Breeding			Red	X	X
Bullfinch	Breeding			Amber	X	X
Yellowhammer	Breeding			Red	X	X
Reed Bunting	Possible			Amber	X	X
Total species = 48						

¹ Species included on Annex 1 of the EU Birds Directive (79/409/EEC).

² Species protected by Schedule 1 of the Wildlife & Countryside Act 1981.

³ Species on the Birds of Conservation Concern Red list (Eaton *et al.*, 2009).

⁴ Priority Species in the UK Biodiversity Action Plan (Anon, 2012).

⁵ Species included in Section 41 of the Natural Environment and Rural Communities Act 2006 (Ref: Anon 2006). August 2010 update.

Species diversity

3.10 The number of species recorded in an area is a simple measure of diversity that can indicate its importance at each season of the year. Fuller (1980) gives the following breeding diversity criteria:

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

3.11 With 38 confirmed and probable/possible breeding species, the table shows the area to be of local importance for breeding birds. However, it should be noted that Fuller's analysis was developed in the 1970's. Since then, in intensively farmed landscapes and woodlands across the UK bird species diversity has declined significantly (Harris *et al.* 2013). As a result, it is considered that Fuller's thresholds are too high for today's breeding bird populations. Since the threshold for the next category is 49 species and there were 38 species breeding at this site it is likely that the breeding bird assemblage at the Wenny Road site is still of local importance.

Population size

3.12 None of the breeding species occurred in nationally significant numbers.

3.13 Of the species considered to be of highest conservation value; there were, ~29 Dunnock territories, four Song Thrush territories, nine Starling nesting

sites, a colony of 16 pairs of breeding House Sparrow, a colony of nine pairs of breeding Linnet two pair of breeding Bullfinch and one Yellowhammer and Reed Bunting territory .

- 3.14 The Dunnock and Song Thrush were using the hedgerows and woodland tree belts for nesting.
- 3.15 The House Sparrows were nesting within the houses bordering the northern boundary of the development site.
- 3.16 The Starling were nesting within the houses bordering the northern boundary of the development site and holes in some of the mature trees.
- 3.17 The Linnet colony was primarily located in the north eastern section along the bramble coverage drainage ditch with outlier colonies located along hedgerows with dense bramble cover.
- 3.18 The two Bullfinch were nesting amongst the hedgerows whether Blackthorn was dominant along Birch Fen Drove.
- 3.19 The single Yellowhammer and Reed Bunting territories were located along the north eastern boundary and were mainly situated beyond the eastern boundary of the development site amongst the arable land and arable field margins.
- 3.20 The territorial/nesting areas are shown in Figures 3.1 to 3.8

Species rarity

- 3.21 None of the species found breeding at the site are considered rare. However the presence of Barn Owl, a species list under Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) is worthy of note although it was not considered nesting within the survey area. The Barn Owl was seen on one occasion hunting for small mammals over the rough grassland area, that was being used to graze horses, towards the southern part of the development site.

4 RECOMMENDATIONS

- 4.1 To avoid delays to the work programme or contravention of the wildlife legislation pertaining to nesting birds, clearance works should either take place outside the birds' breeding season (March-September inclusive) or include measures to ensure breeding birds remain unaffected by the building activities. Under the provision of the Wildlife & Countryside Act 1981 (as amended) all birds' nests, eggs and young are protected while the nest is being built or occupied (see Appendix B).
- 4.2 Ideally all vegetation should be cleared before March; vegetation that is cleared after this time must be checked for nesting birds by an experienced ornithologist acting as an Ecological Clerk of Works.
- 4.3 Any trees that remain as part of the landscaping scheme should be protected from damage during the clearance and construction works. If branches from the remaining trees were too close to any of the existing or new buildings they could be pruned. In addition, appropriate root protection should be established to safeguard the trees long term survival. The root protection would also act as a 'cordon' for vehicles and people to prevent the trees and any active birds' nests from being damaged during the clearance and construction work.
- 4.4 Some consideration should be made to include measures that meet the objectives of the national and local action plans for Swift, Dunnock, Song Thrush, Starling, House Sparrow, Linnet, Bullfinch Yellowhammer and Reed Bunting. All these species were breeding at or very near to the survey area. To benefit Song Thrush for instance, maintain and enhance shrub layers in proximity to existing damp hedgerow bases, ensure appropriate management occurs to the scrub, scrub edge and scattered scrub features to maintain humidity levels to support molluscs on which Song Thrushes feed. To benefit Linnet, maintaining and enhancing bramble scrub areas and rough grassland seed producing areas would be of readily achievable.
- 4.5 It is recommended that the development proposals aim to maintain the linear perimeter habitat features. This is because these areas were favoured by nesting birds at this site. Therefore where possible existing habitats, such as the hedgerows, wet ditches, rough grassland corners and broadleaved woodland strips be retained and enhanced.
- 4.6 It is recommended that nest boxes, which could be used by various bird species be included within the fabric of the residential properties (nest boxes could include those suitable to support breeding Swift, House Martin, Starling and House Sparrow. This measure has been successfully carried out at the Windmill Estate at Fulbourn in Cambridgeshire and has a track record of success and has won national recognition for its design.

- 4.7 As an enhancement nest boxes for other species (e.g. Kestrel, Stock Dove) could be installed within the woodland areas and on the retained mature trees.
- 4.8 The production of a long term (25 year) ecological management plan (EMP) for any 'public open space' areas and attenuation pond areas would provide a mechanism by which the recommendations described here could be described in detail and incorporated into the scheme design. The EMP would also provide details about the management procedures and measures necessary to ensure the habitats created and features incorporated are maintained in a favourable condition in the long term.

5 KEY POINTS AND FINDINGS

- 5.1 Six bird surveys were conducted between mid March and mid June. These surveys recorded a total of 48 bird species. It was considered that the survey results presented an accurate reflection of the bird species present during the spring and early summer at this site.
- 5.2 The species recorded reflect an assemblage typical of the habitat present at the site. The habitats included hedgerows, tall ruderal vegetation, semi-mature and mature trees, bramble scrub, rough grassland and grazing pasture.
- 5.3 Observations of bird activity during the breeding bird survey indicated that 38 species recorded were either confirmed and/or probable/possible breeding species. In terms of species diversity this number of breeding birds would rank the site of local importance only. None of the species found were considered rare, and none held specific legislative protection; being listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended).
- 5.4 Of the breeding/possible breeding species, the site supported eight bird species (Dunnock, Song Thrush, Starling, House Sparrow, Linnet, Bullfinch, Yellowhammer and Reed Bunting) that are recognised for their conservation value by being UK BAP listed species and Principal Species of Importance (Section 41 NERC Act 2006). As such, national species action plans have been created for these species to safeguard current populations and reverse population declines.
- 5.5 Five species (Song Thrush, Starling, House Sparrow, Linnet and Yellowhammer) considered breeding at the site were listed on the BoCC Red List in recognition of their significant population decline (>50%) and consequently of conservation concern.
- 5.6 Eight species (Kestrel, Stock Dove, Green Woodpecker, Swallow, Dunnock, Whitethroat, Willow Warbler and Bullfinch) were listed on the BoCC Amber List in recognition of their moderate population decline (<50%) and consequently of conservation concern.
- 5.7 All the species mentioned here listed on recognised conservation criteria are of some conservation importance. The presence of these species should be of material consideration when the design and management of the habitat creation proposals for the site.
- 5.8 Most of the habitat in the survey area comprised grazing pasture. Although the areas of grazing land was of very limited value to the breeding birds on the site, it did provide important feeding areas for birds collecting insects and seeds.

- 5.9 Most nesting bird activity in the survey area was associated with the linear vegetation (hedgerows, wet ditch, woodland and scrub) and unmanaged grassland.
- 5.10 Without mitigation, the development proposals would likely result in a number of direct adverse impacts on breeding birds. These direct impacts would include, (i) habitat loss through land-take, (ii) population isolation through habitat fragmentation, (iii) reduction in quality of habitat and (iv) direct mortality.
- 5.11 In addition to the direct adverse impacts there would also be a number of indirect adverse impacts, which would include (i) disturbance and (ii) persecution and predation.
- 5.12 The provision of habitat to support nesting birds would be necessary to ensure the development did not have a permanent adverse effect on nesting birds locally.
- 5.13 As the scheme design has not been fully developed, there is an opportunity to provide potential direct positive effects such as habitat creation, through the creation of new habitat on any retained grassland areas, around sustainable urban drainage (e.g. attenuation pond area) and within linear habitat features such as hedgerows and woodland.
- 5.14 A number of measures have been recommended that should be incorporated into the scheme proposals that would limit the impact of the scheme on the existing breeding bird assemblage. For instance, in the short-term there is a risk of potential impacts to nesting birds - seasonal timing of site clearance activity (vegetation and building removal) is recommended to avoid damage/destruction of nests that are specially protected under the terms of the Wildlife & Countryside Act 1981 (as amended) and Countryside Rights of Way Act (2000) .
- 5.15 Through the development proposals there is an opportunity to provide habitat creation and biodiversity enhancement at the site. Enhancement opportunities would include the provision of nest sites for species that could readily be encouraged to use the site, e.g. Swift, House Sparrow and Starling.
- 5.16 A long term (25 year) Ecological Management Plan (EMP) should be prepared for the site. The EMP would help to ensure the mitigation and enhancement measures described in this report would have the best chance of success. Thereby minimising the potential for the new development to have a permanent adverse effect on the breeding bird assemblage within the site. The EMP should be prepared in-combination with the landscaping plan, to provide a mechanism by which the recommendations described in this report could be incorporated into the scheme design. The EMP would also provide details about the management procedures and measures necessary to ensure the habitats created and features incorporated are maintained in a favourable condition in the long term.

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7 FIGURES

Figure 1.1.: Red line boundary of the proposed development site.

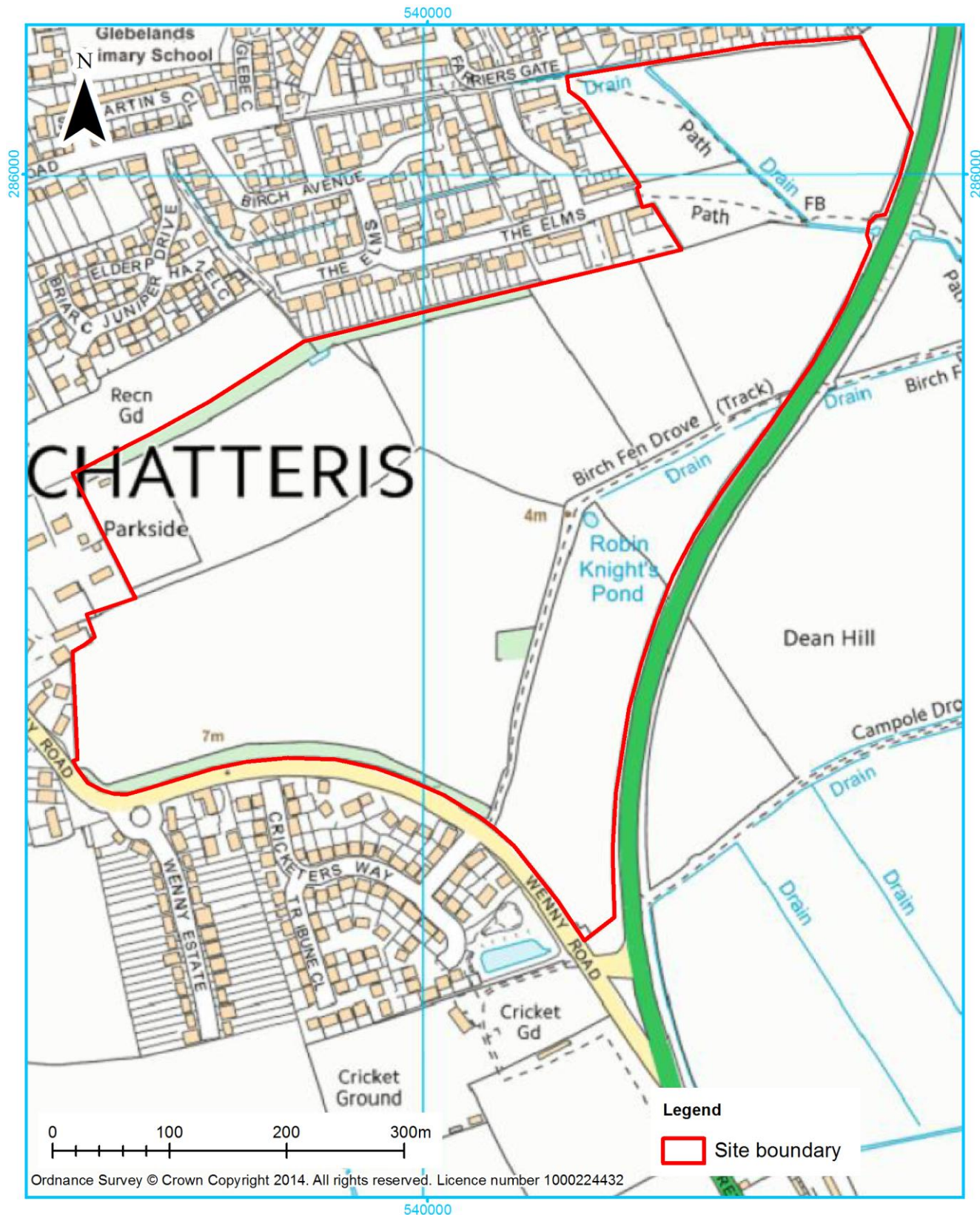


Figure 1.2.: Breeding bird survey area in Spring 2015.

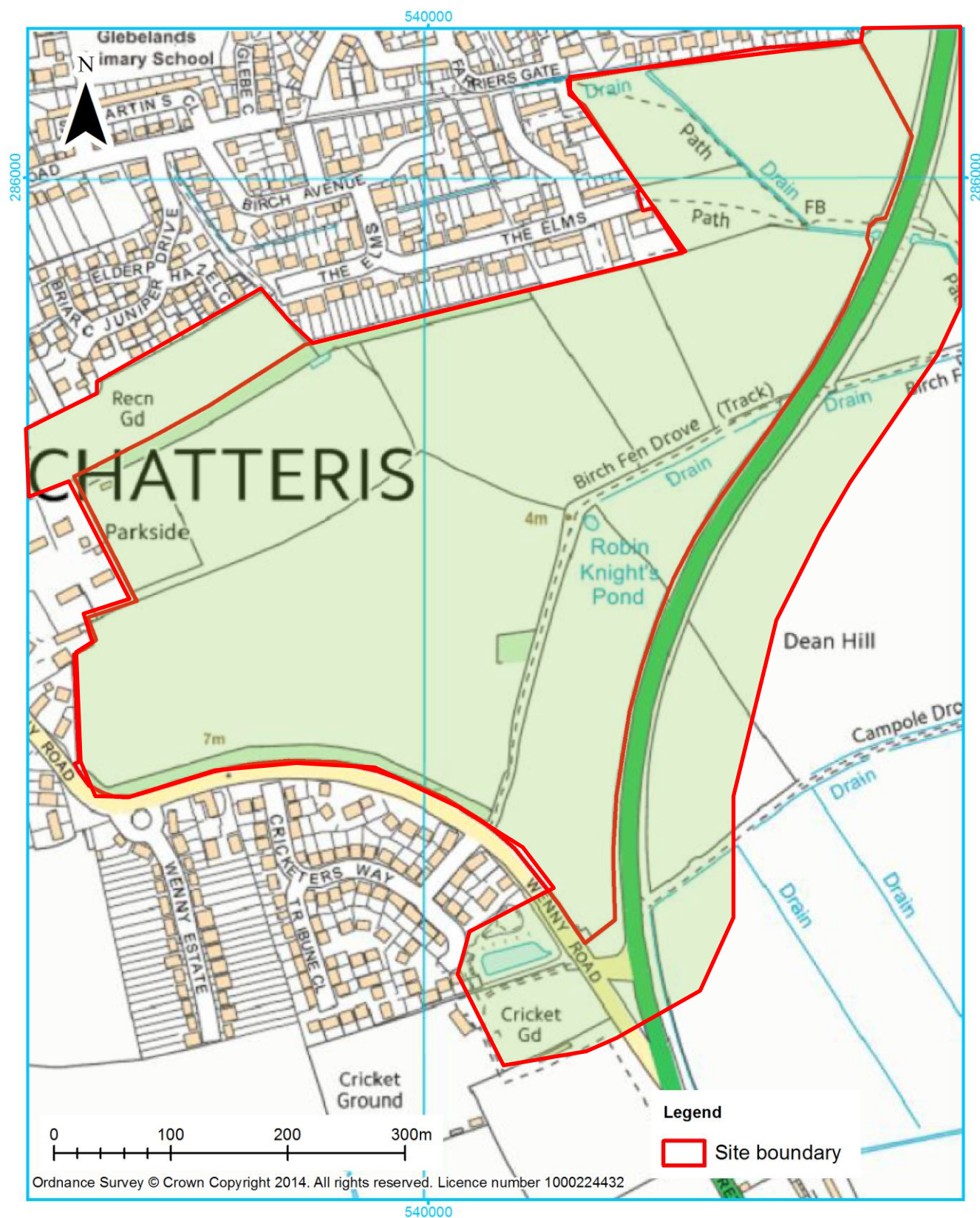


Figure 3.1: Indicative location of breeding territories of Dunnock.

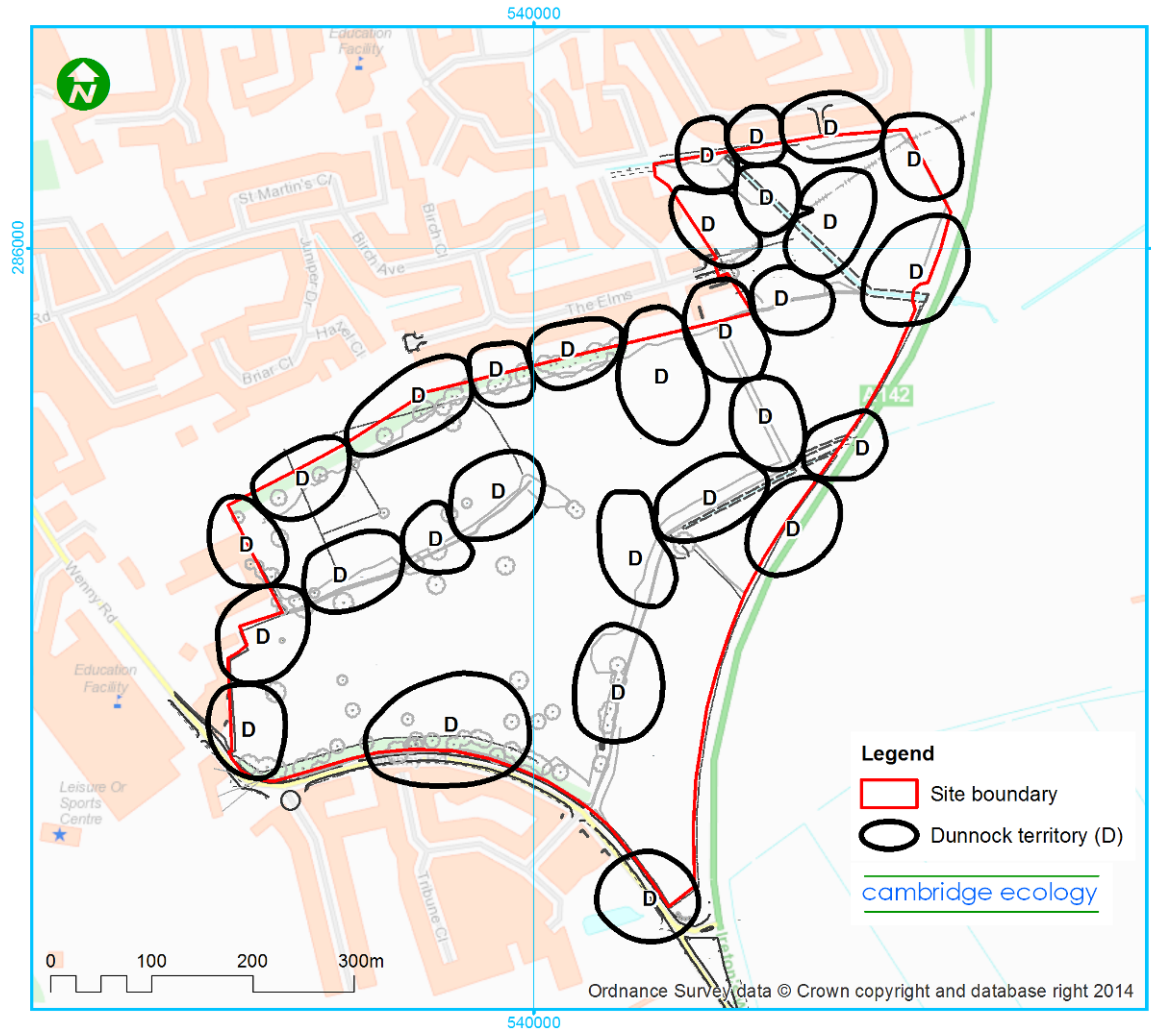


Figure 3.2: Indicative location of breeding territories of Song Thrush.

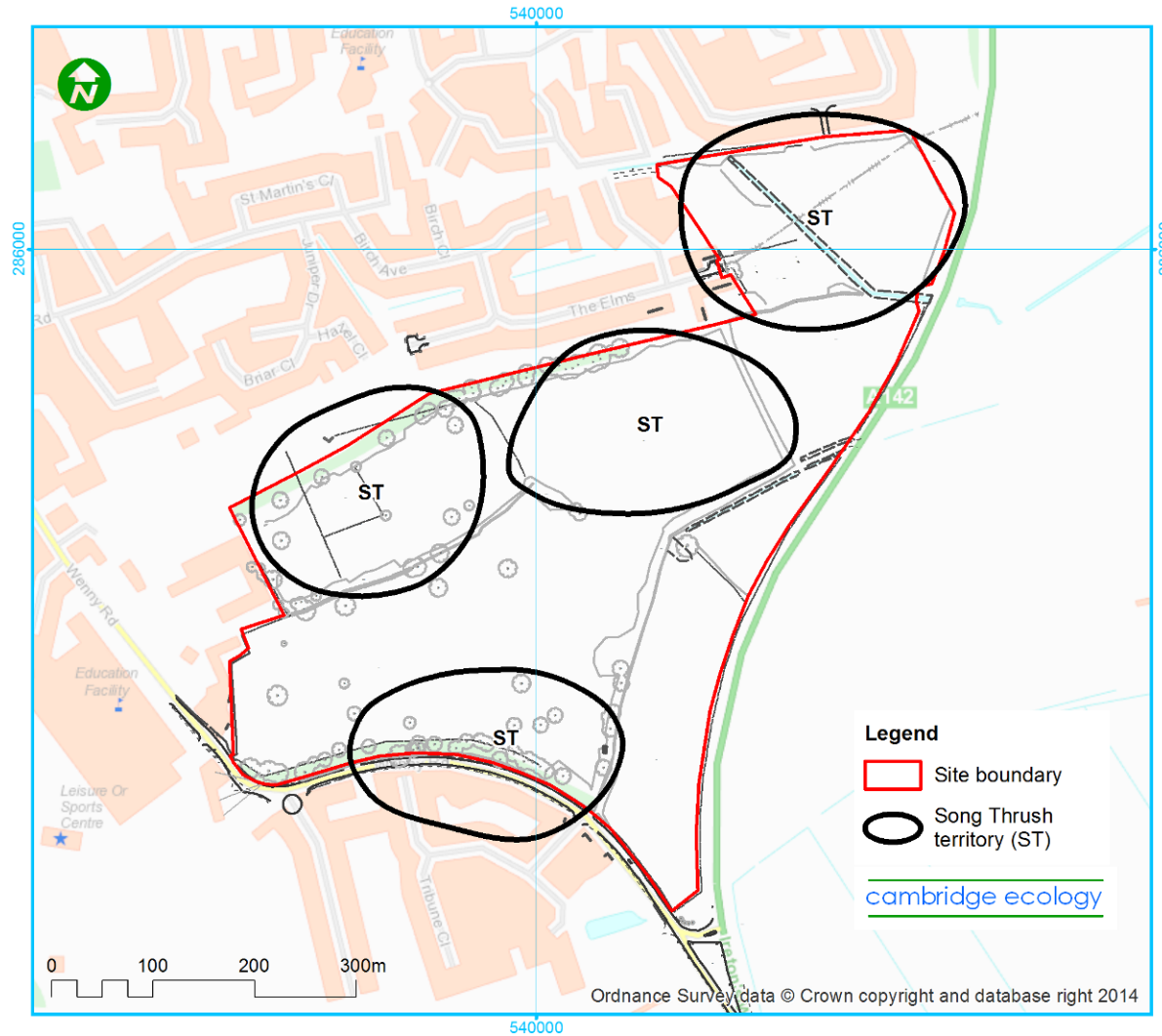


Figure 3.3: Indicative location of breeding territories of Starling.

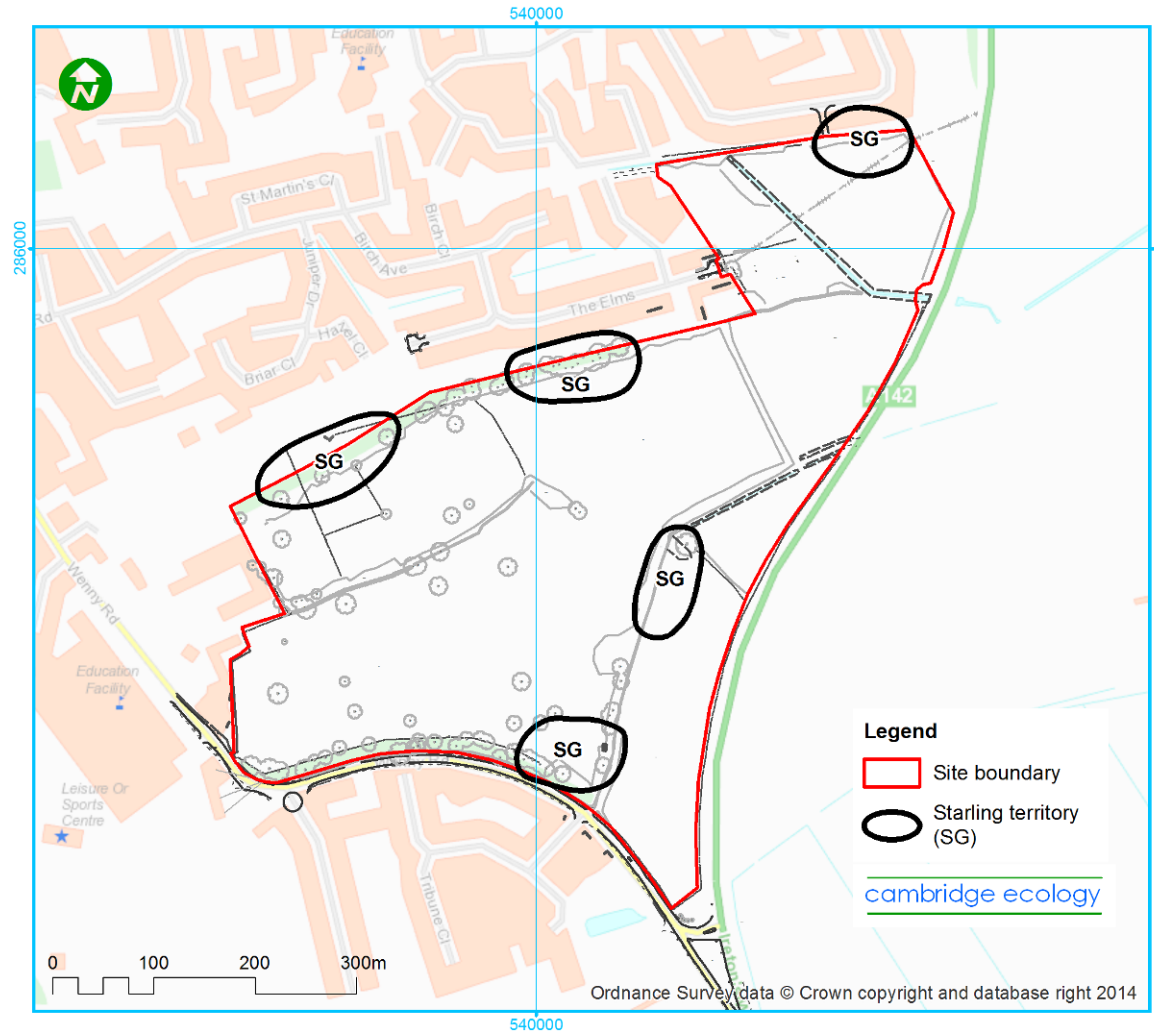


Figure 3.4: Indicative location of breeding territories of House Sparrow.

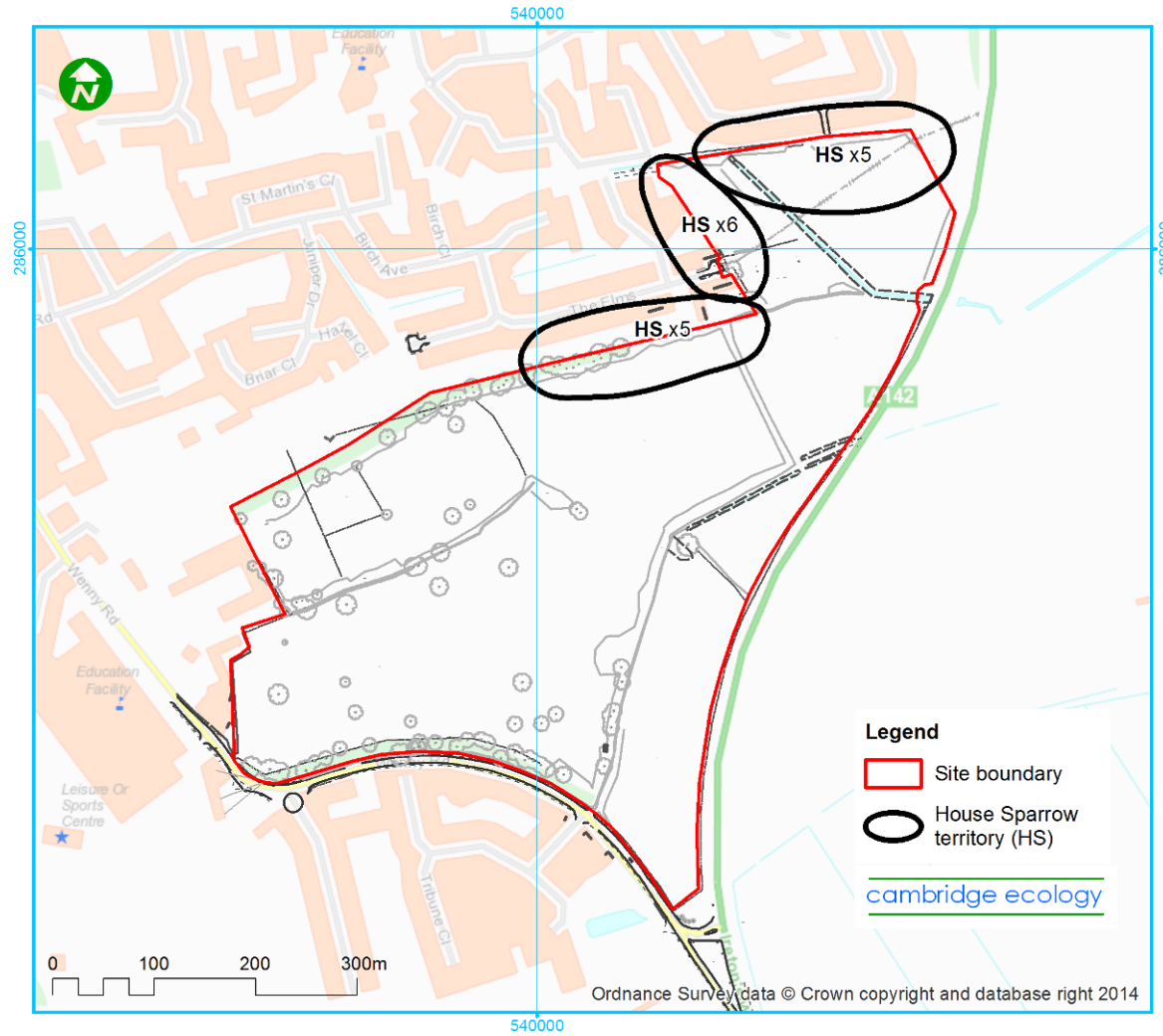


Figure 3.5: Indicative location of breeding territories of Linnet.

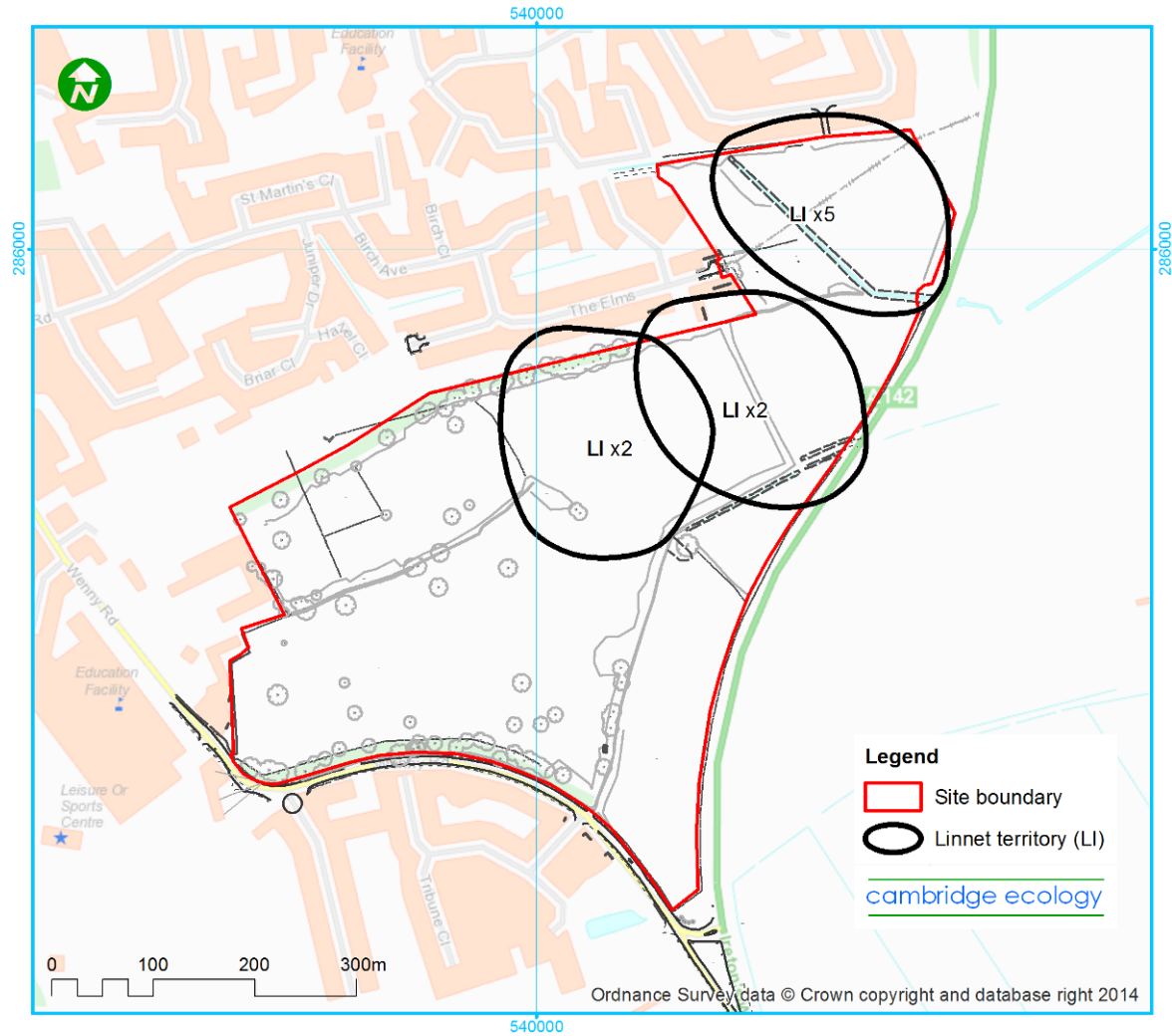


Figure 3.6: Indicative location of breeding territories of Bullfinch.

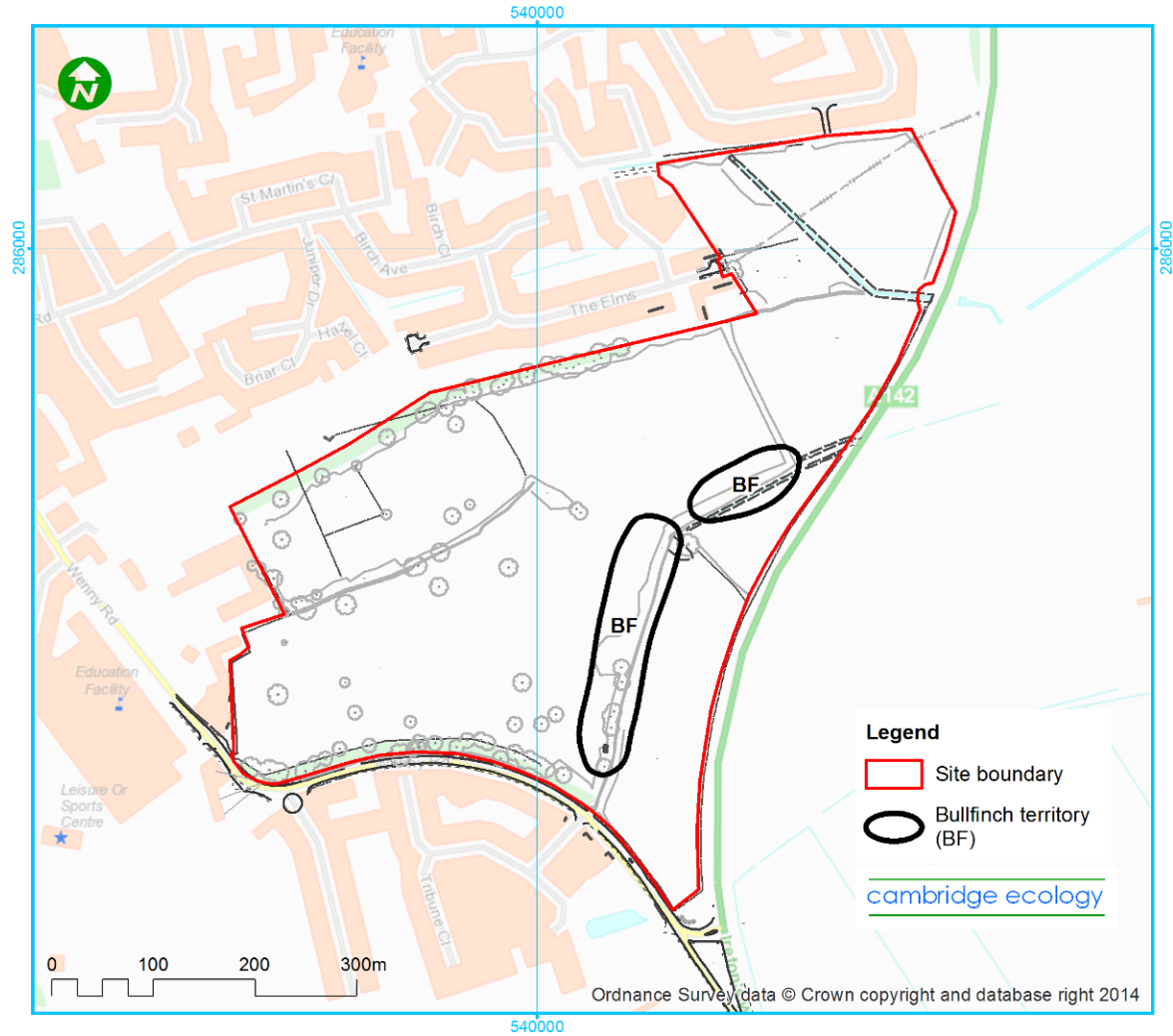


Figure 3.7: Indicative location of breeding territories of Yellowhammer.

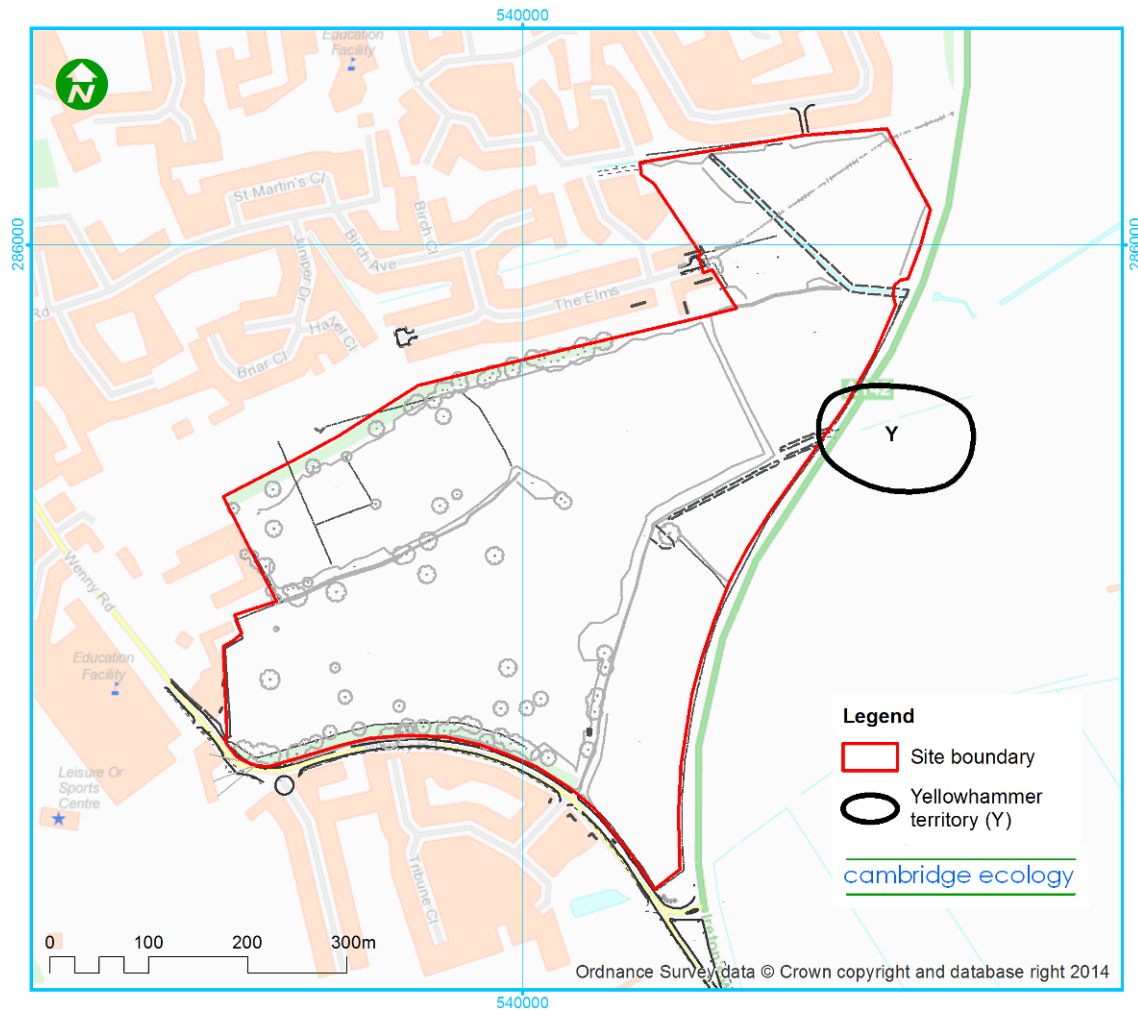
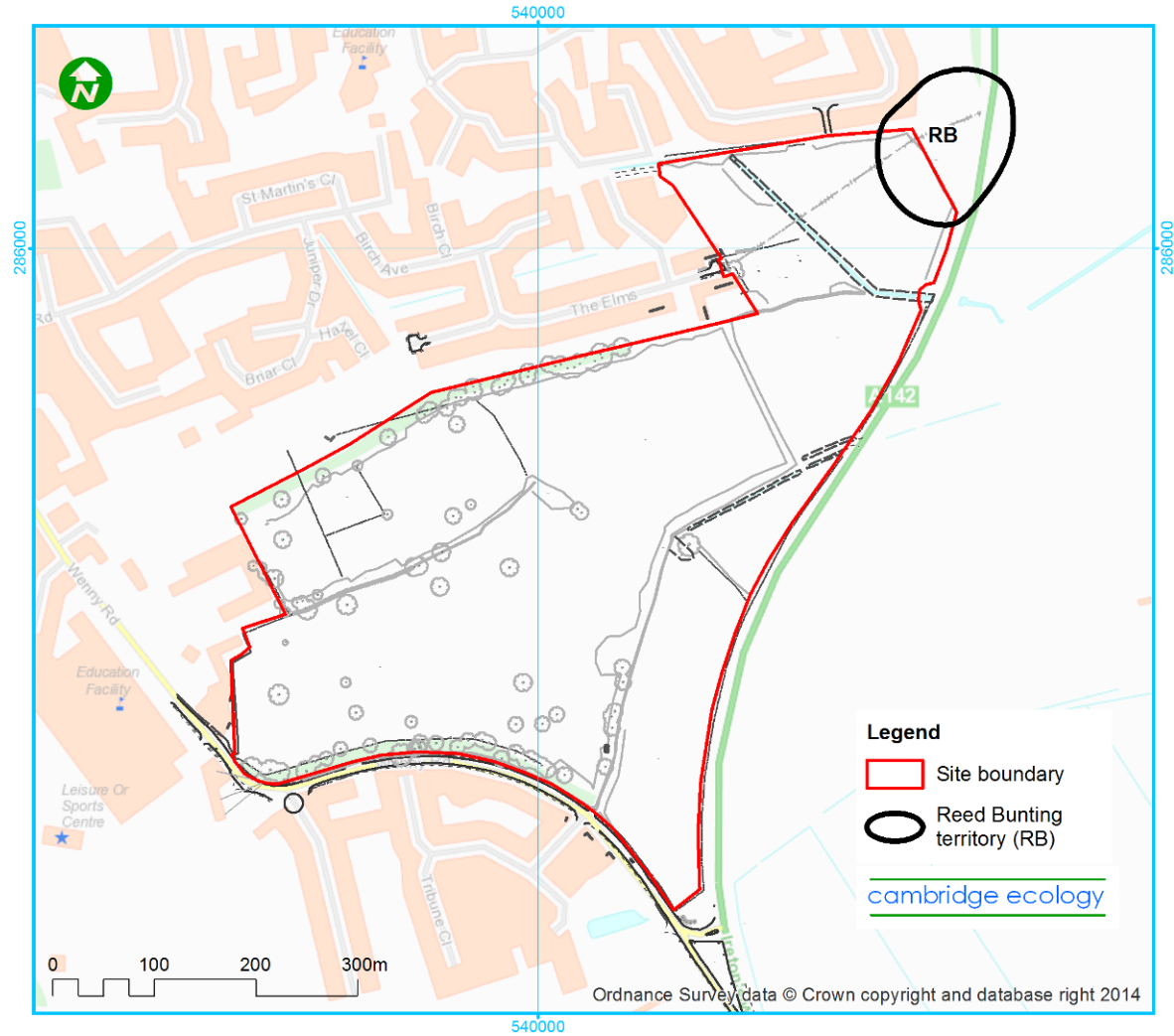


Figure 3.8: Indicative location of breeding territories of Reed Bunting.



8 APPENDIX A – ENGLISH AND LATIN NAMES OF ALL BIRD SPECIES RECORDED DURING THE SURVEYS AT THE WENNY ROAD DEVELOPMENT SITE.

Species English Name	Latin Name
Mallard	<i>Anas platyrhynchos</i>
Sparrowhawk	<i>Accipiter nisus</i>
Kestrel	<i>Falco tinnunculus</i>
Red-legged Partridge	<i>Alectoris rufa</i>
Moorhen	<i>Gallinula chloropus</i>
Snipe	<i>Gallinago gallinago</i>
Stock Dove	<i>Columba oenas</i>
Woodpigeon	<i>Columba palumbus</i>
Collared Dove	<i>Streptopelia decaocto</i>
Barn Owl	<i>Tyto alba</i>
Tawny Owl	<i>Strix aluco</i>
Swift	<i>Apus apus</i>
Green Woodpecker	<i>Picus viridis</i>
Great Spotted Woodpecker	<i>Dendrocopos major</i>
Swallow	<i>Hirundo rustica</i>
House Martin	<i>Delichon urbica</i>
Meadow Pipit	<i>Anthus pratensis</i>
Pied Wagtail	<i>Motacilla alba</i>
Wren	<i>Troglodytes troglodytes</i>
Dunnock	<i>Prunella modularis</i>
Robin	<i>Erithacus rubecula</i>
Blackbird	<i>Turdus merula</i>
Song Thrush	<i>Turdus philomelos</i>
Redwing	<i>Turdus iliacus</i>
Mistle Thrush	<i>Turdus viscivorus</i>
Lesser Whitethroat	<i>Sylvia curruca</i>
Whitethroat	<i>Sylvia communis</i>
Garden Warbler	<i>Sylvia borin</i>
Blackcap	<i>Sylvia atricapilla</i>
Chiffchaff	<i>Phylloscopus collybita</i>
Willow Warbler	<i>Phylloscopus trochilus</i>
Long-tailed Tit	<i>Aegithalos caudatus</i>
Blue Tit	<i>Parus caeruleus</i>
Great Tit	<i>Parus major</i>
Jay	<i>Garrulus glandarius</i>
Magpie	<i>Pica pica</i>
Jackdaw	<i>Corvus monedula</i>
Rook	<i>Corvus frugilegus</i>
Carrion Crow (black forms)	<i>Corvus corone corone</i>
Starling	<i>Sturnus vulgaris</i>
House Sparrow	<i>Passer domesticus</i>
Chaffinch	<i>Fringilla coelebs</i>
Greenfinch	<i>Carduelis chloris</i>
Goldfinch	<i>Carduelis carduelis</i>
Linnet	<i>Carduelis cannabina</i>
Bullfinch	<i>Pyrrhula pyrrhula</i>
Yellowhammer	<i>Emberiza citrinella</i>
Reed Bunting	<i>Emberiza schoeniclus</i>

9 APPENDIX B

Breeding Bird legislation

- 9.1 Under the terms of the Wildlife & Countryside Act 1981 (as amended) - All birds, their nests, eggs and young are protected by law. It is an offence, with certain exceptions, to:
- intentionally kill, injure or take any wild bird.
 - intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
 - intentionally take or destroy the egg of any wild bird.
 - have in one's possession or control any wild bird (dead or alive), part of a wild bird or egg of a wild bird which has been taken in contravention of the Act, the Protection of Birds Act 1954 or the law of any EU Member State (which implements the EU Birds Directive 1979).
 - intentionally or recklessly (revised under the terms of the CRoW Act 2000) disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird.
- 9.2 Therefore any activities, such as site clearance work, must avoid contravention of this legislation.
- 9.3 The results of the study show the presence of Hobby nesting at the site. The Hobby is listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) and therefore have the additional protected from intentional or reckless disturbance
- 9.4 It is recommended that for the latest information and guidance on the interpretation of the legislation additional legal advice should be sought. See www.jncc.gov.uk for further information.
- 9.5 It remains the client's responsibility to maintain legal compliance relating to national and international wildlife legislation.