

One Horton Heath

Secondary Infrastructure Road and Green Infrastructure: Bird Hazard Management Plan

Final

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TABLE OF CONTENTS

INTRODUCTION	1
1.1 Background	1
1.2 Site Location	2
BIRD HAZARD GUIDANCE	4
1.3 Airport Operators Authority (AOA) Safeguarding Advice Notes (Previously BAA) – 2007	4
1.4 Civil Aviation Authority (CAA)	4
1.5 CAA CAP 772 Wildlife Hazard Management at Aerodromes	4
METHODOLOGY	5
1.6 Data Search	5
1.7 Surveys	5
1.7.1 Previous Surveys 2013 and 2014	5
1.7.2 Breeding Bird Surveys 2020	5
1.7.3 Limitations	5
1.8 Bird Hazard Assessment	5
1.8.1 Birds that Pose Risk	6
BASELINE DATA	7
1.9 Habitats	7
1.10 Birds	7
1.10.1 Data Search	7
1.10.2 Previous Surveys 2013 and 2014	7
1.10.3 Breeding Bird Surveys 2020	9
EVALUATION AND ASSESSMENT	11
1.11 Evaluation	11
1.12 Risk Assessment	11
1.12.1 Waterbodies	14
BIRD HAZARD MANAGEMENT PLAN	15
1.13 Design	15
1.13.1 Landscape Planting	15
1.13.2 Sustainable Drainage Systems (SuDS) and Great Crested Newt Ponds	16
1.14 Management	16
1.14.1 Construction Phase	16
1.14.2 Operational Phase	16
1.15 Monitoring and Dispersal	17
1.15.1 Monitoring	17
1.15.2 Remedial Management Options	18
CONCLUSIONS	19
REFERENCES	20
APPENDIX A – BIRDS NON-TECHNICAL SUMMARY 2020	

1 INTRODUCTION

1.1 BACKGROUND

Eastleigh Borough Council has commissioned Johns Associates to undertake work to support the preparation of a Bird Hazard Management Plan (BHMP) for the Secondary Infrastructure Road (SIR) and associated Green Infrastructure (GI) parcels (namely the Northern, Central and Southern GI) as part of the One Horton Heath Project. This accords with the previously submitted and approved BHMP for the first residential development parcel.

The proposed development has been designed in full accordance with the Development Plan and Outline Planning Application (OPA) O/20/89498, which has a resolution to grant consent subject to S106 negotiations relating to education. This application is for full planning consent due to the time for these negotiations to complete. Submitting details of the Secondary Infrastructure Road (SIR) as a full planning application will deliver the SIR in accordance with, and as part of the OPA, but enable commencement more quickly than waiting for the resolution of the OPA S106 and the determination of an application for Reserved Matters Approval of details of the SIR.

The SIR and three GI parcels are part of a large strategic development under the collective name of One Horton Heath. While this report pertains specifically to the SIR and GI parcels, in the interest of simplicity and clarification of results, the "Site" shall hereby refer to One Horton Heath as a whole. All results herein and references to the Site should be assumed to be relevant to the SIR and GI parcels and proposed development, enhancement and landscape changes therein.

The development falls within the 13 km radius of an aerodrome in which bird strike risk is considered a hazard. This 13 km radius forms the safeguarding zone when aircraft are on approach to land or at take-off. Within this zone aircraft are at lower altitudes and at an increased risk of bird strikes. Within the safeguarding zone, consultation is required for potential bird attractant developments. At its closest point, the Site is located circa 3.2km south-east from Southampton Airport, and falls within the inner Horizontal Surface (IHS) which is designed to protect approaching and departing aircraft at lower levels which are positioning to land or depart.

Pre-planning application advice has been sought from Southampton Airport due to the proximity of the development to the airport. The pre-planning advice from Southampton airport highlighted that a BHMP will be requested as part of the planning process and outlines measures to be included within the BHMP.

This report aims to set out specific measures to be implemented during and after the construction phase of the project. As such, this BHMP:

- Sets out the requirements for and principles of the BHMP;
- Considers potential bird hazard risks from the development that could impact Southampton Airport;
- Sets out general suitable principles for habitat management requirements to reduce the perceived potential risks to tolerable levels.

This report necessarily draws on, and at times, reproduces specific text/guidance from Civil Aviation Publications (CAP) 772, regarding safeguarding aerodromes from wildlife hazards (Civil Aviation Authority, 2017. Wildlife Management at Aerodromes, CAP772)¹.

This BHMP forms part of the management documentation and site procedures for the proposed development.

This BHMP complies with Safeguarding of Aerodromes, Advice Note 3 Wildlife Hazards around Aerodromes².

The Bird Hazard Management Plan shall be implemented as approved, during construction and shall remain in force for

the life of the development. No subsequent alterations to the plan will take place unless first submitted to and approved in writing with Eastleigh Borough Council.

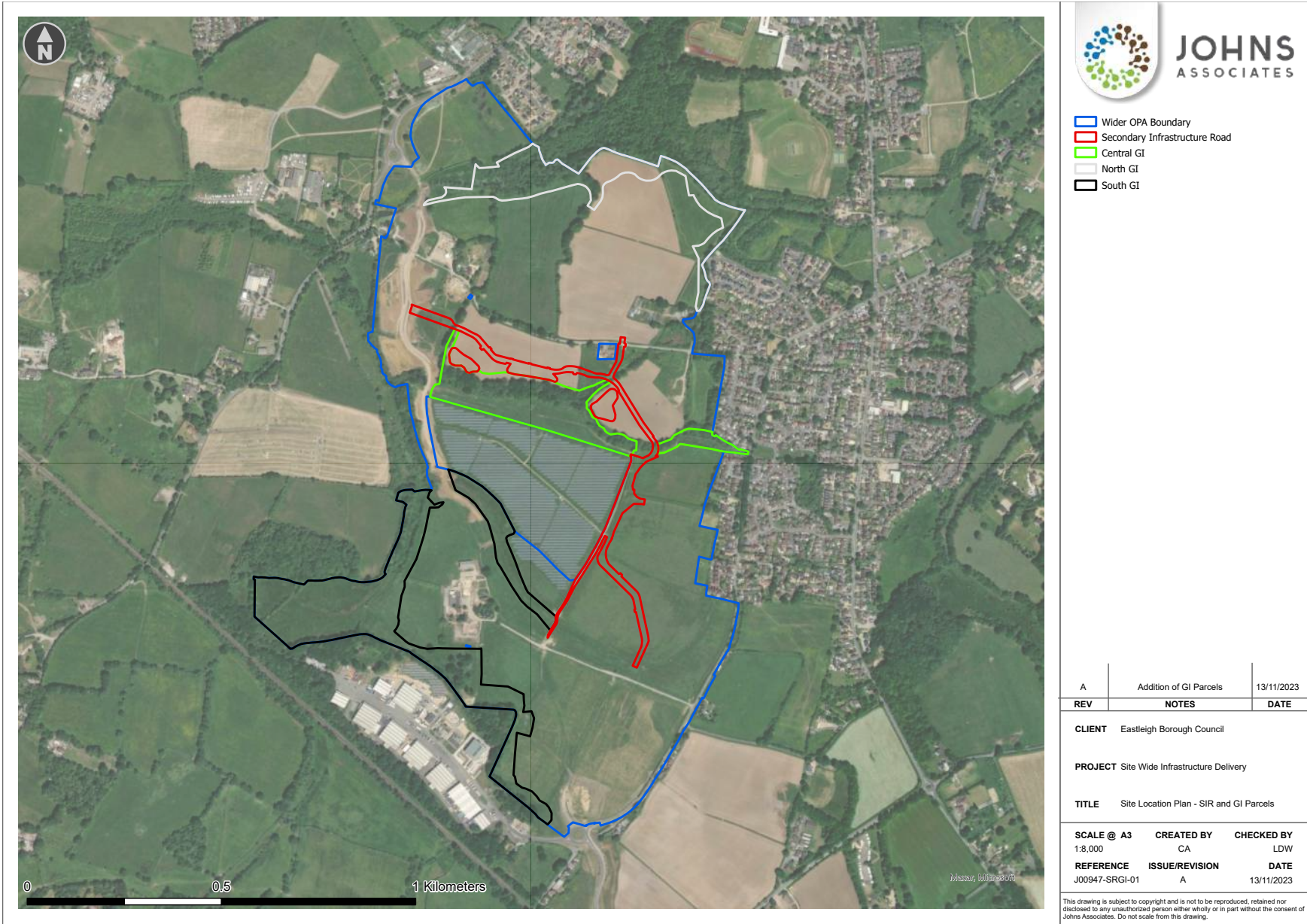
1.2 SITE LOCATION

The Site is approximately 4.36 ha in size located in the borough of Eastleigh in Hampshire (central grid reference SU 48823 17024) which lies approx. 3.2 km east of Southampton International Airport. Between the Site and the airport lies Itchen Country Park, the River Itchen and tributaries which form part of the River Itchen SSSI and SAC, flow through the country park and then out into the Solent within the 13km Bird Safeguarding Area. The Country Park also has a series of large open waterbodies present and water meadows. Following the River Itchen upstream to the north there are several other large water bodies including Hampshire Carp Fisheries which has a series of ponds for breeding fish stock (central grid reference SU 47451 20315) and Fishers Pond (central grid reference SU 49051 21131). This network of large waterbodies located along the river Itchen catchment is likely to form a flight line running from north to south located between the Site and Southampton Airport to the west.

The network of wetland habitats along the River Itchen, open waterbodies and water meadows running north to south located to the east of the Site, and the relative absence of similar habitats within the Site means the Site is very unlikely to attract birds. Notably, large wetland bird species which are likely to pose a bird strike risk to aircraft are unlikely to use the Site. This is supported by the limited bird species observed within the Site boundary (see **Section 4.2**).

See **Figure 1** overleaf for the Site Location Plan, showing the One Horton Heath Outline Planning Application (OPA) boundary, plus the individual phase boundaries for the SIR and three GI parcels.

Figure 1: Site Location



2 BIRD HAZARD GUIDANCE

The design and management of the new features is informed by the following guidance, noting the existing baseline environment and populations of hazardous birds within the semi-natural and agricultural character of the Site prior to development (i.e. agricultural pasture and arable habitats, woodland, hedgerows and trees).

2.1 AIRPORT OPERATORS AUTHORITY (AOA) SAFEGUARDING ADVICE NOTES (PREVIOUSLY BAA) – 2007

- Advice Note 3: Potential Bird Hazards from Amenity Landscaping and Building Design;
- Advice Note 6: Potential Bird Hazards from Sustainable Urban Drainage Schemes (SUDS);
- Advice Note 8: Potential Bird Hazards from Building Design.

2.2 CIVIL AVIATION AUTHORITY (CAA)

- Advice Note 3: Wildlife Hazards around Aerodromes – 2016.

2.3 CAA CAP 772 WILDLIFE HAZARD MANAGEMENT AT AERODROMES

CAA CAP 772 sets out guidelines for the management of wildlife hazards in and around aerodromes. This document focuses on risks posed to aircraft by birds as they are the greatest wildlife risk. It refers to land or water within 13 km of an aerodrome to which hazards are considered to represent a bird strike risk. One Horton Heath is at its closest point located circa 3.2 km from Southampton Airport.

The main threat in relation to bird strike relates to certain large, higher flying species such as Canada geese *Branta canadensis*, and to a lesser extent greylag geese *Anser anser*, which is evident from the publication of the CAA Safety Regulation Group document "Large Flocking Birds – An International Conflict Between Conservation and Air Safety" that specifically addresses this threat. The objective of CAP 772 is to reduce the potential for roosting and to make sure that landscape areas are not attractive to such large flocking bird species, which also include gulls (family *Laridae*) and corvids (family *Corvidae*). Smaller birds that do not form dense flocks have a lower hazard potential.

3 METHODOLOGY

3.1 DATA SEARCH

Johns Associates conducted a data search comprising the procurement of records of all birds within 2 km of the Site from Hampshire Biodiversity Information Centre (HBIC) in 2020.

3.2 SURVEYS

3.2.1 Previous Surveys 2013 and 2014

Ecologica Ltd conducted a wintering bird survey (WBS) for the entire Site which incorporated the first residential development boundary (now known as Lower Acre). The survey was conducted over seven months from September 2013 to March 2014. Ecologica also carried out a breeding bird survey (BBS) over three months in April, May and June 2014.

Common species not subject to special protection or under threat were not recorded during the surveys. The species recorded comprised species listed on Annex 1 of the Birds Directive 2009/147/EC, Schedule 1 of the Wildlife and Countryside Act (as amended) 1981, Natural Environment and Rural Communities (NERC) Act 2006 Section 41 species, UKBAP species and Birds of Conservation Concern (BoCC) Red and Amber species.

3.2.2 Breeding Bird Surveys 2020

Johns Associates undertook breeding bird surveys in 2020 across the wider Horton Heath Site, spaced evenly between the months of April and June. The surveys were carried out by Ben Mitchell BSc (Hons) MCIEEM following the standard British Trust for Ornithology (BTO) Breeding Bird Survey (BBS) methodology. Surveys were started within 2 hours of sunrise, in suitable weather conditions where possible. A transect covering all areas of suitable habitat within the Site was walked at a slow pace in an alternating direction between survey visits. Birds were identified visually using binoculars and identified through song. All singing and non-sing birds, and birds carrying food or nesting material, were recorded using standard BTO registrations. Records during each visit were marked upon separate maps, and then records for each species were combined upon a single map to allow identification of habitat areas used by individual bird species and to allow estimation of the number of bird territories.

3.2.3 Limitations

The Ecologica Ltd surveys omitted common species, therefore there is a lack of data on hazardous species such as corvids and pigeons (family *Columbidae*). Existing woodlands, waterbodies and grasslands do provide opportunities for these species to gather.

3.3 BIRD HAZARD ASSESSMENT

In the UK, Airfield Safeguarding Areas (ASAs) are designated for areas that fall within 13km of an airfield. ASAs ensure that the operation and development of both civil and military airfields is not inhibited by developments, including those which have the potential to increase the number of birds and the 'bird strike' risk. ASAs are based on a statistic that 95% of bird strikes occur below 2,000ft, and that an aircraft approaching an aerodrome on a normal approach would descend below 2,000ft approximately 13km from the runway, reflecting historic angles of take-off and approach.

The Site lies wholly within the 13km ASA and therefore needs to consider bird strike risk and how it can be mitigated.

3.3.1 Birds that Pose Risk

Listed below are some common hazardous bird species as highlighted in Advice Note 3 - Wildlife Hazards around Aerodromes. In general, large birds and flocking species present the greatest hazard, although other species may also have the potential to increase the hazard equally.

Common Hazardous Birds include:

- All wildfowl (ducks, geese and swans) (family *Anatidae*);
- All large waterfowl (herons, egrets (both family *Ardeidae*) and cormorants (family *Phalacrocoracidae*));
- Game birds (pheasants and partridges) (family *Phasianidae*);
- Birds of prey (order *Falconiformes*);
- Large waders (curlews (family *Recurvirostridae*), lapwings and golden plovers (both family *Charadriidae*));
- All gull species (family *Laridae*);
- All pigeon species (family *Columbidae*);
- All corvid species (family *Corvidae*);
- Starlings (family *Sturnidae*).

4 BASELINE DATA

4.1 HABITATS

The baseline (pre-construction) habitat types present within the Site boundary are comprised of farmland, mainly arable field or modified grassland fields for cattle grazing, and smaller areas of other neutral grassland divided by hedgerows and lines of trees. Woodland is also present in the Central and Northern GI and, to a lesser extent, the Southern GI. See **Error! Reference source not found.** for a UKHab Map of the existing habitats within the SIR and GI parcels.

The fields within the Site are not low lying and rarely collect standing water which could be an attractant to wintering wading bird species.

Prior to the commencement of development of the wider Site there was a single permanent water body (Chalcroft pond, central grid reference SU 48628 16610) present within the Chalcroft Farm complex in the south of the Site. This pond is known to have small numbers of breeding mallards *Anas platyrhynchos* and moorhen *Gallinula chloropus* present.

Other water attractants to bird species include an ephemeral watercourse towards the north of the Site in Quabbleigh Wood, but this is heavily shaded by trees and scrub and no wading birds have been observed here.

4.2 BIRDS

4.2.1 Data Search

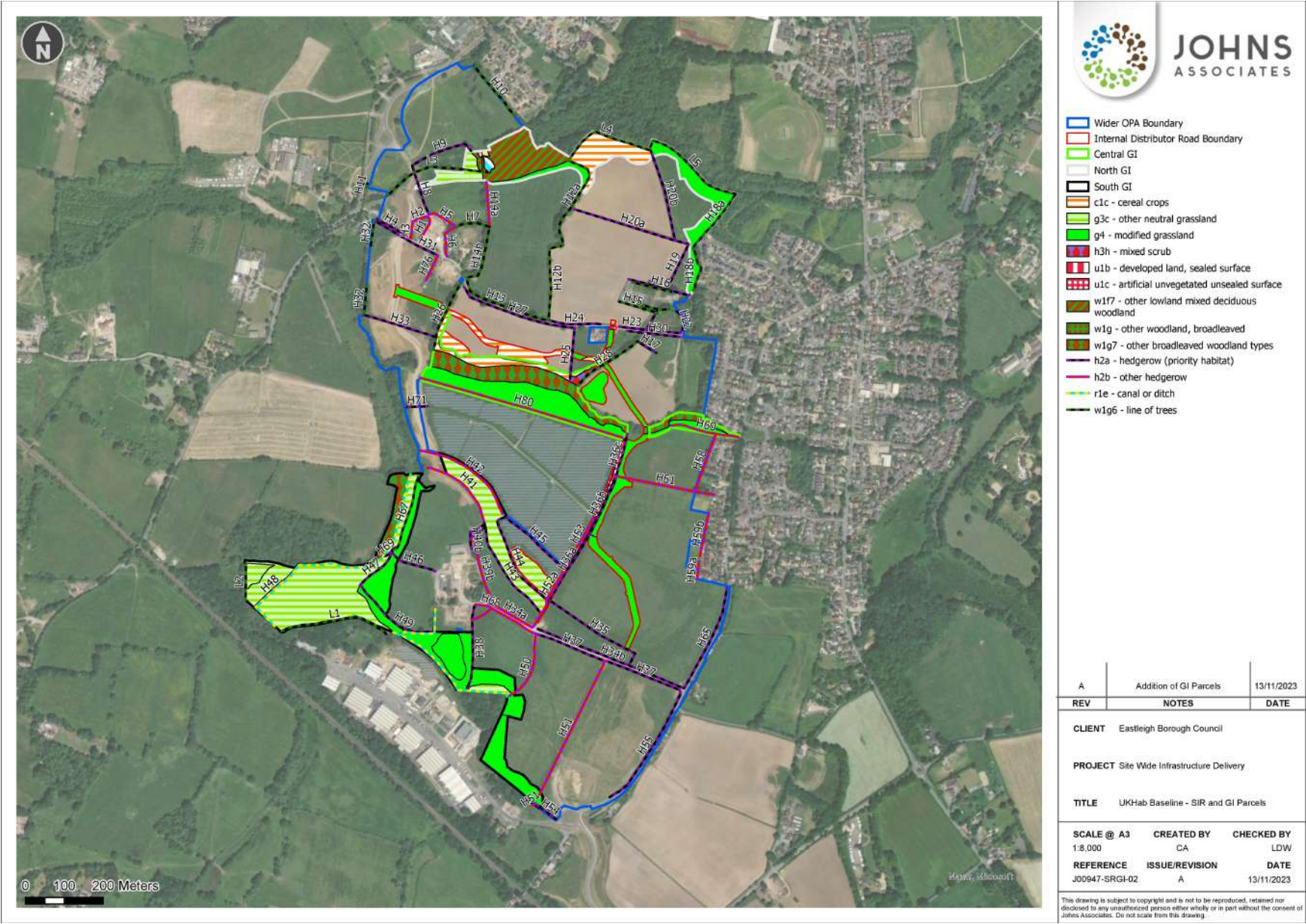
Results from the data search comprised 1,224 bird records within a 2km radius of the Site. Most of the records are associated with specific sites such as Itchen Valley Country Park, Allington Gravel Pit (which now holds water and is located next to Itchen Valley Country Park), Eastleigh sewage works (900m north-west of Southampton airport) and Moorgreen Farm (south-west of the Site, located south of the trainline). Many of the bird records in these locations relate to birds that are considered common hazardous bird species (see **Section 4**).

4.2.2 Previous Surveys 2013 and 2014

A total of 28 species were recorded across the One Horton Heath Site during the 2013/2014 WBS. No wintering species for which the Solent and Southampton Water Special Protection Area (SPA) is designated were observed (teal *Anas crecca*, dark-bellied brent goose *Branta bernicla bernicla*, black-tailed godwit *Limosa limosa* and ringed plover *Charadrius hiaticula*). Of the species observed during the surveys, the following hazardous bird species were recorded:

- Herring gull *Larus argentatus*, black headed gull *Chroicocephalus ridibundus*, common gull *Larus canus* and lesser black-backed gull *Larus fuscus* were all recorded flying high over the Site in low numbers, a single black headed gull was the only gull species observed on Site near Chalcroft Farm. Common gull was observed in the greatest number flying over the Site with a peak count of 41 in November;
- One group of six little egrets *Egretta garzetta* were recorded in December resting in a field near Chalcroft Farm;
- Mallards were recorded across the Site during most surveys, mainly around Chalcroft Farm pond with a peak count of 19 in March;
- On a single occasion in October a group of 28 greylag geese were recorded in a field south of Chalcroft Farm;
- A single lapwing *Vanellus vanellus* was recorded circling over a field east of the solar farm to the north of the Site in March. Two single snipes *Gallinago gallinago* were recorded rising from a watercourse in March;

Figure 2: Baseline Habitats and Hedgerows within the SIR and GI Parcels



- A single kestrel *Falco tinnunculus* recorded flying over the Site in April was the only bird of prey observed during the surveys;
- Starlings *Sturnus vulgaris* were recorded on Site during every survey with numbers ranging between 48 and 274. They were scattered around the Site but there was a concentration observed around Chalcroft Farm;
- No other hazardous bird species were recorded during the winter bird surveys.

A total of 20 species were recorded across the Site during the 2014 BBS. No wintering species for which the Solent and Southampton Water SPA is designated were observed and no Annex 1 or Schedule 1 species were recorded. Of the species observed during the surveys the following hazardous bird species were recorded:

- Herring gull, common gull and lesser black-backed gull were all recorded flying high over the Site in small numbers (<5). There was no evidence of any of these species breeding on Site;
- A single snipe was recorded outside of the Site boundary within a field dominated by rushes west of Chalcroft Farm in April;
- Mallards were recorded across the Site during every survey visit, clustered around Chalcroft Farm pond. Two broods were observed, one on Chalcroft Farm and one on the watercourse to the south of Chalcroft Farm;
- A single kestrel recorded flying over the Site in June was the only bird of prey observed during the surveys. There was no evidence of the species breeding on Site;
- Starlings were recorded on Site during every survey with numbers ranging between 24 and 137. They were scattered around the Site but there was a concentration observed around Chalcroft Farm;
- No other hazardous bird species were recorded during the breeding bird surveys.

4.2.3 Breeding Bird Surveys 2020

A total of 25 bird species were recorded within the Site across the survey period. The majority of the species recorded were not considered to be hazardous bird species, and are therefore not included in this assessment. Appendix A provides the Technical Note for the 2020 Breeding Bird Survey. Detailed below are species that are listed as aviation hazards and that were recorded within or adjacent to the Lower Acre site boundary:

- Nine starling registrations were recorded on and adjacent to the Site in small numbers (maximum count of 20 in one post-breeding flock);
- A rookery (breeding colony of rooks *Corvus frugilegus*) is present in the mature ash trees immediately north-east of the Chalcroft Farm complex;
- A single pair of moorhens bred successfully on Chalcroft pond;
- A total of nine woodpigeon *Columba palumbus* registrations were recorded across the Site, including within the Chalcroft Farm complex;
- Mallards were observed on a single survey outside of the Site boundary to the west, in a wet ditch.
- The barn owl surveys identified an active barn owl nest within the nest box within the parkland south of Chalcroft Farm with a roost used by at least one adult within the stables building on the southern edge of the farm complex.
- One observation was reported of a Red kite over the western site boundary. No records during formal surveys.

- A record of breeding kestrel in a mature oak tree immediately north of Foxholes Cottages was reported by tenant. This was investigated during each survey in 2020 in the vicinity with no individuals observed on site.

No other birds considered to present a bird strike risk were identified within or adjacent to the Site boundary during any of the breeding bird surveys undertaken in 2020. No notable change in habitat condition between 2020 and 2023 has occurred that would result in any significant change in the use of the Site by the birds recorded during the surveys. This has been informed by numerous Site inspections by Johns Associates including update UKHab and Biodiversity Net Gain (BNG) condition assessments in July 2023. As such, a high level of confidence is placed in the baseline survey.

5 EVALUATION AND ASSESSMENT

5.1 EVALUATION

The historical bird surveys of the Site carried out by Ecologica Ltd in 2013 and 2014 were undertaken prior to submission of the previous planning applications. In the main, the surveys did not identify large conglomerations of larger bird species. The largest species observed was greylag goose, which were only observed on one occasion in a group of 28. Gull species were observed in greater numbers during the wintering bird surveys, with common gull being the most frequently observed flying high over the site. Mallards and starlings were the most frequently recorded hazardous species recorded during the suite of 2013/2014 surveys, with mallards recorded during every WBS and most BBS, and starlings recorded during every WBS and BBS. The mallards were recorded in small numbers (peak count of 19).

Starlings were historically recorded in larger concentrations (count 137) around the Chalcroft Farm complex in 2014 and 2015. No large murmurations or aggregations of this species have been recorded on Site throughout the suite of 2018-2020 surveys, with a maximum count of 20 in one post-breeding flock. While starlings have the potential to be hazardous in large aggregations, they are not considered to represent a bird strike risk as only low numbers were recorded on Site in the 2018-2020 surveys. They would only pose an aviation hazard when murmuring in larger flocks, and. Although nest boxes will be provided on Site as part of the development it is not considered likely that numbers of this species will increase significantly to be a risk post-development.

No large groups of larger bird species were recorded in the 2020 bird surveys (Appendix A).

5.2 RISK ASSESSMENT

Table 1 overleaf details the likelihood of any changes to the observed bird populations post-development.

Table 1: Bird Hazard Assessment - Likely Bird Populations Pre- and Post-development

Hazardous Species / Genus / Group	Pre-development	Post-development	Forecast Change	Comments
Wildfowl	A total of 2 comorant and 2 mallard were recorded.	SuDS features created. While these will be designed to provide ecological and biodiversity benefits, the suitability of these features for waterfowl is expected to be limited by the small extent of semi-permanent standing water	Negligible	There is likely to be a small increase post-development but this is expected to be a maximum of two pairs of mallard, moorhen or coot <i>Fulica atra</i> per SUDs feature.
Large waterfowl	Absent	SuDS features created. While these will be designed to provide ecological and biodiversity benefits, the suitability of these features for waterfowl is expected to be limited by the small extent of semi-permanent standing water	Negligible	Due to the absence of breeding or wintering large waterfowl on Site, there is the potential for a small increase post-development, however the SUDs features are limited in size and will not be large enough to support significant numbers of large waterfowl.
Game birds	1 pheasant was recorded on site	There is no predicted increase in game birds as a result of the development.	Negligible	N/A
Birds of prey	One pair of breeding barn owl. No records of breeding buzzard <i>Buteo</i> buteo or red kite <i>Milvus milvus</i>	Breeding barn owl nest box within the parkland south of Chalcroft Farm retained	Negligible	The site has some suitability for large, high flying raptors (buzzard, red kite) but no nest recorded. The Site will become less suitable as a result of the development despite the small extension of the parkland present elsewhere on Site due to the increased levels of recreational disturbance
Large waders	Absent	Absent	Negligible	The Site is currently unsuitable for large wading birds and will become less suitable as a result of the development due to the increased disturbance despite the inclusion of ecologically beneficial SuDS, which are limited in area and size.

Hazardous Species / Genus / Group	Pre-development	Post-development	Forecast Change	Comments
Gulls	Only a single black headed gull was recorded on Site during the surveys despite the meat processing facility present in Chalcroft Farm. Although the surveys recorded many gulls flying overhead, there is no evidence to suggest that any gull species are breeding on Site	Very low populations of gulls likely to be present on Site	Negligible	No additional nesting opportunities provided by scheme – designs follow AOA guidance to avoid opportunities for gulls in the build environment. No commercial units included within SIR or GI phases. Waste tightly controlled and contained within specific bin storage. Meat processing facility to be relocated off Site as part of wider scheme
Pigeons	There are nine records of woodpigeon within the Site boundary, including within the Chalcroft Farm complex. This constitutes a low population in the context of the Site	Over the lifespan of the project, a very small increase in suitable nesting habitat will be delivered by enhancing the parkland and ancient woodland habitats. Given the very limited extent of this area of habitat, this is only expected to provide suitable nesting habitat for one to two breeding pairs. This will remain to constitute a low population overall	Negligible	Designs follow AOA guidance to avoid opportunities for nesting pigeons in the built environment wherever possible. No ledges or similar architectural features will be included within the scheme
Corvids	There is one rookery present within the Site boundary, north-east of Chalcroft Farm	The trees will be retained with the rookery present and the numbers of birds that it supports is unlikely to change.	Negligible	No additional nesting opportunities are provided by scheme; new trees will not be of suitable size to be used by nesting crows for a significant amount of time. In the long-term any additional rookeries are not likely to pose an aviation risk. Waste tightly controlled and contained within specific bin storage
Starlings	There are no records of breeding or wintering/flocking starling in 2018-2020 within the Site boundary although the Site is likely to provide a foraging resource for starling breeding within the wider area	A small increase in the population may occur.	Negligible	Given the established severe declines in this species and its status as a NERC S41 priority species, it is the intention of the development to include provision for this species in order to compensate for the loss of foraging habitat. The scheme will include provision of nest boxes for starling, swift and house sparrow (10 no. each species) on units around the periphery of the wider development. The inclusion of these features in the scheme is considered appropriate given the conservation status of starlings and the very limited hazard presented by their low numbers

5.2.1 Waterbodies

Whilst the proposed drainage attenuation ponds will be planted to provide some ecological interest in order to contribute to the delivery of an overall net gain in biodiversity, they have been designed solely for drainage attenuation purposes and will hold low levels of water all year round, although their levels are expected to fluctuate considerably as a result of weather conditions. Planting schemes around these SuDS features should encourage tall marginal vegetation which will deter large flocks of species such as gull, geese and wading species. Rather than one large feature, a number of ponds have been designed in order to limit the extent of open water and thus reduce the attractiveness to flocking birds, thereby avoiding potential congregation activity. As such, it is not considered that the proposed waterbodies would act as a significant attractant for additional water birds such as ducks, geese, swans, herons, coots and cormorants and will not be of a size considered suitable for roosting gull populations.

Creation of the new SuDS is not considered likely to attract large number of bird species. Itchen Valley Country Park lies between Southampton airport and the Site is which has a large series of waterbodies as well as the river Itchen running through the area. Creation of a new flight path is not expected as a result of the creation of the SuDS features with the significant habitats already present within Itchen Valley Country Park. Additionally, the design and planting of the attenuation basins will be designed to deter waterfowl and wading bird species.

6 BIRD HAZARD MANAGEMENT PLAN

Based on the baseline data and the Site risk assessment, bird numbers are not expected to significantly change as a result of the development, and therefore it is not considered that the development will cause a significant bird hazard risk. However, the measures described in the Bird Hazard Management Plan (BHMP) below will be implemented into the Site design and management to ensure that bird hazard risk is kept to a minimum at the Site, and that any bird hazards would be detected and dealt with swiftly if they were to occur.

Eastleigh Borough Council are developing the Site and are currently responsible for the ongoing implementation of the BHMP. Responsibility will be passed to site management companies and/or any other relevant parties during operation.

The duration of this BHMP is linked to the Site and not the site owner or operator.

6.1 DESIGN

The proposed development is not considered to result in an overall increase in bird populations, both during the construction phase and post construction and as a result there is no increase in bird strike risk predicted. As a precaution, a number of preventative measures are incorporated into the BHMP to ensure that hazardous birds and large congregations of birds are not attracted to the Site as a result of the proposed development. Details of these measures are provided below.

6.1.1 Landscape Planting

The Pre-Application Planning Advice received from Southampton Airport in relation to the full outline planning application states:

"The Inner Horizontal Surface has a maximum height AMSL of 54.34m and therefore, taking a worst-case scenario, in the SE of the site with a ground height of 38 metres to avoid penetration of this surface buildings should not exceed 16.4m AGL."

"As the site sits within the boundary of the Inner Horizontal Surface, tree planting at centers of 4 meters or greater is acceptable, but the following species must be excluded; Scots Pine *Pinus Sylvestris*, Oak *Quercus* sp. and Beech *Fagus Sylvatica*."

It is the aspiration of the scheme to include oak in the landscape planting in specific areas across the Site where it provides an enhancement to the existing oak woodland and parkland on the following basis:

- The parkland habitat is a UK BAP habitat and there is a rare opportunity associated with this development to provide an enhancement to the existing veteran oak parkland. The proposed enhancement includes planting oaks at 4m centres with the intention to thin to existing density (~15m centres) as the trees mature.
- Part of the Site is located within the Chalcraft Priority Biodiversity Link as identified in the Eastleigh Biodiversity Action Plan and woodland/parkland planting seeks to enhance this corridor and effectively extend the Chalcraft Business Park woodland Site of Important Nature Conservation (SINC).
- Significant areas of designated Lowland Mixed Deciduous Woodland (UK BAP priority habitat, SINC and ancient woodland) comprising significant oak trees exist on Site and the proposed planting follows the species mix present in the existing valuable habitats. The proposed planting is not considered to present a visual feature or trees that will penetrate the Inner Horizontal Surface;
- The increase in hazardous birds is expected to be very low on the basis that these areas will be adjacent to a high-density residential development and, as such, the suitability of the new habitats for nesting large raptors is very low due to disturbance effects;

- Light Detection and Ranging (LIDAR) (2019 1m DTM) shows that the ground level in the area proposed for parkland oak planting is 19-20m AMSL ground level. This leaves a clearance of 34.34m between the ground level and the Inner Horizontal Surface. *Q. robur* has a maximal height of 30m implying that oak planting in this area would not compromise the Inner Horizontal Surface. Mitigation is proposed to manage the potential height of these oak trees to a maximum height of 20m (e.g. leader removal and vertical stem management) to ensure that the IHS is not compromised by these trees and there is a negligible change in terms of the appearance of this area over time given the presence of large, mature oak trees in the immediate vicinity of the new planting.

Berry/fruit bearing planting (trees and shrubs) dispersed throughout the scheme, will be subject to a maximum of 15% of the total planting.

6.1.2 Sustainable Drainage Systems (SuDS) and Great Crested Newt Ponds

A Drainage Strategy has been developed for the Site, which includes several SuDS basins. The Site wide SuDS design has not been finalised, however, some of the SuDS ponds will be planted for biodiversity and wildlife interest and will retain water throughout the year. GCN ponds will also be created. The concept designs for the SuDS features will include small areas with deep permanent water, larger areas permanent shallow water, edges of ephemerally wet land and planted with permanent vegetation cover around the feature, planting will include tall marginal species and ensure the water levels are maintained at a low level to deter larger bird species.

6.2 MANAGEMENT

6.2.1 Construction Phase

Control of construction drainage and earth works during the construction phase should ensure that wide areas of permanent open water do not develop which can attract geese, gulls and wading species.

If necessary, bare loose soil should be compacted to reduce its suitability for bird species.

The timing of all significant earthworks, particularly topsoil spreading and grading, shall be notified to the airport (Airfield Operations) in advance and scheduled, where possible, at times of lower flying activity.

Grass seeding should be done in phased sections if the area to be seeded is larger than 150m² rather than all at once. Intervals between discrete blocks should ideally be in the order of 3 days. This will produce staggered germination, reducing the amount of seed available to pigeons, reducing the area affected at any one time and allowing better deployment of passive deterrent measures.

Blocks of ground where construction work has been completed shall be reinstated or covered and re-seeded (where applicable) at the earliest opportunity.

Waste control and disposal for the Site, including food waste, should be controlled to avoid the build-up of scavenging bird species such as gulls and corvids. Waste should be placed in covered skips and bins to reduce risk.

6.2.2 Operational Phase

Trees and Shrubs

Existing and newly created hedgerows within and surrounding the development that contain fruiting species such as Hawthorn *Crataegus monogyna* and Blackthorn *prunus spinosa* are not expected to significantly increase bird species to numbers that will increase bird hazard risk.

Grassland

Grassland in amenity areas throughout the Site will be maintained as a short sward.

Areas of existing diverse grassland habitats within the Site will have a reduced cutting regime. Arisings from these areas will be removed for the benefit of biodiversity and to remove seeds which may attract flocking birds.

SuDS

Swales used within the Site as part of the SuDS scheme will be monitored to ensure that they are quick draining. Grass within the swales will be regularly cut to ensure it is maintained as a short sward, to ensure they are kept as unattractive features for hazardous bird species.

SuDS basins that hold water on a non-permanent basis are to be managed to control any bird hazard as appropriate.

SuDS basins that are designed to hold water at a low level on a permanent basis will be planted with tall marginal species such as common reed *Phragmites australis* and reedmace *Typha latifolia* or *Typha angustifolia* which will limit the amount of open water which will naturally reduce the appeal of the water body to species such as gulls, geese and cormorants. Additional scrub and hedgerow planting around SuDS will be allowed to grow with minimal management.

Putrescible Waste

The following precautions will be implemented during construction and operation of the SIR and GI phases to minimise bird attraction:

- All waste will be stored in private bins and bin storage facilities on Site;
- Signs will be erected in public places informing the public that they should not feed birds in places birds are likely to cause an issue, e.g. SuDS pond. This situation will be monitored quarterly as part of the BHMP (or outside these checks if concerns are raised by a residents) and if it is considered to be an issue, then further steps will be taken to inform the public, for example by distributing informative leaflets. Residential bird feeders are not covered under this as they are not expected to pose a risk. Public feeding of flocking birds such as feral pigeons and gulls is to be discouraged through information pack issued to nearby residents associated with the wider scheme.

6.3 MONITORING AND DISPERSAL

Regular monitoring and reporting will be undertaken by an agent appointed by Eastleigh Borough Council. Annual reviews of the records of bird and potential bird hazards will be undertaken by the project ecologist and reported back to Eastleigh Borough Council. Any emerging hazards will be reported to National Air Traffic System (NATS) based at Southampton Airport. Should unacceptable potential risks be encountered, management intervention will occur to reduce the potential risk to an agreed acceptable level in consultation with NATS.

6.3.1 Monitoring

Construction phase monitoring will specifically include:

- A log book will be kept providing an auditable record of all BHMP information to be maintained detailing: dates, times and description of monitoring carried out, species and number of birds recorded, control effort provided and the results of any control;
- Numbers and species of bird present across the Site to be recorded in a log book. The frequency of the monitoring will be undertaken under the direction of the bird management consultant and will be dictated by the level of bird activity and time of year. If required advice would be sought from a bird control specialist if levels are seen to increase;

- The general attractiveness of the Site for birds will also be monitored on an ongoing basis with any measures (such as landscape/habitat management, surveillance/dispersal strategies) adopted where required to render the Site unattractive for birds;
- SuDS features will be checked quarterly to monitor bird populations and identify if management will be required to reduce the numbers of birds if this is observed to increase;
- Southampton International Airport will also be able to independently verify that the objectives of the BHMP are being met, and an inspection of the records and Site can be made without notice to Eastleigh Borough Council, access to all areas of the Site will be made available to ensure that inspections can be carried out;
- Contact would be made with the Southampton Airport Air Traffic Control team should any bird issues arise.

6.3.2 Remedial Management Options

- If bird activity of larger flocking species (such as gulls, wildfowl or corvids) is recorded during on-going monitoring of the proposed SuDS attenuation ponds, a bird control specialist will be contacted, and appropriate control measures would be undertaken if deemed appropriate;
- Consideration will be given to the use of wider bird deterrent measures to encourage dispersal, e.g. distress calls, gas cannons;
- Following monitoring and any recommendations from consultation with the retained ecological consultants, habitat management (targeted landscape management) and surveillance/dispersal strategies would be adopted if deemed necessary;
- Any control measures considered necessary, after Site monitoring and consultation with the project ecologists, must be to be carried out under an appropriate licence as necessary;
- Existing and newly planted hedgerows, trees and shrubs throughout the Site in community open spaces will be managed yearly.

Should the Site manager have concerns about bird numbers and activity due to unexpected or seasonal bird activity following adoption of aforementioned measures, the activity shall be recorded in the logbook and contact shall be made with the project ecologists and Southampton Airport for advice.

The project ecologist will undertake audits across the development site and the wider One Horton Heath Site, once per month during the construction phase and yearly thereafter subject to satisfactory performance.

7 CONCLUSIONS

This BHMP concludes that there is no significant increase in bird strike risk to Southampton International Airport associated with the Secondary Infrastructure Road and associated Green Infrastructure parcels at One Horton Heath following implementation of the mitigation measures outlined within this report.

Southampton Airport lies in close proximity to an identified bird fly way to the east of the airport which runs north to south along the River Itchen corridor. The Site lies to the east of the river Itchen, and the development is not expected to attract common hazardous bird species to the Site or alter the pre-existing bird fly ways identified if measures laid out within the BHMP are followed.

Recommendations have been made to design out potential attractant habitat for birds within the development design. Also, management measures during and post-construction have been made to further lower risk of bird strike hazards.

The high level of human occupancy across the Site post-construction is considered to be a deterrent to larger wading birds such as geese, herons, egrets, cormorants, lapwing, curlew and golden plover. Despite the increase of wetland SuDS features, human disturbance is likely to deter these species in larger numbers that are considered to be an aviation hazard.

The proposed measures will be continually reviewed in line with the BHMP, through Site monitoring and reporting to Southampton International Airport, thereby ensuring a robust and proactive approach to any risks of increased bird strike. The Site management and monitoring will be ongoing throughout the life of the development, or as long as there is an operational aerodrome within 13km of the Site.

Overall, it is considered that in accordance with best practice the mitigation measures detailed in this document are sufficient to ensure that any risks of bird strike associated with the development of the Secondary Infrastructure Road and associated Green Infrastructure of the One Horton Heath development have been reduced as low as is reasonably practicable.

8 REFERENCES

1. Civil Aviation Authority, 2017. Wildlife Management at Aerodromes, CAP772
2. Airport Operators Association, August 2026. Safeguarding of Aerodromes, Advice Note 3 Wildlife Hazards around Aerodromes

APPENDIX A – BIRDS NON-TECHNICAL SUMMARY 2020

EASTLEIGH BOROUGH COUNCIL

Horton Heath

Appendix 10.8: Birds

1 NON-TECHNICAL SUMMARY

Johns Associates have carried out breeding bird surveys across the wider Horton Heath Site in 2020 recorded a total of 25 species including the following notable species:

- Barn Owl (Breeding)
- Skylark (non-breeding)
- House Sparrow (Breeding)
- Song Thrush (Breeding)
- Linnet (possible breeding)
- Starling (Breeding)
- Mistle Thrush (probable breeding - off site)

Species previously recorded but absent in 2020:

- Kingfisher (non-breeding record)

Historic surveys carried out by Ecologica Ltd showed a very low level of breeding bird activity throughout the site for notable species.

2 INTRODUCTION

This report presents the results breeding bird surveys undertaken in 2020 by Johns Associates in support of the development proposals and planning application at Horton Heath. It also provides a summary of historic surveys for bird surveys carried out at Horton Heath since 2014.

The aim of the surveys was to update the historic baseline and to confirm the presence or absence of important bird species within the Site and to identify any constraints to development and opportunities that could be delivered through the development proposals.

3 METHODOLOGY

3.1 DESK STUDY

Information provided by the Hampshire Biodiversity Information Centre and from previous surveys conducted by Ecologica Associates Ltd was reviewed for previous records of breeding bird on the Site.

3.2 FIELD SURVEYS

3.2.1 Breeding Bird Surveys

The breeding bird surveys were undertaken by Ben Mitchell BSc (Hons) MCIEEM, an experienced and competent ornithologist.

The Site was assessed as providing habitat of high suitability for nesting birds. Surveys were spaced evenly between the months of May and mid-June and were undertaken by experienced ornithologist Ben Mitchell BSc (Hons) MCIEEM following the standard BBS methodology¹. Survey event details are summarised in Table 3.1. Surveys were started within 2 hours of sunrise, in suitable weather conditions where possible. A transect covering all areas of suitable habitat within the Site was walked at a slow pace in an alternating direction between survey visits. Birds were identified visually using binoculars and identified through song. All singing and non-sing birds, and birds carrying food or nesting material, were recorded using standard BTO registrations. Records during each visit were marked upon separate maps, and then records for each species were combined upon a single map to allow identification of habitat areas used by individual bird species and to allow estimation of the number of bird territories.

¹ Gilbert, G et al (1998). Bird Monitoring Methods: A manual of techniques for key UK species.

Table 3.1 Breeding Bird Survey Methodology Detail

Date	Transect Route	Direction	Weather
29.04.20	South	Clockwise	13°C start of survey, 15°C end of survey Periods of rain and dry weather 8mph NW wind Full cloud cover
01.05.20	North	Clockwise	10°C start of survey, 15°C end of survey Dry 2mph W wind Partial cloud
12.05.20	South	Anticlockwise	11°C start of survey, 17°C end of survey Dry 6mph SW wind Light low lying fog
15.05.20	North	Anticlockwise	10°C start of survey, 15°C end of survey Dry 10mph SW wind Partial cloud
02.06.20	South	Clockwise	11°C start of survey, 116°C end of survey Dry 6mph NE wind Clear
04.06.20	North	Clockwise	11°C start of survey, 18°C end of survey Dry 3mph SW wind Clear

3.2.2 Barn Owl Surveys

The barn owl surveys were undertaken by Ben Mitchell BSc(Hons) MCIEEM on the following dates following survey methodologies devised by the RSPB² and the Barn Owl Trust³:

² Gilbert, G et al (1998). Bird Monitoring Methods: A manual of techniques for key UK species.

³ Barn Owl Trust (2012). Barn Owl Conservation Handbook: A comprehensive guide for ecologists, surveyors, land managers and ornithologists.

Date	Survey Type	
29.04.20	Potential Roost Site Scoping Survey	15°C start of survey, 16°C end of survey Periods of rain and dry weather 8mph NW wind Full cloud cover
01.05.20	Barn Owl Box Inspection	16°C start of survey, 17°C end of survey Dry 2mph W wind Partial cloud
15.05.20	Update roost inspection (Chalcroft)	15°C start of survey, 17°C end of survey Dry 10mph SW wind Partial cloud
22.06.20	Vantage Point Survey (Chalcroft)	18°C start of survey, 15°C end of survey Dry 1mph SW wind Partial cloud
08.07.20	Vantage Point Survey (Fir Tree Farm)	18°C start of survey, 15°C end of survey Dry 1mph SW wind Partial cloud

3.2.3 LIMITATIONS

Access to certain sections of the site were not possible due to the presence of livestock. Surveys of the fields containing livestock were completed from the field boundaries. This is not considered to have constrained the survey.

4 RESULTS

4.1 DESK STUDY AND HISTORIC SURVEYS

Table 4.1 below summarises the notable species that have been recorded within 2km of the Site boundary (data obtained from HBIC). Species of interest are highlighted and discussed in detail .

Table 4.1. Protected and notable species recorded within 2km of the Site boundary

Latin name	Common name	Status									Location	Number of records between 2010 – 2020 & distance from site
		WCA ⁴	Habs Regs ⁵	SoPI ⁶	NR ⁷	NS ⁸	IUCN list ⁹	Red-listed ¹⁰	Amber-listed ¹¹	Local interest ¹²		
<i>Alauda arvensis</i>	Skylark			X				X		HBAP	SU493164	9 records in total. 1 record On site on 2012
<i>Alcedo atthis</i>	Kingfisher	Schd1							X		SU470170	22 records in total. Closest record (off site), - Has been recorded on site.
<i>Ardea cinerea</i>	Grey heron									County Scarce	SU618	3 records in total. Closest record (off site) will likely be using site.
<i>Milvus Milvus</i>	Red kite	X		X						HBAP / County Rare	SU4916	47 records in total. On site
<i>Motacilla cinerea</i>	Grey wagtail							X			SU4818	17 records in total. Closest DS record (off site) – Has been seen on site.
<i>Sturnus vulgaris</i>	Starling							X			SU4916	15 records in total. On site
<i>Turdus iliacus</i>	Redwing	Schd 1						X			SU4816	27 records in total. On site
<i>Turdus philomelos</i>	Song thrush							X		HBAP	SU486171	20 records in total. On site
<i>Turdus viscivorus</i>	Mistle thrush							X			SU485163	15 records in total. On site
<i>Tyto alba</i>	Barn owl	Schd 1									SU492188	12 records in total. Closest record 450m south of site – Has been recorded on site.

⁴ Listed on Schedules 1, 5 or 8 of the Wildlife and Countryside Act (1981) (as amended)

⁵ Listed on Schedule 2 of the Conservation of Habitats and Species Regulations (2017)

⁶ Listed as a Species of Principal Importance in England under s41 of the Natural Environment and Rural Communities (NERC) Act (2006)

⁷ Nationally rare: Occurring in 15 or fewer hectads in Great Britain.

⁸ Nationally scarce: Taxa which are recorded in 16-100 hectads in Great Britain.

⁹ IUCN Red List. Taxa are: CE - a taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future; E- A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered, and it is therefore considered to be facing a very high risk of extinction in the wild; V - A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable, and it is therefore considered to be facing a high risk of extinction in the wild; NT - A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future. In Britain, this category includes species which occur in 15 or fewer hectads but do not qualify as Critically Endangered, Endangered or Vulnerable.

¹⁰ Bird species on the Red List of Birds of Conservation Concern [Easton, M. A., Aebischer, N. J., Brown, A. F., Hearn, R. D., Lock, L., Musgove, A. J., Noble, D. G., Stroud, D. A., and Gregory, R. D. (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]

¹¹ Bird species on the Amber List of Birds of Conservation Concern (Easton et al, 2015)

¹² Of local interest e.g. listed in a County Red Book or as a priority species within the local Biodiversity Action Plan (BAP)

Latin name	Common name	Status									Location	Number of records between 2010 – 2020 & distance from site
		WCA ⁴	Habs Regs ⁵	SoPl ⁶	NR ⁷	NS ⁸	IUCN list ⁹	Red-listed ¹⁰	Amber-listed ¹¹	Local interest ¹²		
<i>Gallinago gallinago</i>	Snipe								X	HBAP, County scarce	SU477163	9 records in total. Closest record 450m south of site - Has been recorded on site.
<i>Linaria cannabina</i>	Linnet							X		HBAP	SU477163	5 recorded in total. Closest record 450m south of site - Has been recorded using the site
<i>Motacilla flava</i>	Yellow wagtail							X		HBAP, County rare	SU477163	16 records in total. Closest record 450m south of site. Possibility of it being present on site.
<i>Emberiza citrinella</i>	Yellowhammer			X				X			SU5016	7 records in total. Closest record 600m east of site - Likely to be present on site.
<i>Ficedula hypoleuca</i>	Pied flycatcher							X		County rare	SU477163	7 records in total. Closest record 450m south of site. Possibility of it being present on site
<i>Larus argentatus</i>	Herring gull							X		County rare	SU467182	8 records in total. Closest record 2km off site. Has been recorded on site
<i>Larus fuscus</i>	Lesser black-backed gull							X		County rare	SU477163	12 records in total. Closest record 450m south of site. Has been recorded on site.
<i>Chroicocephalus ridibundus</i>	Black-headed gull							X		Country rare	SU5016	5 records in total. Closest record 450m south of site - Has been recorded on site
<i>Regulus ignicapilla</i>	Firecrest	Schd 1								HBAP, County scarce	SU477163	41 records in total. Closest record 450m south of site – Possibility of it being present on site.
<i>Emberiza schoeniclus</i>	Reed bunting			X					X	HBAP	SU477163	16 records in total. Closest record 450m south of site. Likely to be present on site.
<i>Cuculus canorus</i>	Cuckoo			X				X			SU4917	23 records in total. On site
<i>Acanthis cabaret</i>	Lesser redpoll			X				X			SU477163	14 records in total. Closest record 450m south of site – Possibility of it being present on site.
<i>Fingilla montifringilla</i>	Brambling			X							SU477163	8 records in total. Closest record 450m south of site – Possibility of it being present on site in winter.
<i>Anthus trivialis</i>	Tree pipit			X				X			SU477163	6 records in total. Closest record 450m south of site
<i>Falco columbarius</i>	Merlin	Schd 1						X		HBAP	SU477163	6 records in total. Closest record 450m south of site. Annex 1 Species on the birds directive
<i>Larus melanocephalus</i>	Mediterranean gull	Schd 1								HBAP, County rare	SU477163	20 records in total. Closest record 450m south of site – Possibility of it being present on site. Annex 1 Species on the birds directive
<i>Numenius arquata</i>	Curlew			X				X			SU4717	3 records in total. Closest record 1km west of site – Possibility of being on site.
<i>Vanellus vanellus</i>	Lapwing			X				X		HBAP	SU477163	14 records in total. Closest record 450m south of site – Possibility of being on site.
<i>Pluvialis apricaria</i>	Golden plover									HBAP	SU477163	6 records in total. Closest record 450m south of site. Possibility of being on site. Annex 1 Species on the birds directive

Latin name	Common name	Status									Location	Number of records between 2010 – 2020 & distance from site
		WCA ⁴	Habs Regs ⁵	SoPl ⁶	NR ⁷	NS ⁸	IUCN list ⁹	Red-listed ¹⁰	Amber-listed ¹¹	Local interest ¹²		
<i>Pheonicurus ochruros</i>	Black redstart	Schd 1						X		County rare	SU477163	5 records in total. Closest record 450m south of site.
<i>Phoenicurus phoenicurus</i>	Redstart								X	County Interest	SU477163	13 records in total. Closest record 450m south of site.
<i>Phylloscopus sibilatrix</i>	Wood warbler			X				X		County interest	SU4719	1 record in total. Closest record 2km north west of site.
<i>Saxicola rubetra</i>	Whinchat							X		HBAP, County rare	SU477163	10 records in total. Closest record 450m south of site.
<i>Scolopax rusticola</i>	Woodcock							X			SU477163	16 records in total. Closest record 450m south of site – Possibly using the site.
<i>Spinus spinus</i>	Siskin									County interest	SU477163	24 records in total. Closest record 450m south west of site – Likely to be on site
<i>Turdus pilaris</i>	Fieldfare			X				X			SU477163	20 records in total. Closest record 450m south of site – Likely to be using the site in winter
<i>Riparia riparia</i>	Sand martin									County scarce	SU477163	10 records in total. Closest record 450m south of site.
<i>Poecile palustris</i>	Marsh tit							X			SU501184	12 records in total. Closest record 2km north west of site – Possibility of being on site.
<i>Falco subbuteo</i>	Hobby	Schd 1								HBAP	SU41 - Sensitive	15 records in total. Possible that it is using the site.
<i>Passer domesticus</i>	House sparrow			X				X			SU4818	10 records in total. Closest record - 380m north west of site. Likely to be on site.

4.1.1 Historic Surveys On Site

Breeding, wintering and specific barn owl surveys were carried out by Ecologica Ltd to inform the previous applications on this site in 2014 and 2015 respectively. No records of barn owl were identified.

Table 4.2 Historic Breeding Bird Survey - Full application boundary

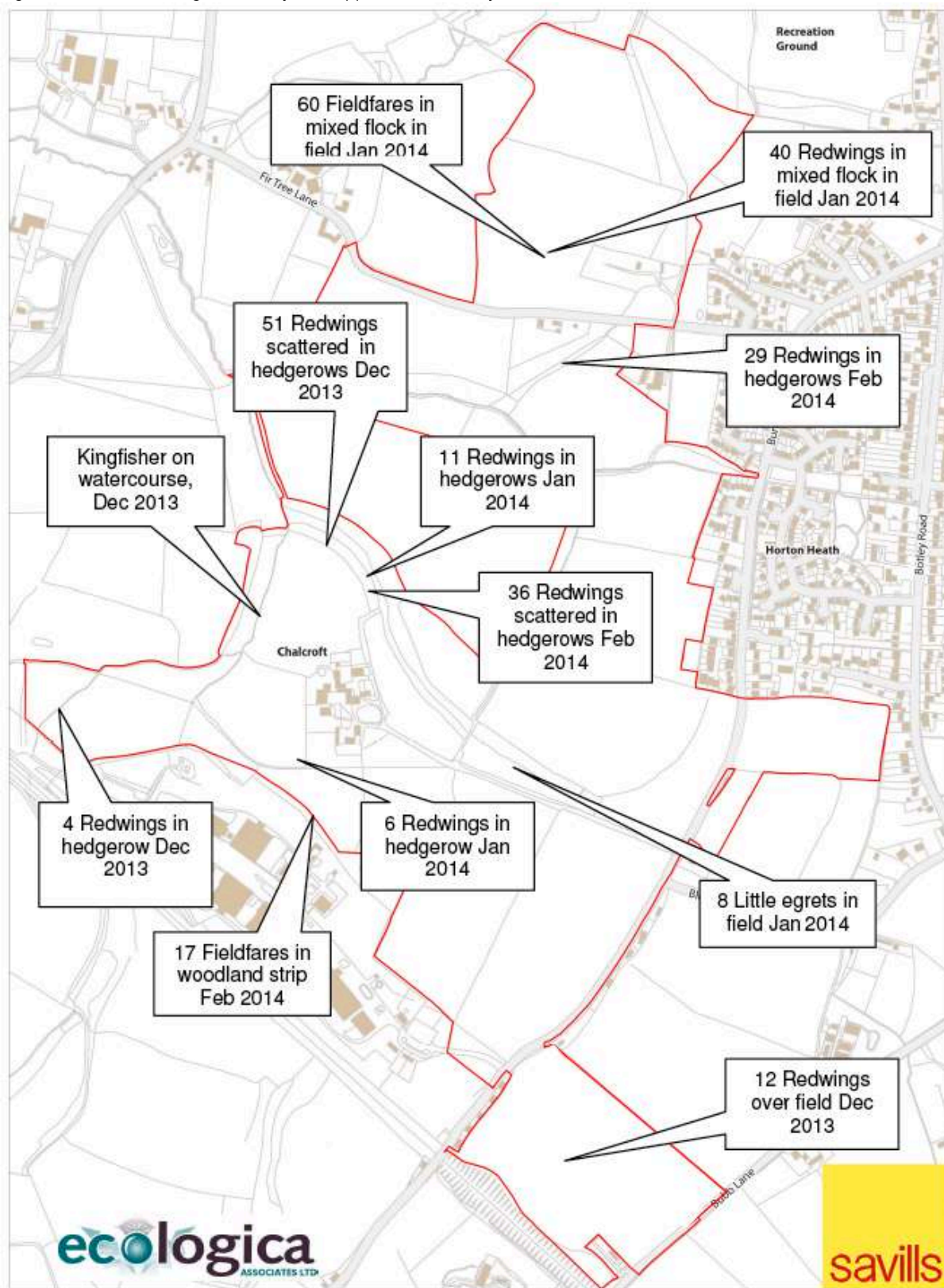
Species	Months Observed			Max No	Observation Notes
	Apr	May	Jun		
NERC & UKBAP Species					
Herring Gull			5	5	Two singles and one group of 3, passing high over the site
Skylark	3		2	3	Three singles in April: two east of Chalcroft & one south of Foxholes Farms. Two singles June, one south-east of Chalcroft, one in new road field in south-east corner of site
Cuckoo		1		1	Single bird in north-west corner of site
Song Thrush	5	8	16	16	Thinly scattered across the site in singles and pairs, with flock of 5 in June
Starling	29	137	24	137	Individuals, pairs & small groups scattered across the site, with clusters around Chalcroft Farm and west of Foxholes Farm: flocks forming from May, with groups of 25, 25 & 17
House Sparrow	33	49	14	49	Small groups scattered across the site, particularly around Foxholes and Chalcroft Farm buildings.
Reed Bunting			2	2	Pair in hedge NW of Chalcroft Farm
Dunnock	34	25	29	34	Widely spread in hedgerows across the site, mainly in singles and pairs

Table 4.3 Historic Breeding Bird Survey - NW Area of the site only

SPECIES	MONTHS OBSERVED			MEAN NO	OBSERVATION NOTES
	Apr	May	Jun		
NERC & UKBAP Species					
Herring Gull	1			<1	Single passing high over the site
Cuckoo		1		<1	Single calling from woodland block
Song Thrush	6	8	6	7	Mainly singles scattered across site
Starling	8	39	8	18	Individuals, pairs & small groups scattered across the site, with clusters around farm buildings
House Sparrow	20	17	33	23	Concentrated around farm buildings and houses, with 7 occupied nests in SW barn
Dunnock	11	11	15	12	Singles and pairs scattered in hedgerows across site and woodland

BOCC Amber Listed Species					
Mallard	3			1	Pair and single flying on SW boundary
House Martin		5	14	6	Circling around buildings & fields nearby, plus twelve apparently recent nests under eaves of Fir Tree Old Farmhouse, with birds arriving and departing

Figure 1 Historic Wintering Bird Survey - Full application boundary



4.2 FIELD SURVEYS

4.2.1 Breeding Bird Surveys

25 bird species were observed during all breeding bird surveys within the Site, with the number of species recorded increasing as survey visits increased. Species recorded are listed in Table 4.4. Summary analysis of estimated territories is shown in Figure 2 and Figure 4

Table 4.4 Breeding Bird Survey 2020 - Total Registrations - All Species

Species	Latin Name	Registrations
Barn Owl	<i>Tyto alba</i>	2
Blackbird	<i>Turdus merula</i>	25
Blackcap	<i>Sylvia atricapilla</i>	38
Blue Tit	<i>Cyanistes caeruleus</i>	27
Chaffinch	<i>Fringilla coelebs</i>	21
Chiffchaff	<i>Phylloscopus collybita</i>	21
Cormorant	<i>Phalacrocorax carbo</i>	2
Dunnock	<i>Prunella modularis</i>	9
Golden Pheasant	<i>Chrysolophus pictus</i>	1
Goldfinch	<i>Carduelis carduelis</i>	3
Great Spotted Woodpecker	<i>Dendrocopos major</i>	1
Great Tit	<i>Parus major</i>	17
Greenfinch	<i>Chloris chloris</i>	4
House Martin	<i>Delichon urbicum</i>	2
House Sparrow	<i>Passer domesticus</i>	9
Jackdaw	<i>Coloeus monedula</i>	3
Linnet	<i>Linaria cannabina</i>	3
Little Owl	<i>Athene noctua</i>	1
Long-tailed Tit	<i>Aegithalos caudatus</i>	3
Mallard	<i>Anas platyrhynchos</i>	2
Marsh Tit	<i>Poecile palustris</i>	1
Mistle Thrush	<i>Turdus viscivorus</i>	1
Moorhen	<i>Gallinula chloropus</i>	2
Nuthatch	<i>Sitta europaea</i>	2
Redshank	<i>Tringa totanus</i>	1
Robin	<i>Erithacus rubecula</i>	61
Skylark	<i>Alauda arvensis</i>	13
Snowy Owl	<i>Bubo scandiacus</i>	11
Starling	<i>Sturnus vulgaris</i>	9
Stock Dove	<i>Columba oenas</i>	1
Whitethroat	<i>Sylvia communis</i>	12
Woodpigeon	<i>Columba palumbus</i>	9
Wren	<i>Troglodytes troglodytes</i>	73
Grand Total		390

4.2.2 Territory Assessment

The data has been subject to an assessment to estimate the number of breeding territories present on site following the BBS/CBC methodology to identify cluster of registrations over multiple visits. This assessment is complex and subject to a number of variables including habitat quality and seasonal variation. The estimated territory sizes are primarily based on behavioural observations over the three visits and an appropriate extent of suitable nesting habitat rather than the precise extent of the habitats used by any given pair. The size and location of these territories will also vary significantly

between breeding seasons and, as such this assessment is correct as of the breeding season 2020 and is not a substitute for any pre-construction diligence in terms of additional surveying or protecting nesting birds.

Where singing males have only been recorded on one occasion only in a given area, these have been included in the territory analysis on a precautionary basis.

Records of very common and ubiquitous bird species (robin, wren, blackbird, carrion crow, blue tit & great tit) were captured but have been excluded from the detailed assessment on the basis that they are common, ubiquitous species that display generalist requirements and are therefore unlikely to be affected by the scheme.

Table 4.5 Breeding Bird Surveys - Summary Results – Notable Species

Common Name	Latin Name	Total Registrations	Estimated Territories	Confirmed Nests	Assessment
Blackcap	<i>Sylvia atricapilla</i>	37	18		Blackcap are a dominant feature of the breeding bird assemblage, with a wide distribution throughout the site, with a preference for mature field boundaries and woodland.
Barn Owl	<i>Tyto alba</i>	2	2	1	The barn owl surveys identified an active barn owl nest within the nest box within the parkland south of Chalcroft Farm with a roost used by at least one adult within the stables building on the southern edge of the farm complex. No barn owl activity was observed in the north of the site. All potential roost and nest sites were surveyed, and no activity was recorded. Given that the home range for this species can be between 350 (summer) to 5000 ha (winter), the survey results indicate that the site is likely to support one breeding pair. The pair in the nest box bred successfully in 2020 fledging 3-4 chicks.
Chiffchaff	<i>Phylloscopus collybita</i>	21	13		Chiffchaff are also dominant feature of the breeding bird assemblage, with a wide distribution throughout the site, with a preference for mature field boundaries and woodland. This is typical as they are a widespread, loud and easily identifiable species.
Chaffinch	<i>Fringilla coelebs</i>	21	14		Chaffinch are also distributed across the site, relying primarily on mature hedgeorws.
Dunnock	<i>Prunella modularis</i>	7	7		An estimated 7 dunnock breeding territories were observed at low density within the Site, singing upon hedgerow perches.
Goldfinch	<i>Carduelis carduelis</i>	4	2		Records across the site are sparse with activity observed occasionally. A slight increase in activity observed along

					Quobleigh stream.
Greenfinch	<i>Chloris chloris</i>	4	3		Localised on site and largely contained to the Quobleigh stream area.
House Martin	<i>Delichon urbicum</i>	5	5	5	A total of 5 house martin nests were recorded on site with associated nest construction and mud gathering behavior. These were limited to the established Fir Tree Farmhouse colony.
House Sparrow	<i>Passer domesticus</i>	9	9	7	Seven house sparrow nests were recorded in 2020 clustered around Chalcroft Farm and the unoccupied Fir Tree Farm. Additional activity was observed associated with the gardens and properties immediately adjacent to the site on the eastern boundary.
Jackdaw	<i>Coloeus monedula</i>	3	2	2	A small colony of jackdaws was present through the surveys, nesting in tree cavities immediately south west of Quobleigh Wood, along the stream corridor. Juvenile birds were observed in June confirming breeding on site.
Linnet	<i>Linaria cannabina</i>	2	1		One singing male was observed on two occasions singing from the hedgerow immediately to the north of the Chalcroft Farm track. A subsequent record of a pair with two juveniles in this area could indicate breeding but a direct link between these records, and therefore breeding on site, is uncertain. The habitats in these areas are considered suitable nesting habitat for this species.
Long-tailed Tit	<i>Aegithalos caudatus</i>	4	1		A small (assumed family) flock of long tailed tits were observed. The breeding status of this species on site is unknown.
Mistle Thrush	<i>Turdus viscivorus</i>	2	1		A pair of mistle thrush were observed in the large dead oak tree in the south west of the site, flying into the Chalcroft distribution Park woodland on two separate visits in April and June. This pair is assumed to be breeding within this woodland.
Moorhen	<i>Gallinula chloropus</i>	2	1	1	A single pair bred successfully on Chalcroft pond.

Nuthatch	<i>Sitta europaea</i>	2	2		Nuthatch were recorded in two locations within mature woodland areas adjacent to the site boundaries in the west and far northeast.
Rook	<i>Corvus frugilegus</i>	1	1		A rookery is present in the mature ash trees immediately north east of the Chalcroft Farm complex.
Skylark	<i>Alauda arvensis</i>	4	2		One singing male was observed in the areas both north and south of the Chalcroft farm track. A possible pair was observed in this area during the second survey visits but these were absent during the third visit and are unlikely to have bred in this area in 2020.
Starling	<i>Sturnus vulgaris</i>	9	5	4	Activity was dispersed over the site with multiple records of foraging and singing adults. Four nests were confirmed (2 within holes in telegraph poles) with a number of foraging sorties observed with adult birds returning to nests within the adjacent Horton Heath residential areas. Additional observations in late summer/autumn recorded small post breeding flocks of adults and juvenile birds with the largest group comprising 20 birds. No large murmurations or aggregations of this species have been recorded on site through the suite of 2018-2020 surveys delivered on site for multiple species.
Song Thrush	<i>Turdus philomelos</i>	11	3	1	Three singing males were recorded on site with one confirmed nest identified in a hedgerow just north of Quobleigh stream containing 4 chicks.
Whitethroat	<i>Sylvia communis</i>	12	9		Associated with hedgerows. Likely breeding given close proximity of multiple records.

4.2.3 Notable absences from historic surveys

4.2.3.1 Kingfisher

No kingfisher were recorded on site despite numerous surveys across the site throughout the summer along the watercourses. A notable lack of suitable breeding habitat was also noted on or adjacent to the site. The previous record was of a single wintering bird and this is considered to be the likely extent of the usage of this site for dispersal or young birds by this species given the suboptimal nature of the habitat. Confidence in the absence of breeding kingfisher is high.

4.2.3.2 Firecrest

A challenging species to identify. Given the historic record nearby, particular attention was given to woodland habitat areas with a focus on identifying this species. No evidence of the common cryptic species, goldcrest, were identified during the surveys either. The confidence in this assessment is moderate.

4.2.3.3 Anecdotal records

Red Kite

One observation was reported of a Red kite over the western site boundary. No records during formal surveys

Kestrel

A record of breeding kestrel in a mature oak tree immediately north of Foxholes Cottages was reported by tenant. This was investigated during each survey in 2020 in the vicinity with no individuals observed on site.

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Breeding Bird Summary Results:

- 01/05/2020
- 02/06/2020
- 09/06/2020
- 12/05/2020
- 15/05/2020
- 29/04/2020

CLIENT	Eastleigh Borough Council
PROJECT	OHH OPA
TITLE	OHH Breeding Bird Survey Summary Results
SCALE @ A3	CREATED BY BM
REFERENCE J00556	CHECKED BY BM DATE ISSUED 11/11/2020

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Figure 3: Breeding Bird Survey 2020 -Territory Analysis - North

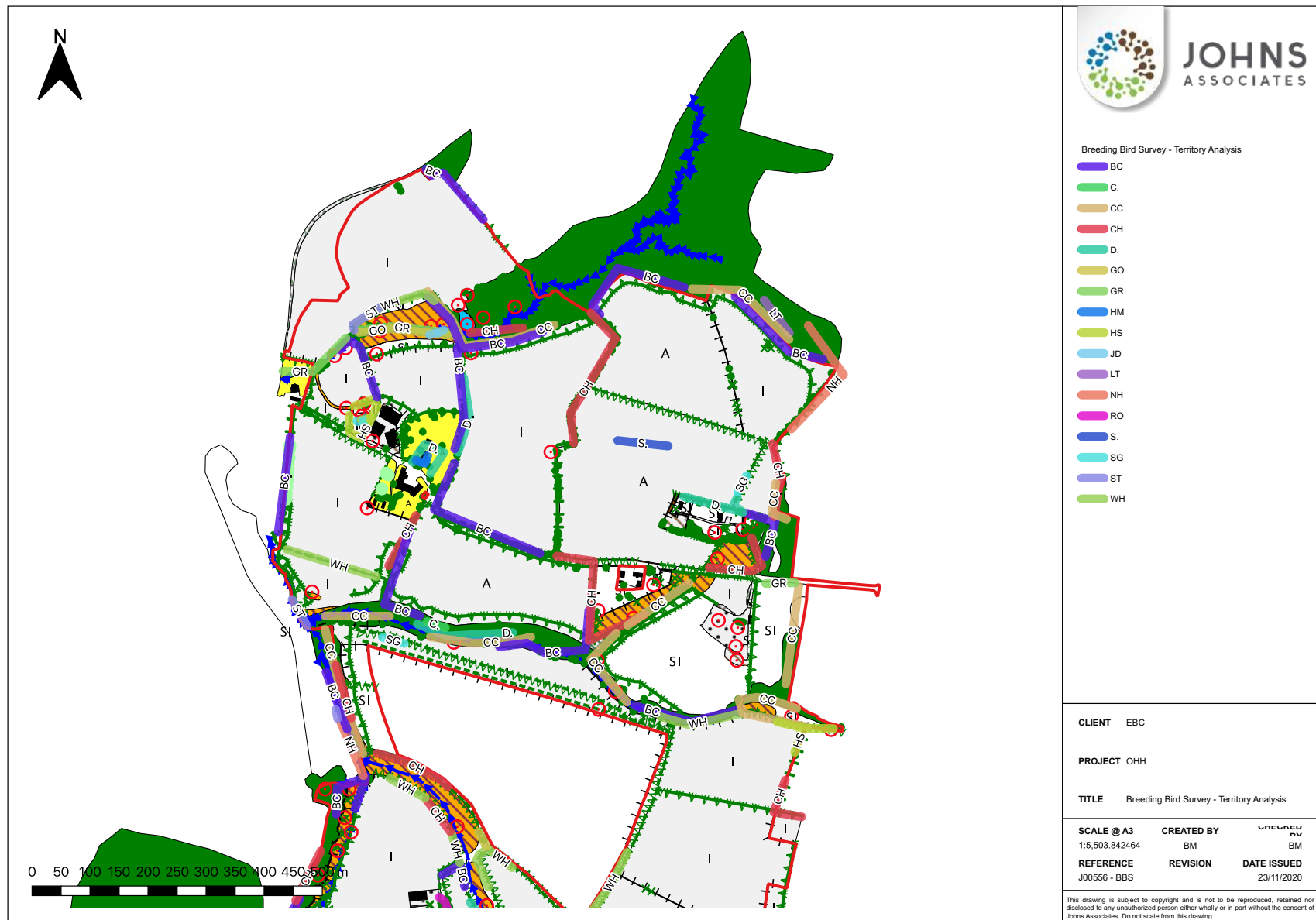


Figure 4: Breeding Bird Survey 2020 -Territory Analysis - South

