

Land at Station Road (The Secret Lake)
Nelstrop Rd N, Levenshulme, Stockport M19
3WH.
Breeding Bird Survey.

Version One. 03.11.2025
Prepared for: The Northern Group

NAME OF SITE:	Land at Station Road (The Secret Lake) Nelstrop Rd N, Levenshulme, Stockport M19 3WH.
PROJECT No:	12596
CLIENT NAME:	The Northern Group
SPECIALIST:	Amenity Tree Care Ltd
DATE PREPARED:	03.11.2025
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AMENITY TREE CARE

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1. Background and report purpose

Amenity Tree Care was appointed in June 2024 by The Northern Group to undertake a four breeding bird surveys, as instructed by the Preliminary Ecological Appraisal (PEA) survey that was undertaken on the 10th of April 2025. The standard suite of six surveys was not required in this instance as the assemblage of species and breeding behaviours recorded during the survey period was considered sufficient to determine the site's value for breeding birds and provide the appropriate mitigation for those species that are present and notable due to their conservation concern or positive impacts of biodiversity.

Habitats identified that will likely hold significance for a variety of breeding birds include the main lake/reservoir, other woodland; mixed (broadleaved), mixed scrub and the reedbed (which is also listed as a Schedule 41 habitat under the Natural Environment and Rural Communities Act, 2006).

Figure 1

Aerial view of the site, with boundary of affected areas.



Note. National Grid Reference: SJ 88752 94634

Development proposals

The proposed development consists of the construction of residential properties including dwellings and multiple storey apartments, creation of vehicular, pedestrian, and cycle infrastructure throughout the site and associated landscaping (fishing huts, lakeside paths and seating areas).

Legislation

All birds, their nests and eggs are protected by the **Wildlife and Countryside Act 1981** (as amended) and it is an offence, with certain exceptions, to intentionally kill, injure or take any wild bird; intentionally take, damage or destroy or otherwise interfere with the nest of any wild bird while it is in use or being built; intentionally obstruct or prevent any wild bird from using its nest; or intentionally take or destroy the egg of any wild bird.

Schedule 1 of the Wildlife and Countryside Act lists birds protected by special penalties at all times. It is an offence to intentionally or recklessly disturb any wild bird listed in Schedule 1 while it is nest-building or is at or near a nest with eggs or young; or disturb the dependent young of such a bird.

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 lists the living organisms which are of principal importance for the purpose of conserving biodiversity in England. Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man (RSPB 2015) categorizes all British bird species as green, amber or red (representing low, moderate and high, respectively) to indicate the level of conservation concern for the species.

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2. Methodologies

Desktop search

Multi-Agency Geographic Information for the Countryside (MAGIC) website (<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>) has confirmed the following:

- There are section 41 habitats listed on the priority habitat inventory (woodland is located within 1km, approximately 750m to the southwest which forms part of Highfield Country Park, and 850m to the northwest which forms part of Knutsford Vale Park) as shown below. Although this is not visible on MAGIC, a Schedule 41 reedbed habitat (NERC, 2006) was identified onsite as a result of the field survey and is considered a habitat of principle importance.
- The site is covered by the Grassland Assemblage Farmland Birds (2 species) (England).
- The site is covered by the Arable Assemblage Farmland Birds (4 species) (England).
- There are no important Bird Areas, Seabird considerations, or water and wetland considerations in respect of avian species.

As part of the data search data has been obtained for Greater Manchester Ecology Unit (GMEU) which indicates the following in relation to avian species.

- Numerous bird species have been recorded within a 1km proximity of the site these species include various Schedule 41 (NERC, 2006) and Schedule 1 (Wildlife & Countryside Act, 1981) species including Bullfinch, Common Gull, Dunnock, Grasshopper warbler, Greenfinch, Grey Wagtail, House Sparrow, Kingfisher, Lesser Redpoll, Mallard, Mute Swan, Reed Bunting, Rook, Song Thrush, Sparrowhawk, Starling, Whitethroat, Willow Warbler, Woodpigeon and Wren. Many of these listed species have exhibited probable and confirmed breeding behaviours.

Methods

Habitat suitability was assessed for a variety of bird species that were identified in 1km data search, and the ecologist walked a predetermined transect line, giving particular attention to habitats with nesting potential. The transect route was subject to alteration based on previous survey activity. Four early morning survey visits were conducted in June and July when weather conditions were considered appropriate (i.e., minimal wind/rain and warm ambient temperature ideally no lower than 5 degrees).

The ecologist used binoculars to identify and record avian species via call/visual observations. Notes regarding behaviour and positioning were plotted on a map in accordance with the BTO guidelines. Observations for signs of breeding birds were also given during each survey.

On completion of the surveys, all avian records were transferred to bird survey plans. This will illustrate the breeding status (possible, probable or confirmed) of the birds, behavioural notations and provide peak counts for individuals of the same species.

Data followed BTO species coding system and Atlas guidance; categories are defined below:

NON-BREEDING:

- Flying over
- Species observed but suspected to be still on migration
- Species observed but suspected to be summering non-breeder

POSSIBLE BREEDING:

- Species observed in breeding season in suitable nesting habitat
- Singing male present (or breeding calls heard) in breeding season in suitable breeding habitat

PROBABLE BREEDING:

- Pair observed in suitable nesting habitat in breeding season
- Permanent territory presumed through registration of territorial behaviour (song, etc.) on at least two different days a week or more apart at the same place or many individuals on one day
- Courtship and display (judged to be in or near potential breeding habitat) • Visiting probable nest site
- Agitated behaviour or anxiety (alarm) calls from adults, suggesting probable presence of nest or young nearby
- Nest building or excavating nest-hole

CONFIRMED BREEDING:

- Distraction-display or injury feigning
- Used nest or eggshells found (occupied or laid within period of survey)
- Recently fledged young (nidicolous species) or downy young (nidifugous species)

- Adults entering or leaving nest-site in circumstances indicating occupied nest (including high nests or nest holes, the contents of which cannot be seen) or adults seen incubating
- Adult carrying faecal sac or food for young
- Nest containing eggs
- Nest with young seen or heard

The number of bird species for which breeding was confirmed or considered probable within the red line boundary was used to assign value to the site based on the following geographical categories developed by Fuller (1980): District 25-49 / County 50-69 / Regional 70-84 / National 85+.

Surveyors and Weather Conditions

Ryan Whitmarsh is an experienced ecologist and has attained a *BSc (Hons)*. He has attended courses for bats and BNG (FSc) and has experience in a range of ecological surveys including Breeding Bird Appraisals. Ryan is also a qualifying member of CIEEM and holds a Field Identification Skills Certificate (FISC) at level 3.

Survey weather conditions.

Survey 1.

Date: 20th June 2025	
Precipitation	None (1)
Cloud Cover	0-33%
Wind	Calm (1)
Visibility	Good (1)

Survey 2.

Date: 30th June 2025	Start
Precipitation	None (1)
Temperature	34-66%
Cloud Cover	Calm (1)
Wind (1-12 Beaufort)	Good (1)

Survey 3.

Date: 7th July 2025	Start
Precipitation	None (1)
Cloud Cover	0-33%
Wind	Light wind (2)
Visibility	Good (1)

Survey 4.

Date: 18th July 2025	
Precipitation	None (1)
Cloud Cover	34-66%
Wind	Light wind (2)
Visibility	Good (1)

Survey Constraints and Limitations

There were no major constraints identified during the surveys. The breeding bird optimal survey period runs through late March to early July; survey 4 was undertaken on 18th July, the weather between early July and the 18th July was consistent and there was no reason to consider the survey conditions to be invalid. Surveys have been undertaken in order to ensure that the surveys cover resident breeders which start breeding early, as well as migrant breeders which arrive later.

All surveys have been carried out in accordance with bird survey guidelines (Bird Survey & Assessment Steering Group. (2025). Bird Survey Guidelines for assessing ecological impacts, <https://birdsurveyguidelines.org>).

3. Results

Legislation/conservation status of species identified during the field surveys.

Species Identified	Conservation Concern (RSPB 2015) + Other legislation
Blackbird	Green.
Blackcap	Green.
Blue Tit	Green.
Bullfinch	Amber. Schedule 41 (NERC, 2006)
Buzzard	Green.
Canada Goose	Green.
Carrion Crow	Green
Chaffinch	Green.
Chiffchaff	Green.
Coal Tit	Green.
Collared Dove	Green
Common Gull	Amber
Curlew	Red. Shedule 1 (Wildlife & Countryside Act, 1981). Shedule 41 (NERC, 2006)
Dunnock	Amber. Shedule 41 (NERC, 2006)
Garden Warbler	Green
Goldcrest	Green
Grasshoper Warbler	Red. Schedule 41 (NERC, 2006).
Great Spotted Woodpecker	Green.

Great Tit	Green
Green finch	Red
Grey Heron	Green
House Martin	Red.
House sparrow	Red Shedule 41 (NERC, 2006)
Jackdaw	Green.
Jay	Green.
Kestrel	Amber. Shedule 1 (Wildlife & Countryside Act, 1981).
Kingfisher	Green. Shedule 1 (Wildlife & Countryside Act, 1981)
Little Grebe	Green
Long-tailed Tit	Green
Magpie	Green.
Mallard	Amber.
Mistle thrush	Red Shedule 41 (NERC, 2006)
Moorhen	Amber
Nuthatch	Green
Reed Bunting	Amber.
Reed Warbler	Green.
Ring-necked Parakeet	Invasive none native species. Schedule 9 (Wildlife & Countryside Act, 1981)
Robin	Green.
Song Thrush	Red. Schedule 41 (NERC, 2006)
Sparrowhawk	Amber.
Starling	Red.
Swift	Red
Tawny owl	Amber.
Tree creeper	Green.
Whitethroat	Amber.
Willow Warbler	Amber.
Wood pigeon	Amber.
Wren	Amber.

Detailed survey results.

Species compositions and total numbers of sightings/recordings varied slightly between surveys see the tables below for a species list for each of the four surveys.

Survey 1

Species identified	Behaviour recorded	Notes
Grey Heron (H.)	Perching	
Grey Heron (H.)	Flying - W	
Reed Bunting (RB)	Calling	
Reed Bunting (RB)	Nest - carrying material	
Song Thrush (ST)	Nest - occupied	
Willow Warbler (WW)	Singing male	
Blackbird (B.)	Nest - occupied	Adult accompanied by juvenile
Great Tit (GT)	Nest - occupied	Observed exiting nest hole
Bullfinch (BF)	Adult - carrying food	Carrying food to nest site.
Mallard (MA)	Pair	
Swift (SI)	Foraging	
Blue Tit (BT)	Nest - carrying material	Adult observed exiting nest hole, accompanied by juvenile
Wren (WR)	Nest - carrying material	No nest location found
House Sparrow (HS)	Nest - occupied	Juvenile group with adult
Garden Warbler (GW)	Perching	
Kingfisher (KF)	Foraging	Briefly perched on branch overlooking reservoir
Sparrowhawk (SH)	Flying - S	
Blackbird (B.)	Nest - adult sitting	
Willow Warbler (WW)	Singing male	
Coal Tit (CT)	Calling	
Great Tit (GT)	Singing male	
Wood Pigeon (WP)	Nest - adult sitting	
Wood Pigeon (WP)	Nest - adult sitting	
Treecreeper (TC)	Foraging	
Blackcap (BC)	Pair	
Robin (R.)	Adult - carrying food	
Nuthatch (NH)	Perching	
Blackbird (B.)	Nest - occupied	Distraction display
Goldcrest (GC)	Pair	
Carrion Crow (C.)	Nest - occupied	
Magpie (MG)	Nest - adult sitting	
Moorhen (MH)	Calling	
Blackbird (B.)	Nest - occupied	
Mistle Thrush (M.)	Singing male	
Greenfinch (GR)	Singing male	

Chaffinch (CH)	Calling	
Jackdaw (JD)	Calling	
Chiffchaff (CC)	Singing male	Continuous calling throughout survey
Tawny Owl (TO)	Calling	No visual, record made at 5:45am
Ring-necked Parakeet (RI)	Flying - N	
Little Grebe (LG)	Perching	
House Sparrow (HS)	Nest - carrying material	
Long-tailed Tit (LT)	Calling	Group of 4-6
Wood Pigeon (WP)	Nest - adult sitting	
Carrion Crow (C.)	Calling	
Collared Dove (CD)	Nest - adult sitting	
Blackbird (B.)	Nest - occupied	Vocalisations of juveniles recorded.
Curlew (CU)	Calling	
Chaffinch (CH)	Foraging	
Starling (SG)	Foraging	
Reed Warbler (RW)	Calling	
Dunnock (D.)	Calling	
Wren (WR)	Pair	
Blackcap (BC)	Pair	
Wren (WR)	Pair	
Blackcap (BC)	Nest - occupied	
Blackbird (B.)	Possible territory	Agitated tick calls.
Chiffchaff (CC)	Male	
Garden Warbler (GW)	Pair	
Greenfinch (GR)	Calling	
Wood Pigeon (WP)	Nest - adult sitting	
Blackbird (B.)	Nest - occupied	
Wren (WR)	Calling	

Survey 2

Species identified	Behaviour recorded	Notes
Blue Tit (BT)	Calling	
Blackbird (B.)	Singing male	
Blackcap (BC)	Pair	
Blackbird (B.)	Nest - carrying material	
Great Tit (GT)	Calling	
Grey Heron (H.)	Perching	
Wood Pigeon (WP)	Calling	
Blackbird (B.)	Singing male	
Great Tit (GT)	Confirmed territory	Adult accompanied by juvenile
Greenfinch (GR)	Calling	

Moorhen (MH)	Confirmed territory	Adult pair accompanied by juvenile.
Wood Pigeon (WP)	Nest - occupied	Adult observed bringing food item to occupied nest.
Buzzard (BZ)	Flying - N	
Mallard (MA)	Pair	
Coal Tit (CT)	Possible territory	Calling at possible song post.
Chiffchaff (CC)	Calling	
Common Gull (CM)	Flying - SW	
Magpie (MG)	Nest - adult sitting	
Wood Pigeon (WP)	Nest - occupied	
Reed Bunting (RB)	Calling	
Willow Warbler (WW)	Singing male	
Carrion Crow (C.)	Foraging	
Wren (WR)	Calling	
Moorhen (MH)	Perching	
Jackdaw (JD)	Calling	
House Sparrow (HS)	Nest - occupied	Occupied (hatchlings inside) nest revealed after hand search.
Grasshopper Warbler (GH)	Calling	
Wren (WR)	Calling	
Song Thrush (ST)	Singing male	Probable song post, continuous singing for 1-2hours throughout survey.
Buzzard (BZ)	Flying - S	
Garden Warbler (GW)	Singing male	
Wood Pigeon (WP)	Nest - occupied	
Jay (J.)	Calling	
Goldcrest (GC)	Calling	
Nuthatch (NH)	Adult - carrying food	
Bullfinch (BF)	Calling	
Treecreeper (TC)	Foraging	
Carrion Crow (C.)	Calling	
Treecreeper (TC)	Calling	
Blackcap (BC)	Calling	
Chaffinch (CH)	Confirmed territory	Chaffinch observed going behind dense ivy cover, probable nest site
Wood Pigeon (WP)	Adult - carrying food	
Wren (WR)	Calling	
Collared Dove (CD)	Nest - adult sitting	
Mistle Thrush (M.)	Calling	
Wren (WR)	Pair	Adult pair accompanied by juvenile
Great Spotted Woodpecker (GS)	Calling	Drum heard
Mallard (MA)	Perching	
Blue Tit (BT)	Confirmed territory	Adult pair accompanied by juvenile
Starling (SG)	Calling	
Whitethroat (WH)	Calling	

House Martin (HM)	Flying - S	Group of 6+
Treecreeper (TC)	Calling	

Survey 3

Species identified	Behaviour recorded	Notes
Wren (WR)	Calling	
Wood Pigeon (WP)	Singing male	
Jackdaw (JD)	Foraging	
Carrion Crow (C.)	Foraging	
Blackcap (BC)	Calling	
Chiffchaff (CC)	Nest - carrying material	
Blackbird (B.)	Nest - adult sitting	Occupied nest within Himalayan Balsam stand.
Ring-necked Parakeet (RI)	Flying - S	
Carrion Crow (C.)	Nest - occupied	
Great Tit (GT)	Calling	
Starling (SG)	Foraging	
House Sparrow (HS)	Nest - carrying material	
Wren (WR)	Calling	
Robin (R.)	Confirmed territory	Adult accompanied by juveniles.
Moorhen (MH)	Pair	
Canada Goose (CG)	Flying - SE	
Grey Heron (H.)	Perching	
Wood Pigeon (WP)	Adult - carrying food	Adult observed bringing food back to occupied nest.
Wren (WR)	Confirmed territory	Distraction display. Adult fled from scrub vocalisations of juveniles heard from veg
Chiffchaff (CC)	Calling	
Jay (J.)	Nest - adult sitting	
Wood Pigeon (WP)	Confirmed territory	Courtship/breeding observed
Blue Tit (BT)	Aggressive encounter	Probable territory
Blackbird (B.)	Confirmed territory	Female observed exiting probable nest site (bramble scrub)
Jay (J.)	Adult - carrying food	Carrying food to probable nest site, within canopy of black poplar on the western side of the main lake
Mallard (MA)	Calling	
Chiffchaff (CC)	Calling	
Jackdaw (JD)	Pair	
Carrion Crow (C.)	Nest - adult sitting	

Wren (WR)	Calling	
Blackbird (B.)	Calling	Alarm call and possible distraction display from male
Bullfinch (BF)	Calling	
Robin (R.)	Adult - carrying food	
Greenfinch (GR)	Calling	
Dunnock (D.)	Calling	
Common Gull (CM)	Flying - W	
Chiffchaff (CC)	Calling	
Grasshopper Warbler (GH)	Possible territory.	Calling from the reed bed area noted on 2 separate occasions
Magpie (MG)	Calling	
Reed Bunting (RB)	Pair	
Willow Warbler (WW)	Calling	
Song Thrush (ST)	Calling	
Goldfinch (GO)	Singing male	
Blackcap (BC)	Calling	
Blackcap (BC)	Nest - occupied	Recently fledged juveniles.
Long-tailed Tit (LT)	Calling	
Great Tit (GT)	Calling	
Magpie (MG)	Pair	
Wood Pigeon (WP)	Nest - adult sitting	
Reed Bunting (RB)	Calling	
Great Spotted Woodpecker (GS)	Calling	Drum
Long-tailed Tit (LT)	Calling	
Blue Tit (BT)	Calling	Adult pair accompanied by juveniles.
Wren (WR)	Calling	
Sparrowhawk (SH)	Flying - W	
Bullfinch (BF)	Calling	
Robin (R.)	Calling - alarm type	Possible territory.
Common Gull (CM)	Flying - S	
Reed Bunting (RB)	Calling	
Great Tit (GT)	Foraging	
Wren (WR)	Calling	
Wood Pigeon (WP)	Nest - adult sitting	
Jackdaw (JD)	Calling	
Moorhen (MH)	Calling	
Raven (RN)	Calling	
Wren (WR)	Calling	

Grey Heron (H.)	Perching	
Grasshopper Warbler (GH)	Calling	
Blackbird (B.)	Nest - carrying material	
Chiffchaff (CC)	Calling	
Song Thrush (ST)	Singing male	
Kestrel (K.)	Flying - NW	
Chaffinch (CH)	Calling	
Chaffinch (CH)	Confirmed territory	Recently fledged juveniles accompanied by adults.
Garden Warbler (GW)	Calling	
Jay (J.)	Calling	
Wood Pigeon (WP)	Nest - adult sitting	
Mallard (MA)	Confirmed territory	Adult female accompanied by juveniles.
Magpie (MG)	Perching	
Nuthatch (NH)		
Treecreeper (TC)	Adult - carrying food	

Survey 4

Species Identified	Behaviour recorded	Notes
Blackbird (B.)	Singing male	
Blackbird (B.)	Calling	
Blackbird (B.)	Nest - carrying material	
Blackcap (BC)	Foraging	
Blue Tit (BT)	Flying - SW	
Blue Tit (BT)	Calling	
Carrion Crow (C.)	Calling - alarm type	
Carrion Crow (C.)	Pair	
Chiffchaff (CC)	Singing male	
Chiffchaff (CC)	Calling	
Chiffchaff (CC)	Possible territory	Continuous calling on all 3 rotations of the site; probable song post location.
Chiffchaff (CC)	Calling	
Garden Warbler (GW)	Singing male	
Great Tit (GT)	Calling	
Great Tit (GT)	Pair	
Greenfinch (GR)	Calling	
Grasshopper Warbler (GH)	Possible territory	Probable nest site, continuous calling and agitated "tick" calls when surveyor approached the reedbed area.

House Sparrow (HS)	Confirmed territory	Recently fledged juveniles accompanied by adult female.
House Sparrow (HS)	Foraging	
Jackdaw (JD)	Calling	
Jay (J.)	Perching	
Magpie (MG)	Flying - NE	
Magpie (MG)	Pair	
Magpie (MG)	Foraging	
Magpie (MG)	Calling	
Magpie (MG)	Calling	
Moorhen (MH)	Confirmed territory	Adult pair accompanied by juvenile group.
Moorhen (MH)	Foraging	
Mallard (MA)	Pair	
Robin (R.)	Calling	
Robin (R.)	Calling - alarm type	
Robin (R.)	Calling	
Robin (R.)	Singing male	
Robin (R.)	Calling	
Reed Bunting (RB)	Calling	
Sparrowhawk (SH)	Flying - SE	Female spotted (fly-over)
Song Thrush (ST)	Singing male	
Swift (SI)	Flying - W	Group of 6 (flyover); very limited habitat found onsite.
Treecreeper (TC)	Foraging	
Willow Warbler (WW)	Singing male	
Willow Warbler (WW)	Possible territory	Continuous calling signalling potential territory.
Wood Pigeon (WP)	Nest - occupied	
Wood Pigeon (WP)	Nest - occupied	
Wood Pigeon (WP)	Calling	
Wood Pigeon (WP)	Foraging	
Wood Pigeon (WP)	Flying - SE	
Wood Pigeon (WP)	Singing male	

4. Evaluation

Notable species

All species considered 'notable' due to their RSBP conservation status or those that are offered additional protection under the Wildlife and Countryside Act, 1981 (Schedule 1) and NERC Act 2006 (Schedule 41) have been subject to an assessment of breeding habitat suitability; this includes the species that were recorded in the area in the 1km data search (GMEU).

Species	Preferred Nesting/Breeding Habitat	Onsite Breeding Potential
Bullfinch	Semi-natural/mature woodland is favoured for this species. Dense vegetation is favoured but is limited within the red line boundary.	High
Common Gull	Are considered to be restricted to coastal habitats but have been recorded to nest in man-made structures such as buildings.	None
Curlew	Open moorland, rough and damp pastures, unimproved hay meadows and boggy ground. No such habitat is present onsite.	Low
Dunnock	Usually well hidden in fairly dense cover such as a shrub or hedge. Small trees and understory vegetation are present and considered suitable.	High
Grasshopper Warbler	Nest in a range of wet and dry habitats including fens, marshland, rough grassland, moorland, thickets, young plantations and forest clearings. The reedbed is considered suitable.	High
Greenfinch	Dense scrub, hedges and trees. There is suitable habitat within the development boundary.	High
Grey Heron	Restricted to nesting habitat in the proximity to water bodies. This species tends to nest in tall trees, bushes or within reedbeds.	Moderate
House Martin	This species typically nests in buildings or cliff ledges. No such habitat is present onsite.	None
Grey wagtail	Urban nesting sites such as in walls, under tiles, between stones are present. Have also been recorded to nest behind thick ivy.	None
Greenfinch	In any woody plants: trees, shrubs or creepers. The woodland onsite is considered suitable.	High
House Martin	Predominantly nest in undisturbed buildings such as barns. But have been recorded nesting in holes in large trees, cliffs and crevices.	Low

House sparrow	Shows an affinity to hedgerows but have been recorded to nest in tree cavities and dense understory vegetation.	Moderate
Kingfisher	Burrows near large water bodies and running water.	High
Kestrel	Large cavities in trees and man-made structures that offer internal access.	Negligible
Lesser redpoll	Favours mixed woodland and shows an affinity to coniferous trees, Birch, Alder and Hawthorn.	Moderate
Mallard	Restricted to aquatic nesting habitat.	High
Missle thrush	Woodland, farmland, scrub, parks and gardens.	High
Moorhen	Restricted to aquatic nesting habitat.	High
Mute Swan	Restricted to aquatic nesting habitat.	High
Reed Bunting	Primarily nest in marshy areas such as wetland fens or reedbeds.	High
Rook	Typically nest high in large trees in open countryside like farmland, grassland,	Low
Snipe	Wet grassland, marshes, and moorlands with soft, damp soil, often featuring rank and tussocky grass or rushes	Moderate
Song Thrush	Woodland, farmland, scrub, parks and gardens. This species normally nest is low, dense vegetation.	High
Sparrowhawk	Wooded areas, typically conifer plantations that are not too dense or too open, as well as broadleaved woodland.	Moderate
Starling	Have been recorded to prefer man-made structures but there is evidence of them nesting in tree cavities.	Low
Swift	Predominately nest in undisturbed buildings such as barns but have been recorded nesting in holes in large trees, cliffs and crevices.	Low
Tawny owl	Large holes and cavities in mature trees, typically within woodland habitats.	Low
Whitethroat	Young trees and understory vegetation of woodland.	High
Willow warbler	The nesting habitat of this species can be variable, but they typically nest in young woodland and scrub habitats.	High
Woodpigeon	The nesting habitat of this species is extremely variable, but they show an affinity to woodland trees and scrub.	High

It should be noted that the site is subject to high levels of anti-social behaviour. This was a factor that was considered while determining the species' breeding potential.

Breeding status of species recorded during the field surveys.

Species Identified	BTO breeding status.
Blackbird	Confirmed.
Blackcap	Confirmed.
Blue Tit	Confirmed.
Bullfinch	Probable.
Buzzard	Non-breeding.
Canada Goose	Non-breeding.
Carrion Crow	Confirmed.
Chaffinch	Probable.
Chiffchaff	Probable.
Coal Tit	Possible.
Collared Dove	Confirmed.
Common Gull	Non-breeding.
Curlew	Non-breeding.
Dunnock	Possible.
Garden Warbler	Probable.
Goldcrest	Probable.
Grasshopper Warbler	Probable.
Great Spotted Woodpecker	Probable.
Great Tit	Possible.
Green finch	Confirmed.
Grey Heron	Possible.
House Martin	Non-breeding.
House sparrow	Confirmed.
Jackdaw	Possible.
Jay	Confirmed.
Kestrel	Non-breeding.
Kingfisher	Possible.
Little Grebe	Possible.
Long-tailed Tit	Possible.
Magpie	Confirmed.
Mallard	Confirmed.
Mistle thrush	Possible.
Moorhen	Confirmed.
Nuthatch	Probable.
Reed Bunting	Probable.
Reed Warbler	Possible.
Ring-necked Parakeet	Non-breeding.
Robin	Confirmed.
Song Thrush	Confirmed.

Sparrowhawk	Non-breeding.
Starling	Non-breeding.
Swift	Non-breeding.
Tawny owl	Non-breeding. Winter breeding season.
Tree creeper	Probable.
Whitethroat	Possible.
Willow Warbler	Possible.
Wood pigeon	Confirmed.
Wren	Confirmed.

Total count.

	Non-Breeding	Possible Breeding	Probable Breeding	Confirmed Breeding	Overall (Species)
Total	11	11	11	15	48

The surveys recorded a total of 48 species were using the site. Of the 48 species, 15 were confirmed breeding onsite. 11 of the identified species were considered probable breeders. 11 of the species were considered possible breeders. 11 of the 48 species were categorised as non-breeders as were only identified via brief sightings/calls or observed flying over the site.

Of the 48 species identified onsite, 30 were notable species meaning that they had a RSBP conservation status of amber/red or they are offered additional protection under the Wildlife & Countryside Act 1981 or the NERC Act, 2006. It is necessary to integrate nesting opportunities for these species into the proposal design, particularly is their nesting habitat is lost through the development.

Fuller, R.J 1980 devised a method for assessing the ornithological interest of sites for conservation based on the number of breeding species (confirmed and probable) recorded by a survey in which the following categories are used to prescribe importance: district 25-49 / county 50-69 / regional 70-84 / national 85 plus. Including confirmed / probable nest sites recorded during survey and those species with high / moderate breeding potential it is suggested that the importance of the breeding bird assemblage is at district level.

5. Recommendations

Enhancements

A detailed ecological enhancement plan is required, including the proposed positions of artificial enhancements: i.e., integrated bird boxes built into the masonry on the proposed residential properties for species that prefer to nest in enclosed spaces (Robin, Wren and Blue Tit- also recorded breeding onsite). Larger nest boxes for birds of prey including Kestrel and Tawny Owl should be affixed to mature trees within the wooded areas; the site currently lacks cavities of a sufficient size to facilitate the nesting of these species.

A woodland management plan should be produced to improve the condition of retained areas of woodland onsite, with particular consideration to the quality of the understory as many of the species recorded onsite have been recorded to favour woodlands with dense understorey vegetation for nesting/breeding; this can be achieved with the planting of native shrubs (e.g., Hawthorn, Blackthorn, Holly, ect.) In addition, the woodland to the north is retained so the development will not result in a major loss of habitat connectivity.

As the proposed plans illustrate retention and restoration of the main lake, loss of the eastern waterbody will not be detrimental to all wading birds as they will have alternative habitat situated around the main lake. Mitigation should be focused on those species that rely specifically on the reedbed habitat for reproduction.

The current proposals outline the loss of the reedbed habitat located on the eastern parcel; this habitat holds significance for numerous species that were recorded in the data search and field surveys. The species listed in the table below will sustain a loss of breeding/nesting habitats, so the implementation of species-specific mitigation is required.

Species recorded	Proposed mitigation measures.
Snipe	The enhancement and creation of inundated grassland and wetland habitats into the proposed design; providing damp soil and shrub planting for suitable nesting cover. Enhancements could be made to the existing marginal vegetation around the main lake area to provide suitable habitat for this species. Fencing should be installed around these areas to prevent damage from grazing and foot erosion from the public. Signage must be installed around the retained/enhanced habitats to ensure that disturbance is minimised in these areas. The

	residents should be informed that certain areas are to be left unmanaged to provide sufficient shelter for nesting.
Reed Bunting	This species is typically associated with wetland habitats with dense, low vegetation. Mitigation for this species consist of the inclusion of bird boxes to be incorporated into the design; these can be integrated into the masonry of the proposed building and affixed to retained woodland trees. The enhancement and appropriate management of the marginal vegetation around the main lake will compensate for some of the loss of the nesting habitat. The enhancements to be made in grassland habitats should include the planting of tussock-forming species such as Yorkshire fog or Cock's foot for ground level nesting habitat but still providing adequate shelter.
Reed Warbler	This species nests in wetland habitats with dense, low vegetation; typically reedbeds. Mitigation measures may consist of reed fringing on the margins of the main lake, ensuring the water levels of the main lake are kept high during the breeding season which will promote reed growth and increase feeding opportunities. The implementation of protective fencing is necessary to minimise disturbance from the public. These species typically nest in habitats with structural diversity, so ensuring the retained and enhanced grassland and scrub areas are kept unmanaged is also key to create a suitable breeding habitat.
Grasshopper Warbler.	This species relies on low, dense and tussocky vegetation, with a varied structure including some taller vegetation for song posts. A considerable level of woodland and scrub is present onsite that will be retained and enhanced; a habitat structure management plan should be produced to ensure the habitats are managed correctly i.e., timed cutting or scrub clearance.

Further survey

Precautionary breeding bird surveys for all species are required before development proceeds if the development is to commence during the breeding bird season. Should the ecologist find an active nest then a 10m exclusion zone will need to be established and maintained until it can be verified that breeding behaviour has ceased to avoid a breach of UK wildlife legislation. The precautionary bird survey shall also apply to February, September and October due to the possibility of nesting within these periods.

In addition to this, post construction monitoring should be undertaken within the breeding bird season (late March- early July) to assess the efficacy of the enhanced/ created habitats and artificial mitigation.

6. Appendices

Appendix One- Images.





Habitats onsite considered to hold value for breeding birds including: reedbeds, dense scrub, broadleaved woodland and the main lake/reservoir.

Appendix 2: Bird Survey Plan: Survey 1.

Breeding bird survey 1; Central parcel (habitats surrounding the main lake).



Breeding bird survey 1; Eastern parcel (habitat surrounding the reedbed).



Appendix 3: Bird Survey Plan: Survey 2.

Breeding bird survey 2; Central parcel (habitats surrounding the main lake).



Breeding bird survey 2; Eastern parcel (habitats surrounding the reedbed).



Appendix 4: Bird Survey Plan: Survey 3.

Breeding bird survey 3; Central parcel (habitats surrounding the main lake).



Breeding bird survey 3; Eastern parcel (habitats surrounding the reedbed).



Appendix 5: Breeding Bird Plan: Survey 4.

Breeding bird survey 4; Central parcel (habitats surrounding the main lake).



Breeding bird survey 4; Eastern parcel (habitats surrounding the reedbed).



Appendix 6: BTO breeding bird species code key

BTO SPECIES CODES

AC	Arctic Skua	GA	Gadwall	LE	Long-eared Owl	SM	Sand Martin
AE	Arctic Tern	GX	Gannet	LT	Long-tailed Tit	SS	Sanderling
AV	Avocet	GW	Garden Warbler	MG	Magpie	TE	Sandwich Tern
BO	Barn Owl	GY	Garganey	MA	Mallard	VI	Savi's Warbler
BY	Barnacle Goose	GC	Goldcrest	MN	Mandarin Duck	SQ	Scarlet Rosefinch
BA	Bar-tailed Godwit	EA	Golden Eagle	MX	Manx Shearwater	SP	Scaup
BR	Bearded Tit	OL	Golden Oriole	MR	Marsh Harrier	CY	Scottish Crossbill
BS	Berwick's Swan	GF	Golden Pheasant	MT	Marsh Tit	SW	Sedge Warbler
BI	Bittern	GP	Golden Plover	MW	Marsh Warbler	NS	Serin
BK	Black Grouse	GN	Goldeneye	MP	Meadow Pipit	SA	Shag
TY	Black Guillemot	GO	Goldfinch	MU	Mediterranean Gull	SU	Shelduck
BX	Black Redstart	GD	Goosander	ML	Merlin	SX	Shorelark
BJ	Black Tern	GI	Goshawk	M.	Mistle Thrush	SE	Short-eared Owl
B.	Blackbird	GH	Grasshopper Warbler	MO	Montagu's Harrier	SV	Shoveler
BC	Blackcap	GB	Great Black-backed Gull	MH	Moorhen	SK	Siskin
BH	Black-headed Gull	GG	Great Crested Grebe	MS	Mute Swan	S.	Skylark
BN	Black-necked Grebe	ND	Great Northern Diver	N.	Nightingale	SZ	Slavonian Grebe
BW	Black-tailed Godwit	NX	Great Skua	NJ	Nightjar	SN	Snipe
BV	Black-throated Diver	GS	Great Spotted Woodpecker	NH	Nuthatch	SB	Snow Bunting
BT	Blue Tit	GT	Great Tit	OP	Osprey	ST	Song Thrush
BU	Bluethroat	GE	Green Sandpiper	OC	Oystercatcher	SH	Sparrowhawk
BL	Brambling	G.	Green Woodpecker	PX	Peafowl/Peacock	AK	Spotted Crake
BG	Brent Goose	GR	Greenfinch	PE	Peregrine	SF	Spotted Flycatcher
BF	Bullfinch	GK	Greenshank	PH	Pheasant	DR	Spotted Redshank
BZ	Buzzard	H.	Grey Heron	PF	Pied Flycatcher	SG	Starling
CG	Canada Goose	P.	Grey Partridge	PW	Pied Wagtail	SD	Stock Dove
CP	Capercaillie	GV	Grey Plover	PG	Pink-footed Goose	SC	Stonechat
C.	Carrion Crow	GL	Grey Wagtail	PT	Pintail	TN	Stone-curlew
CW	Cetti's Warbler	GJ	Greylag Goose	PO	Pochard	TM	Storm Petrel
CH	Chaffinch	GU	Guillemot	PM	Ptarmigan	SL	Swallow
CC	Chiffchaff	FW	Guineafowl (Helmeted)	PU	Puffin	SI	Swift
CF	Chough	HF	Hawfinch	PS	Purple Sandpiper	TO	Tawny Owl
CL	Cirl Bunting	HH	Hen Harrier	Q.	Quail	T.	Teal
CT	Coal Tit	HG	Herring Gull	RN	Raven	TK	Temminck's Stint
CD	Collared Dove	HY	Hobby	RA	Razorbill	TP	Tree Pipit
CM	Common Gull	HZ	Honey Buzzard	RG	Red Grouse	TS	Tree Sparrow
CS	Common Sandpiper	HC	Hooded Crow	KT	Red Kite	TC	Treecreeper
CX	Common Scoter	HP	Hoopoe	ED	Red-backed Shrike	TU	Tufted Duck
CN	Common Tern	HM	House Martin	RM	Red-breasted Merganser	TT	Turnstone
CO	Coot	HS	House Sparrow	RQ	Red-crested Pochard	TD	Turtle Dove
CA	Cormorant	JD	Jackdaw	FV	Red-footed Falcon	TW	Twite
CB	Corn Bunting	J.	Jay	RL	Red-legged Partridge	WA	Water Rail
CE	Corncrake	K.	Kestrel	NK	Red-necked Phalarope	W.	Wheatear
CI	Crested Tit	KF	Kingfisher	LR	Redpoll (Lesser)	WM	Whimbrel
CR	Crossbill (Common)	KI	Kittiwake	RK	Redshank	WC	Whinchat
CK	Cuckoo	KN	Knot	RT	Redstart	WG	White-fronted Goose
CU	Curlew	LM	Lady Amherst's Pheasant	RH	Red-throated Diver	WH	Whitethroat
DW	Dartford Warbler	LA	Lapland Bunting	RE	Redwing	WS	Whooper Swan
DI	Dipper	L.	Lapwing	RB	Reed Bunting	WN	Wigeon
DO	Dotterel	TL	Leach's Petrel	RW	Reed Warbler	WT	Willow Tit
DN	Dunlin	LB	Lesser Black-backed Gull	RZ	Ring Ouzel	WW	Willow Warbler
D.	Duncock	LS	Lesser Spotted Woodpecker	RP	Ringed Plover	OD	Wood Sandpiper
EG	Egyptian Goose	LW	Lesser Whitethroat	RI	Ring-necked Parakeet	WO	Wood Warbler
E.	Eider	LI	Linnet	R.	Robin	WK	Woodcock
FP	Feral Pigeon	ET	Little Egret	DV	Rock Dove (not feral)	WL	Woodlark
ZL	Feral/hybrid goose	LG	Little Grebe	RC	Rock Pipit	WP	Woodpigeon
ZF	Feral/hybrid mallard type	LU	Little Gull	RO	Rook	WR	Wren
FF	Fieldfare	LO	Little Owl	RS	Roseate Tern	WY	Wryneck
FC	Firecrest	LP	Little Ringed Plover	RY	Ruddy Duck	YW	Yellow Wagtail
F.	Fulmar	AF	Little Tern	RU	Ruff	Y.	Yellowhammer

If you are not submitting your data electronically using BBS-Online, please return your Field Recording Sheets to your Regional Organiser with your other BBS forms. If you would like to submit your results on BBS-Online, please inform your RO, then visit www.bto.org/bbs.

Appendix 7: Behavioural notations key.

Breeding Bird Survey; Behavioural Notation Key.

Symbology	Behaviour
	Nest- occupied.
	Pair.
	Calling.
	Nest- carrying material.
	Nest- adult sitting.
	Foraging.
	Singing.
	Flying (arrow indicates flight direction).
	Confirmed territory.
	Aggressive encounter.
	Male.

Breeding Bird Survey; Behavioural Notation Key.

	Adult- carrying food.
	Perching/loafing.
	Alarm calling.