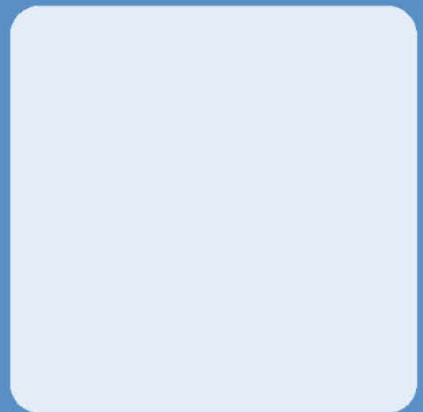
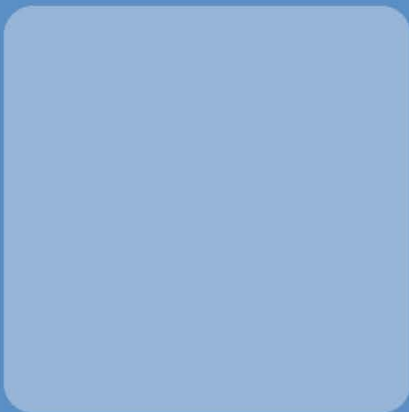
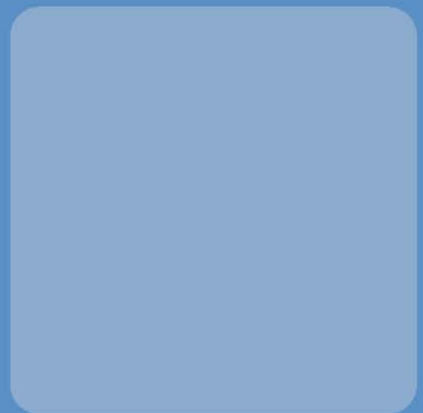
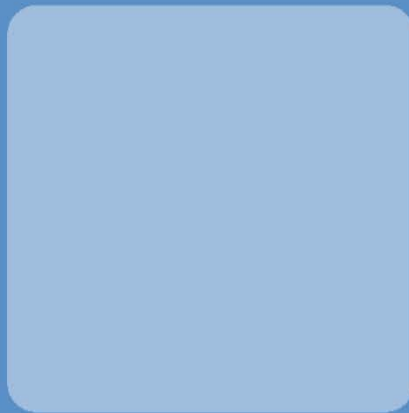
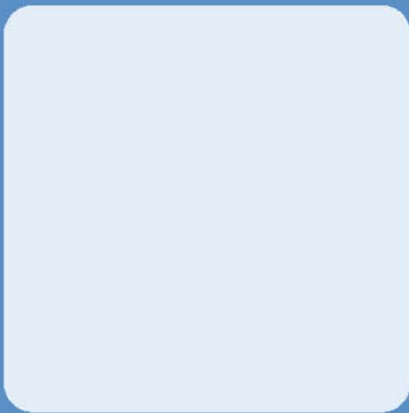


RPS

WALTHAM CROSS: BREEDING
BIRD SURVEY 2017





WALTHAM CROSS: BREEDING BIRD SURVEY 2017

July 2017

Our Ref: JSL2707

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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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EXECUTIVE SUMMARY

- RPS was commissioned by IKEA Properties Investments Limited to undertake a survey for breeding birds on land adjacent to Plaza Park, Great Cambridge Road, Waltham Cross EN8 8DY.
- The breeding bird survey was undertaken based on a standard territory mapping methodology as outlined in Gilbert *et al.* (1998) and Bibby *et al.* (2000). This method is based on the principle that many species during the breeding season are territorial. This is particularly the case amongst passerines, where territories are often marked by conspicuous song, display and periodic disputes with neighbouring individuals. All bird species were recorded and mapped across the whole site.
- Surveys for breeding birds were undertaken between April and June 2017 with a total of five survey visits taking place.
- A total of 34 species were recorded during the survey; 21 species were confirmed as breeding within the site and three species were considered to be probably or possibly breeding within the survey area. Of the species confirmed as breeding or considered as probably / possibly breeding, five species meet at least one of a range of criteria relating to special statutory protection or conservation importance.
- No species recorded during surveys are included on Annex 1 of the EU Birds Directive or on Schedule 1 of the Wildlife and Countryside Act.
- No species considered as breeding or probably / possibly breeding are present in any significant numbers, approaching 1% of the UK population.
- The diversity of species present within the Waltham Cross survey area is at a level indicative of local importance to breeding birds. Where it is necessary to remove any scrub, tree or grassland habitat, the development is therefore likely to cause a loss of suitable breeding habitat with potentially locally significant effects.
- It is recommended that, as a minimum, the development retains existing boundary scrub and trees, which provide valuable food and nesting opportunities for birds.
- To avoid any impacts on breeding birds within the development boundary during construction, any clearance of breeding habitat should be undertaken outside of the bird breeding season (typically March to August inclusive). If this is not possible, then it will be necessary for a suitably qualified ornithologist, acting as an Ecological Clerk of Works (ECoW), to conduct a survey for nesting birds immediately prior to the commencement of any construction activities.
- Should active bird nests be discovered, appropriate measures will be put in place to ensure that any nest is not disturbed, in line with recommendations to detect and avoid breeding birds as detailed in Section 5.
- Depending on the scale of changes or losses to habitat availability across the site, the planting of native trees and shrubs has the potential to maintain the ornithological value of the site.

- Depending on the scale of change or loss to habitat availability across the site, providing nest boxes of several different designs will help to maintain the current populations of some species of bird.

1 INTRODUCTION

Background to the study

- 1.1 RPS was commissioned by IKEA Properties Investments Limited to undertake a survey for breeding birds on land adjacent to Plaza Park, Great Cambridge Road, Waltham Cross EN8 8DY.
- 1.2 The survey site has previously been subject to a Phase 1 Habitat Survey, botanical survey and an ecological appraisal in 1991 (David Tyldesley & Associates, 1991). Further nature conservation interest, botanical and amphibian surveys were undertaken by Babbie Group in 2000 (Babbie Group, 2000). Since then, an ecology survey and reptile report were conducted in 2009 (Entec UK Ltd., 2009).
- 1.3 Proposals for the site include the construction of an Ikea retail store with associated hard and soft landscaping

Legislation

- 1.4 The legislative provisions for the protection of wild birds in the UK are contained primarily in Section 1- 7 of the Wildlife and Countryside Act (WCA) 1981 (as amended). Under the WCA, a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state.
- 1.5 All birds, their nests and eggs are afforded protection under the Wildlife and Countryside Act 1981, as updated by the Countryside and Rights of Way Act 2000. It is an offence 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; and
 - intentionally take or destroy the eggs of any wild bird.
- 1.6 Special penalties exist for offences related to species listed on Schedule 1, for which there are additional offences for disturbing these birds at their nests, or their dependent young.
- 1.7 Schedule 1 birds cannot be intentionally or recklessly disturbed when nesting and there are increased penalties for doing so. Licences can be issued to visit the nests of such birds for conservation, scientific or photographic purposes but not to allow disturbance during a development even in circumstances where that development is fully authorised by consents such as a valid planning permission.

Aims and objectives

- 1.8 The aims and objectives of the survey for breeding birds were to:
- identify whether the site supported any specially protected species or species of particular conservation concern; and

- provide information on potential impacts of the development proposals to the breeding bird community identified in the study area.

Study area

- 1.9 The site is approximately 10 ha in size, irregular in shape and primarily comprised of scrub and tall ruderal rough grassland.
- 1.10 The site is bordered by the Great Cambridge Road A10 to the west, Winston Churchill Way to the north, and Great Eastern Road and a footpath to the south. A railway line runs parallel to the eastern site boundary. The surrounding area consists of industrial buildings to the south and residential buildings to the east. Agricultural fields are present to the west, on the other side of the Great Cambridge Road, with Cedars Park present to the north.
- 1.11 The wider area is a mixture of residential and commercial properties, predominantly to the north and south, with agricultural fields and pockets of woodland to the east and west. A series of lakes are present adjacent to the River Lea further to the east of the site.

2 METHODS

- 2.1 The breeding bird survey was undertaken based on a standard territory mapping methodology as outlined in Gilbert *et al.* (1998) and Bibby *et al.* (2000).
- 2.2 This method is based on the principle that many species during the breeding season are territorial. This is particularly the case amongst passerines, where territories are often marked by conspicuous song, display and periodic disputes with neighbouring individuals.
- 2.3 All bird species were recorded and mapped across the whole site.
- 2.4 The survey area was walked at a slow pace in order to locate and identify all individual birds. Visits were undertaken early in the morning, finishing before midday. The whole survey area was covered in each visit, using suitable optical equipment to observe bird behaviour. All areas of the site were approached to within 50-100m where possible. Survey routes were mapped and the direction walked alternated on each visit, to ensure that all areas were covered at various times of day across the duration of the survey. All species encountered within the survey area were recorded and mapped.
- 2.5 Surveys for breeding birds were undertaken between April and June 2017 with a total of five survey visits taking place. The survey visits and ornithologists undertaking the survey were as follows:
- Visit 1: 3rd April 2017; Andrew Seth
 - Visit 2: 19th April 2017; Andrew Seth
 - Visit 3: 11th May 2017; Andrew Seth
 - Visit 4: 25th May 2017; Andrew Seth
 - Visit 5: 8th June 2017; Andrew Seth
- 2.6 On each visit, registrations were recorded directly into ESRI Arcpad GIS software loaded onto handheld PDA devices, with a 1:10,000 scale Ordnance Survey base map of the study area (and adjacent land). A fresh map was used for each survey. Registrations of birds were recorded using standard British Trust for Ornithology (BTO) two letter species codes (BTO 2009). Specific codes were also used to denote singing, calling, movement between areas, flight, carrying food, nest building, aggressive encounters and other behaviour.
- 2.7 The expected outcome is that mapped registrations fall into clusters, approximately coinciding with territories. A cluster is generally a spatially distinct group of registrations that represent the activity of not more than one pair. Ideally, clusters include registrations of territorial behaviour across all visits and are clearly demarcated from adjacent clusters by simultaneous recording of neighbouring birds. Where a species exhibits high territory density, the mapping of simultaneously singing birds becomes essential. Territory boundaries are assumed to be between such birds.
- 2.8 Territory mapping methods produce analysis maps of non-overlapping ellipses encircling clusters of records thought to relate to separate pairs of breeding birds. These ellipses may not show the

entire extent of the pairs' actual breeding territory which may be significantly larger; however, they are likely to show those areas in which the pair is most active.

- 2.9 On completion of the five surveys, analysis maps were produced for each species, consisting of all registrations recorded during the survey. From these species maps, the number of territories was calculated by identifying the number of territories or clusters present.
- 2.10 For late-arriving migrants, e.g. Spotted Flycatcher *Muscicapa striata*, for which fewer potential contacts are possible, only one registration is required to form a territory cluster. A number of species are not territorial and are dealt with appropriately, e.g. Linnet *Carduelis cannabina*, where data represent aggregations or loose colonies.
- 2.11 Standard registration mapping techniques were also used to record non-breeding species.
- 2.12 The following definitions have been used to identify the breeding status of the species recorded:
- confirmed breeding: Includes species for which territories were positively identified as a result of the number of registrations, the location of an active nest, and the presence of recently fledged young or downy young.
 - probable breeding: Includes a pair observed in suitable nesting habitat in breeding season, or agitated behaviour / anxiety calls from adults suggesting probable presence of nest or young nearby. Behaviour was observed on insufficient occasions to confirm the presence of a territory.
 - possible breeding: Includes species observed in breeding season in suitable nesting habitats, or singing male present (or breeding calls heard) in breeding season in suitable breeding habitat.
 - non-breeding: Fly-over species observed but suspected to be on migration, or species observed but suspected to be summering non-breeder.

Assessment criteria

- 2.13 The assessment of the breeding bird community at Waltham Cross includes a focus on species that are afforded special statutory protection or those included on one, or more, of the lists of species of conservation interest. These include:
- species listed on Annex 1 of the EC Birds Directive (Directive 2009/147/EC) or species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended 1985);
 - species included in the Birds of Conservation Concern (BoCC) Red and Amber Lists (Eaton *et al.*, 2015),
 - species listed as being of Principal Importance under the Natural Environment and Rural Communities (NERC) Act 2006 (Anon, 2006);
 - priority species within the UK Biodiversity Action Plan (UKBAP) (Anon, 2008) or Hertfordshire Local BAP (A 50 year vision Biodiversity Action Plan for Hertfordshire, Hertfordshire Environmental Forum (HEF), (2006); and
 - those occurring in nationally, regionally or locally important numbers.

- 2.14 Annex 1 species are those for which the UK Government are required to take special measures, including the designation of Special Protection Areas, to ensure the survival and reproduction of these species throughout their area of distribution.
- 2.15 The NERC list of Species of Principal Importance is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006; under section 40 every public authority (e.g. a local authority or local planning authority) must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. In addition, with regard to those species on the list of Species of Principal Importance prepared under section 41, the Secretary of State must:
- “(a) take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section, or
 - (b) promote the taking by others of such steps.”
- 2.16 Species listed on the BoCC Red List are those that have declined in numbers by 50% over the last 25 years, those that have shown an historical population decline between 1800 and 1995 and species that are of global conservation concern. The 67 species on the Red List are of the most urgent conservation concern.
- 2.17 Species listed on the BoCC Amber List, of which there are currently 96, include those that have shown a moderate decline in numbers (25%-49%) over the last 25 years and those with total populations of less than 300 breeding pairs. Also included are those species which represent a significant proportion (greater than 20%) of the European breeding or wintering population, those for which at least 50% of the British population is limited to 10 sites or less, and those of unfavourable conservation status in Europe.
- 2.18 The remaining species are placed on the Green List, indicating that they are of low conservation priority. These species still receive full protection through the provisions of the Wildlife and Countryside Act 1981, as amended.
- 2.19 The UKBAP was launched in 1994 and established a framework and criteria for identifying species and habitat types of conservation concern. From this list, action plans for priority species of conservation concern were published, and have subsequently been amended and updated.
- 2.20 Species listed as priority bird species on the Hertfordshire Local BAP have also been considered for assessment.

3 RESULTS

3.1 A total of 34 bird species were recorded during the survey of breeding birds at Waltham Cross between April and June 2017. Of these species, 21 were confirmed to be breeding and three species were considered to be probably / possibly breeding, resulting in a breeding bird assemblage of 24 species. Records relating to the remaining 10 species were considered to be of non-breeding individuals.

3.2 A summary of the breeding and conservation status of the 34 species recorded during the course of the survey, with the numbers of territories identified (or estimated in the case of probable and possible records) is provided in Table 3.1. For some species that are numerous on site and not of conservation concern, the number of territories has not been calculated and these are referred to in Table 3.1 as being present.

Table 3.1. The breeding and conservation status of species recorded during the breeding bird survey at Waltham Cross, April – June 2017

Species	Breeding status	Number of territories (where applicable)	Conservation Status			
			Species of Principal Importance	UK BAP priority species	Birds of Conservation Concern 4	Local BAP
Mallard	Confirmed	1			Amber	
Red-legged Partridge	Probable	(1)				
Pheasant	Probable	(1)				
Grey Heron	Non-breeding					
Sparrowhawk	Non-breeding					
Moorhen	Confirmed	1				
Black-headed Gull	Non-breeding				Amber	
Feral Pigeon	Non-breeding					
Woodpigeon	Confirmed	P				
Collared Dove	Confirmed	2				
Ring-necked Parakeet	Non-breeding					
Magpie	Confirmed	P				
Jackdaw	Non-breeding					
Carrion Crow	Possible					
Goldcrest	Non-breeding					
Blue Tit	Confirmed	6				
Great Tit	Confirmed	4				
Long-tailed Tit	Confirmed	1				

Species	Breeding status	Number of territories (where applicable)	Conservation Status			
			Species of Principal Importance	UK BAP priority species	Birds of Conservation Concern 4	Local BAP
Chiffchaff	Confirmed	6				
Blackcap	Confirmed	6				
Lesser Whitethroat	Confirmed	1				
Whitethroat	Confirmed	12				
Wren	Confirmed	12				
Starling	Non-breeding		■	■	Red	
Blackbird	Confirmed	5-6				
Song Thrush	Confirmed	4	■	■	Red	■
Robin	Confirmed	12				
Dunnock	Confirmed	10	■	■	Amber	
House Sparrow	Confirmed	1-2	■	■	Red	
Meadow Pipit	Non-breeding				Amber	
Chaffinch	Confirmed	2				
Greenfinch	Confirmed	3-4				
Linnet	Confirmed	3	■	■	Red	
Goldfinch	Non-breeding					

Notes on Table 3.1: P = present

- 3.3 A total of 21 species were confirmed to be breeding within the Waltham Cross survey area in 2017.
- 3.4 There were three species considered to be probably / possibly breeding within the survey area in 2017. These were Red-legged Partridge, Pheasant and Carrion Crow. The number of registrations for each of these species was not wholly indicative of behaviour that could allow confirmation of breeding on site.
- 3.5 No species afforded special statutory protection under Annex 1 of the EU Birds Directive (Directive 2009/147/EC), or listed on Schedule 1 of the Wildlife and Countryside Act 1981 were recorded during the survey.
- 3.6 Of the 24 species confirmed to be breeding or possibly breeding on site, four species are listed as a priority species in the UK BAP and as Species of Principal Importance under Section 41 of the NERC Act, one species is listed on the Hertfordshire LBAP, three species are included on the BoCC Red List and two species are included on the BoCC Amber List. These species and their relevant statutory protection or list of conservation importance are shown in Table 3.1.
- 3.7 Ten species were recorded on migration or flying over the site and did not display any signs of breeding activity.

3.8 The locations of territories of species of conservation concern confirmed as breeding on site are shown in Figures 3.1 and 3.2.

4 EVALUATION

Specially Protected Species

- 4.1 No species recorded during surveys are included on Annex 1 of the EU Birds Directive or on Schedule 1 of the Wildlife and Countryside Act.

Species of Conservation Importance

- 4.2 Four species confirmed as breeding (Song Thrush, Dunnock, House Sparrow and Linnet) are included on the list of Species of Principal Importance prepared under Section 41 of the Natural Environment and Rural Communities Act 2006.

- 4.3 Three species confirmed as breeding are included on the UK BoCC Red List. Each species and the reasons for its placement on the Red List is listed below:

- Song Thrush - severe decline in the UK breeding population, of more than 50%, over the entire period used for assessments.
- House Sparrow - severe decline in the UK breeding population, of more than 50%, over the entire period used for assessments and moderate decline, of more than 25% but less than 50% in the last 25 years.
- Linnet - severe decline in the UK breeding population, of more than 50%, over the entire period used for assessments.

- 4.4 Two species confirmed as breeding are included on the UK Amber List. Each species and the reasons for its placement on the Amber List is listed below:

- Mallard – moderate decline in the non-breeding population over the last 25 years.
- Dunnock - moderate decline in the UK breeding population of more than 25% but less than 50% over the entire period used for assessments.

- 4.5 Four species confirmed as breeding (Song Thrush, Dunnock, House Sparrow and Linnet) are priority species listed within the UK BAP and one species (Song Thrush) is listed as a priority species on the Local Biodiversity Action Plan for Hertfordshire.

- 4.6 Inclusion on the BoCC lists or priority list in the UK BAP does not confer any statutory protection. However, the species concerned are all of conservation importance and considered to be under varying levels of threat in a UK context.

Species Abundance and Diversity

- 4.7 No species was present in numbers approaching national significance (*i.e.* 1% of the UK population [Musgrove et al. 2013]).

- 4.8 Accurate local population estimates are unavailable for many of the species of conservation importance recorded during the survey. However, whilst all these species are declining, all remain widespread and are considered likely to be present in numbers important at a local scale only.

Species distribution

- 4.9 With the exception of Mallard, territory locations of species of conservation concern that were confirmed as breeding within the survey area were found in scrub habitat. These territories were widespread and located both within the site and on the periphery of the site.
- 4.10 The Mallard territory was located within the waterbody in the north-eastern corner of the site.

5 IMPLICATIONS OF THE DEVELOPMENT PROPOSALS

- 5.1 This section considers both the impacts of habitat loss and construction on the breeding bird assemblage during the construction process.

Impacts of habitat loss on breeding bird assemblage

- 5.2 It will be necessary to remove areas of scrub, trees and grassland from within the survey area, which will cause a loss of bird breeding habitat for species dependent on these habitats, including species of conservation concern such as Song Thrush, Dunnock and Linnet.
- 5.3 As a result, it is considered that there may be a long-term impact, of local importance, on the breeding bird assemblage at Waltham Cross if the loss of habitat on site is significant and in the absence of suitable mitigation.
- 5.4 The breeding bird assemblage at Waltham Cross is 24 species. Of these species, 20 are dependent on scrub habitat within which to breed.
- 5.5 Therefore, the development proposals should seek to retain as much of the existing habitat on site as possible. This should include, but not be limited to, any boundary scrub along the edge of the survey area.
- 5.6 Should the development proposals lead to the loss of some, but not all, breeding bird habitat present on site, then on-site habitat creation of similar ecological value to that currently present should be included within the landscaping plan. This will ensure that any habitat loss during construction is mitigated for and will have the objective of conserving the assemblage of breeding birds dependent on the survey area.

Impacts of construction on breeding bird assemblage on-site

- 5.7 To avoid any impacts upon breeding birds within the development boundary during construction, any clearance of vegetation should be undertaken outside of the breeding season. Typically, for the majority of species this is considered as being March to August inclusive.
- 5.8 If it is not possible to clear vegetation outside of the bird breeding season, then it will be necessary for a suitably qualified ornithologist, acting as an Ecological Clerk of Works (ECoW) to conduct a survey for nesting birds in advance of vegetation clearance. Typically, this survey will be undertaken 24 hours ahead of planned vegetation clearance.
- 5.9 Should active bird nests be discovered by the ECoW, appropriate measures will be put in place to ensure that any nest found is not disturbed. There is no licence available to damage or destroy an active nest of a breeding bird at any time of year.
- 5.10 Protective measures, on discovery of an active nest, will involve placing a buffer around the nest within which no works will be undertaken until the nest has been judged, by a suitably qualified ornithologist, to no longer be in use (i.e. fledged young have left the nest or the nesting attempt has failed).

- 5.11 The radius of the protective buffer and duration it is imposed will be dependent on the species present and stage of breeding (i.e. with eggs, chicks, etc.). For the majority of birds, this buffer could be in place for up to 30 days (on the assumption of a 'new' nest with recently laid eggs).
- 5.12 Where no active nests are located, vegetation clearance must proceed immediately and should be completed within 24 hours of the inspection.

6 MITIGATION OPPORTUNITIES

- 6.1 It is recommended that wherever possible, as per Section 5, that the development retains any existing trees and scrub along the boundary of the site, which provide valuable food and nesting opportunities for birds.
- 6.2 Where mitigation is required owing to loss of habitat, the landscaping proposals should seek to include the planting of native trees and shrubs on site, as recommended in Section 5.6. Where possible, planting of native bushes, including Common Hawthorn and Blackthorn that produce autumn crops of fruit would be beneficial. This will promote the continued use of the site throughout the year by the majority of bird species recorded during the survey, providing foraging, roosting and breeding habitat in the summer months, along with foraging and roosting habitat in the winter months.
- 6.3 Depending on the scale of changes or losses to habitat availability across the site, providing nest boxes of several different designs will help to maintain the current populations of some bird species. Common species, such as Blue Tit and Great Tit, readily nest in hole-entrance nest boxes in urban areas. Both of these species were identified as breeding on site. Where possible, species-specific nest boxes for species such as Swift, House Martin, House Sparrow and Starling should also be provided on new buildings.

7 CONCLUSIONS

- 7.1 A total of 34 species were recorded during the survey; 21 were confirmed as breeding within the site and three species were considered to be probably or possibly breeding within the survey area. Of the species confirmed as breeding or considered as probably / possibly breeding, five species meet at least one of a range of criteria relating to special statutory protection or conservation importance.
- 7.2 No species considered as breeding or probably / possibly breeding are present in any significant numbers, approaching 1% of the UK population.
- 7.3 The diversity of species present within the Waltham Cross survey area is at a level indicative of local importance to breeding birds. Where it is necessary to remove any scrub, tree or grassland habitat, the development is therefore likely to cause a loss of suitable breeding habitat with potentially locally significant effects.
- 7.4 It is recommended that, as a minimum, the development retains existing boundary scrub and trees, which provide valuable food and nesting opportunities for birds.
- 7.5 To avoid any impacts on breeding birds within the development boundary during construction, it is recommended that any clearance of breeding habitat is undertaken outside of the bird breeding season (typically March to August inclusive). If this is not possible, then it will be necessary for a suitably qualified ornithologist, acting as an Ecological Clerk of Works (ECoW), to conduct a survey for nesting birds immediately prior to the commencement of any construction activities.
- 7.6 Should active bird nests be discovered, appropriate measures will be put in place to ensure that any nest is not disturbed, in line with recommendations to detect and avoid breeding birds as detailed in Section 5.
- 7.7 Depending on the scale of changes or losses to habitat availability across the site, the planting of native trees and shrubs has the potential to maintain the ornithological value of the site.
- 7.8 Depending on the scale of changes or losses to habitat availability across the site, providing nest boxes of several different designs will help to maintain the current populations of some bird species.

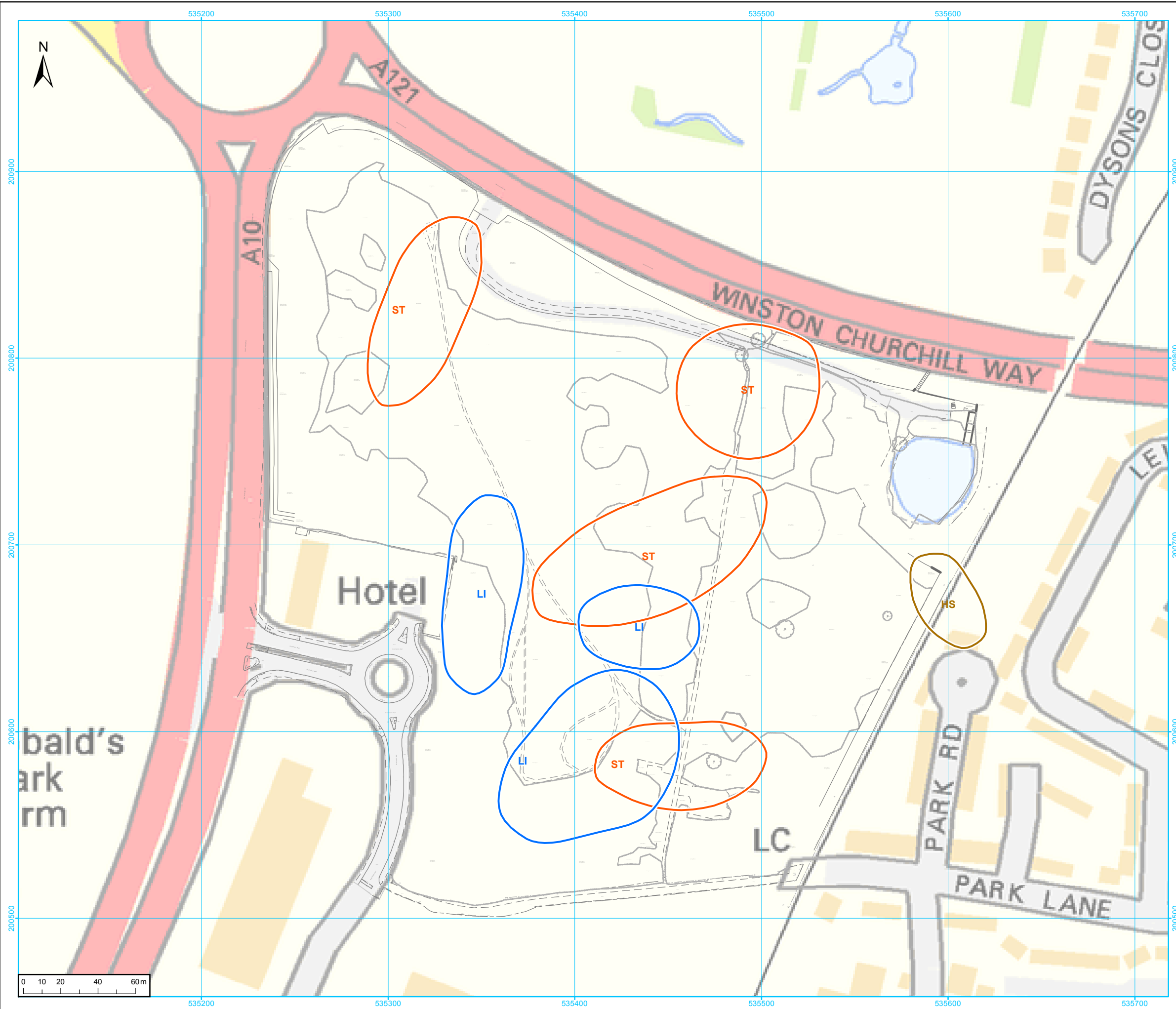
8 REFERENCES

- Anon. (1981). The Wildlife & Countryside Act. HMSO, London.
- Anon. (2006). The Natural Environment and Rural Communities Act. HMSO, London.
- Anon. (2008). UK Biodiversity Action Plan.
- Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000). *Bird Census Techniques: 2nd edition*. Academic Press, London.
- Eaton, M., Aebischer, N., Brown, A., Hearn, R., Lock, L., Musgrove A., Noble D., Stroud, D. and Gregory, R. (2015). Birds of Conservation Concern 4. The population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* **108**: 708-746
- EC (2009) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version). EC, Brussels.
- Gilbert, G., Gibbons, D.W. and Evans, J. (1998). *Bird Monitoring Methods: A manual of techniques for key species*. RSPB/BTO/JNCC/WWT/ITE/The Seabird Group. RSPB/BTO, Sandy, Beds.
- Hertfordshire Environmental Forum (HEF), (2006) Hertfordshire Local BAP (A 50 year vision Biodiversity Action Plan for Hertfordshire
- Musgrove, A., Aebischer, N., Eaton, M., Hearn, R., Newson, S., Noble, D., Parsons, M., Risely, K, and Stroud, D. (2013) Population estimates of birds in Great Britain and the United Kingdom. *British Birds* **106**, 64-100.

FIGURES

Figure 3.1. Locations of territories of BoCC Red List Species

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- Legend**
- Breeding Bird Territories
- House Sparrow (HS)
 - Linnet (LI)
 - Song Thrush (ST)

Rev	Description	Date	Initial	Checked



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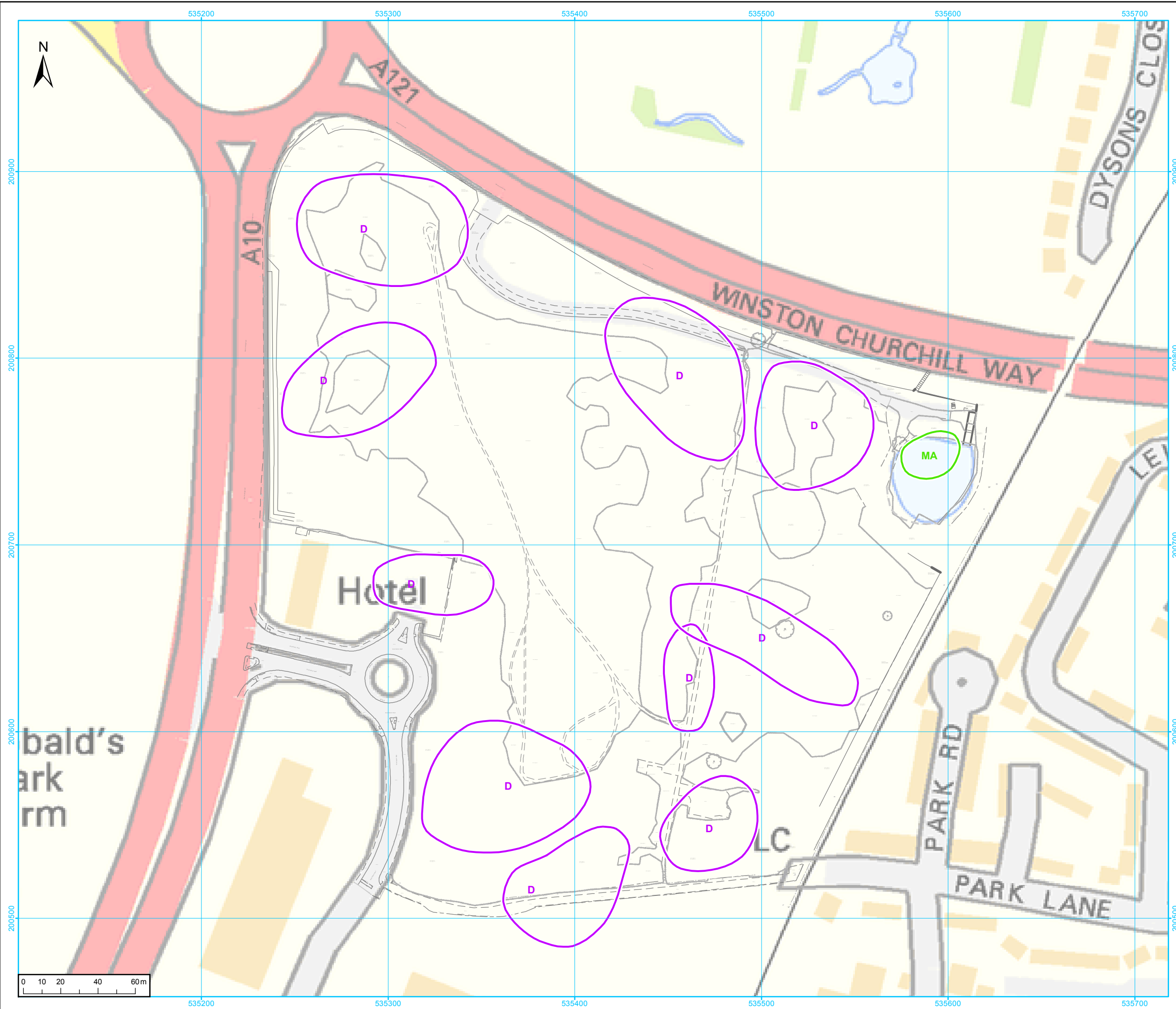
Project **Waltham Cross**

Title **Locations of territories of BoCC Red List species**

Status	Drawn By	PM/Checked By
Final	BF	AJB
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Drawing Number		Rev
Figure 3.1		-

Figure 3.2. Locations of territories of BoCC Amber List species

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Legend

- Breeding Bird Territories
- Dunnock (D)
 - Mallard (MA)

Rev	Description	Date	Initial	Checked



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Client **IKEA Properties Investment Ltd**

Project **Waltham Cross**

Title **Locations of territories of BoCC Amber List species**

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Figure 3.2		-