BIRD AND BAT BOX PLAN

November 2021

Wythenshawe Park
Wythenshawe
Manchester
M23 0AB

URBAN GREEN

QUALITY MANAGEMENT

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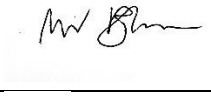
Checked By:	Mark Blacker	Signature		Qualifications	Senior Ecologist, MSc, ACIEEM
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1 Introduction

1.1 Background to the Scheme

This report has been produced by Urban Green on behalf of Manchester City Council in relation to the proposal to develop land at Wythenshawe Park in Wythenshawe, hereafter referred to as 'the site.' The proposals include the creation of cycling facilities at Wythenshawe Park to include a 'Learn to ride' area, a perimeter trail and a skills area and skills trail.

Urban Green have been appointed to provide a Bird and Bat Box Plan (BBBP) for the site.

The author of the report is Jake Healy, Qualifying CIEEM, Assistant Ecologist. Jake has experience providing ecological consulting services for a range of development schemes across the UK, including residential, industrial, and commercial schemes.

1.2 Site Context

The site is located at National Grid Reference SJ 81268 89961 and comprises a total area of approximately 1.9 ha (see Figure 1). The site is within Wythenshawe Park which is highlighted in blue on Figure 1. The perimeter route will largely follow already existing paths within Wythenshawe Park.

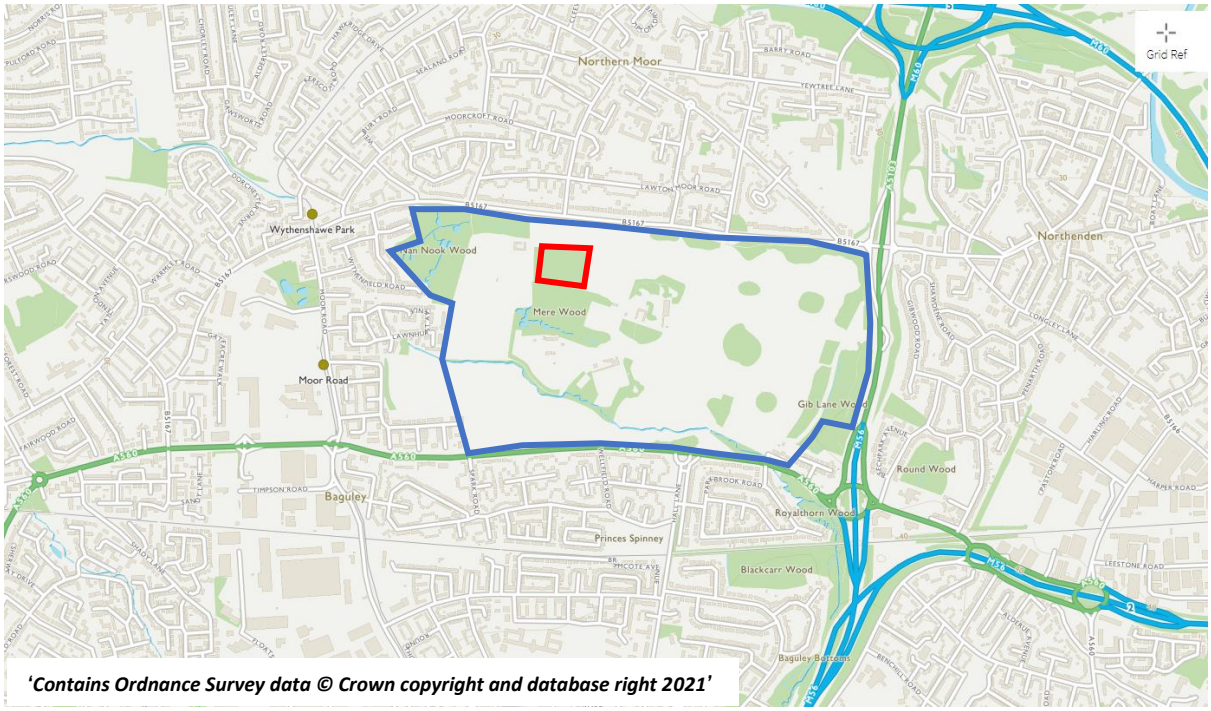

Figure 1 – Site Extent

The site is situated in the 109-hectare open parkland of Wythenshawe Park, in Wythenshawe. It is located approximately 8km south of Manchester City Centre. The M56 is located approximately 1km southeast and the A560 is located approximately 500m south.

1.3 Purpose of this Report

Urban Green have been appointed to complete a Bird and Bat Box Plan in order to discharge Condition 8 of the Planning Application (130542/VO/2021).

Condition 8 states:

"Prior to the removal of vegetation or any trees details, plans and locations of the following shall be submitted to and approved in writing by the City Council as local planning authority:

- The extent of removal of invasive plant species

- The extent of areas of proposed replanting with woodland species

- The types and densities of any new plant species to be introduced

*- **The number, type and location of bird nesting and bat roosting boxes***

The development shall be carried out in accordance with the agreed details.

Reason - To enhance the biodiversity of the site pursuant to policy EN9 of the Core Strategy."

2 Previous Reports

Urban Green provided a range of various surveys of the site, comprising:

- A Preliminary Ecological Appraisal (PEA), conducted by Senior Ecologist Katie Bird and Assistant Ecologist Jake Healy in July 2021.
- An Arboricultural Impact Assessment (AIA) conducted by Principal Arboricultural Consultant Andy Bagshaw in August 2021.
- A Biodiversity Net Gain (BNG) assessment was produced by Ecologist Maisie McKenzie in August 2021.

In summary the PEA assessment identified the following bat and bird species using and potentially using the site, based on a data search conducted within 1km of the site:

- A total of thirty-three field records of bats, including: common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrelle pygmaeus*), pipistrelle bat species (*Pipistrellus* sp), as well as noctule (*Nyctalus noctula*) and Whiskered bat (*Myotis mystacinus*).
- A total of 110 records of protected or notable birds were returned within 1km of the site and are summarised in Table 1:

Table 1 – Protected or notable birds recorded within 1km

Scientific Name	Common Name	Protection	Closest Record to Site	
			Approx. Min. Distance (m)	Date
Pyrrhula pyrrhula	Bullfinch	BoCC4**, S41****	150	2014
Prunella modularis	Dunnock	BoCC4**, S41****	60	2014
Larus argentatus	Herring gull	BOCC4*	Within 1km	2013
Passer domesticus	House sparrow	BoCC4*, S41****	Within 1km	2013
Alcedo atthis	Kingfisher	Sch.1***, BOCC4**	900	2004
Carduelis cannabina	Linnet	BoCC4*, S41****	630	2014
Turdus philomelos	Song thrush	BoCC4*, S41****	0	2014
Sturnus vulgaris	Starling	BoCC4*, S41****	250	2014
Anthus trivialis	Tree pipit	BoCC4*, S41****	400	2014

* Listed Red on the Bird of Conservation Concern 4 (2015)
** Listed Amber on the Bird of Conservation Concern 4 (2015)
*** Wildlife & Countryside Act (Sch 1, 5 & 8)
****Listed on Section 41 (NERC Act, 2006),

The species identified during the previous surveys or identified within the local data search (detailed within the PEA) have been considered to select the appropriate boxes to be installed within the site.

3 Bat Boxes

A total of 10 bat boxes are to be installed in an area of woodland to the south of the proposed "Skills Area" to minimise disturbance to the boxes. The bat boxes selected will provide a range of suitable conditions and target pipistrelle species, noctule species, and myotis species that were confirmed present within the area during the data search for the PEA (Urban Green, 2021).

Externally mounted bat boxes are to be positioned on retained mature trees. Please refer to Table 2 for the bat box specifications example. A bat box design of similar specification can be selected for the site.

Table 2 - Bat box specification

Bat Box Type	Image	Total Number of Boxes
Greenwoods Ecohabitats Two Crevice Bat Box Dimensions: External: 43 high x 21.5 wide x6.8 deep Internal: 41 x 16.5 x1.8 Weight: 6.75 kg		6
Greenwoods Ecohabitats Medium Hollow Bat Box Dimensions: External: 43 x 21.5 x 13.5 Internal: 41 x 16.5 x 8.5 Weight: 6.75		4

3.1.1 Positioning of Bat Boxes

Bat boxes must be positioned between 4–6m high and are most effective when located on a south-east to south-western facing aspect, as this will provide additional heat throughout the day. Bats prefer to change roosts to benefit from varying ambient temperatures, so bat boxes are to be clustered in small groups (i.e., three boxes per tree stem, on the eastern, western, and southern aspects). Please refer to Appendix 1 for the Location Plan.

3.1.2 Timing of Installation

Bat boxes are to be installed prior to construction works beginning on site; the boxes are to be situated upon retained trees.

3.1.3 Maintenance of Bat Boxes

Bat boxes are considered self-cleaning and require minimal maintenance once installed. The boxes are made of hard-wearing material that is generally long-lasting. Bat boxes should be checked periodically (e.g., every two years) to assess their use and the condition of the boxes. Section 5 includes the maintenance schedule.

If any boxes are identified as damaged or missing, they are to be replaced with a box of similar specification.

Note only those holding the appropriate Natural England Class 2 bat licence may open and inspect these boxes. It is an offence for anyone without this licence to open a bat box. If a bat box becomes occupied by a bird the nest must be left *in situ* until after the bird nesting season (March to September inclusive).

4 Bird Boxes

The development has the potential to enhance bird nesting opportunities through the provision of bird nest boxes. As recommended within the PEA (Urban Green, 2021) it has been considered suitable that a total of 10 bird boxes are to be installed in an area of woodland to the south of the proposed "Skills Area" to minimise disturbance to the boxes.

Bird boxes come in several types and sizes, which vary in their suitability from species to species. Table 3 provides details of bird nest box types and the likely species they attract. Bird species that are known to inhabit the local area and readily utilise artificial nest boxes have been selected. Boxes of similar specifications as those detailed in Table 4 can be selected, in the case the example boxes are not available.

Table 3 - Bird nest box hole sizes and associated species

Box entrance hole size	Associated species
28mm	Great tit (*Parus major*), tree sparrow (*Passer montanus*), pied flycatchers (*Ficedula hypoleuca*)
32mm	House sparrow and nuthatch (*Sitta europaea*)
45mm	Starling; Great spotted woodpecker (*Dendrocopus major*)
100mm (open fronted)	Robin (*Erithacus rubecula*) and pied wagtails (*Motacilla alba*)

Table 4 – Bird nest boxes that can be bought from websites such as nhbs.com, habibat.co.uk or other online retailers

Bird box type	Image	Target Species	Number of boxes
BilBao Woodstone Nest Box Height:210mm Width: 305mm Depth:120mm Entrance Hole Diameter: 28mm Weight: 6kg Material: Woodstone		Coal tit, blue tit, great tit	2

Bird box type	Image	Target Species	Number of boxes
BilBao Woodstone nest box Height: 210mm Width: 305mm Depth: 120mm Entrance Hole diameter: Oval Weight: 6kg Material: Woodstone		House sparrow, tree sparrow, great tit, blue tit, nuthatch	2
Schwegler open-front nest box Height: 150mm Width: 200mm Depth: 200mm Material: Woodstone		Spotted flycatcher, robin, pied wagtail, dunnock, and wren	2
Woodpecker Nest Box Height: 490mm Width: 170mm Depth: 187mm Entrance Hole diameter: 45mm Material: Wood		Great spotted woodpecker	2
Vivara Pro Woodstone starling nest box) Height: 385mm Width: 220mm Depth: 215mm Entrance hole diameter: 45mm Weight 7.4kg Material: Woodstone		Starling	2

4.1.1 Positioning of Bird Boxes

Bird boxes are most effective when positioned on a north-east to north-west facing aspect to prevent overheating during the summer nesting season. Care should be taken to make sure boxes are not angled in such a manner to allow rain to enter them. Nest boxes are to be affixed to vertical surfaces on retained trees at a minimum height of 3m. Please refer to Appendix 1 for the Location Plan.

4.1.2 Timing of Installation

The bird boxes must be installed at the earliest opportunity in order to compensate for the disturbance of the on-site nesting habitat. Bird boxes can be installed at any time of the year. However, they must remain undisturbed throughout the bird nesting season (March to September inclusive) to avoid disturbing nesting birds and committing an offence under the Wildlife and Countryside Act 1981 (as amended). Section 5 includes the Schedule of Works.

4.1.3 Maintenance of Bird Boxes

The great crested woodpecker boxes are made of treated softwood boxes due to their large size causing them to be too heavy if made from Woodstone. Softwood boxes must be treated with water-based wood preservative to prolong their life. The other boxes are made of Woodstone, which have been selected due to their durability compared traditional softwood boxes.

The following maintenance measures are to be completed, following the installation of the boxes:

- Bird boxes will require periodic checking and cleaning, (e.g., once every two years).
- Unhatched eggs may be removed legally between September and January and must then be disposed of.
- Disused nests must be removed and cleaned using boiling water to remove parasites. Boxes should be left to dry before replacing the lid. Insecticides and flea powders must not be used.
- If any boxes are identified as damaged or missing, they are to be replaced with a box of similar specification.

Note bird boxes must only be opened and cleaned outside the bird nesting season (which is between March to September inclusive).

5 Work Schedule

5.1 During Construction

Works	J	F	M	A	M	J	J	A	S	O	N	D
Erect boxes	Any time of year. All bird and bat boxes to be erected prior to the completion of the scheme.											

5.2 Post-Construction

Works	J	F	M	A	M	J	J	A	S	O	N	D
Bird box check and cleaning			Avoid bird nesting season									
Bat box checks												

Bird and bat box checks should be conducted in October of every other year to ensure that there is sufficient time for any repairs or replacements to be conducted.

Key

	Recommended times when works can be conducted
	Times to avoid work

6 Conclusion

This plan has demonstrated that the requirements to discharge condition 8 of the relevant application, have been met by demonstrating the following:

- A layout plan detailing where the nesting and roost features are to be positioned, detailed in Appendix 1.
- A specification concerning the type of features to be used, as detailed in Section 3 and 4. Specifically targeting species identified on site during previous ecological surveys (detailed in Section 2) and associated with residential areas.
- Implementation programme as detailed in Section 5.

7 References

British Trust for Ornithology (n.d.). Plants for fruits and seeds [Online]. Available from: http://www.bto.org/our-science/projects/gbw/gardens-wildlife/gardening/plants-fruits-seeds

Garden Nature. *CCD Woodpecker Nest Box.* Available URL: https://gardenature.co.uk/products/ccd-woodpecker-nest-box

Greenwood's Ecohabitats. Shop. Available URL: https://www.greenwoodsecohabitats.co.uk/shop [Last accessed 16/11/21]

NHBS. *Vivara Pro Seville 28mm WoodStone Nest Box.* Available URL: https://www.nhbs.com/vivara-pro-seville-28mm-woodstone-nest-box [Last accessed: 15/11/2021]

NHBS. *Vivara Pro Seville 32mm WoodStone Nest Box.* Available URL: https://www.nhbs.com/vivara-pro-seville-32mm-woodstone-nest-box [Last accessed: 15/11/2021]

NHBS. *Vivara Pro WoodStone Starling Nest Box.* Available URL: https://www.nhbs.com/vivara-pro-woodstone-starling-nest-box [Last accessed: 15/11/2021]

Urban Green (2021). Preliminary Ecological Appraisal. UG_ 1106_ECO_PEA_02.

Urban Green (2021). Arboriculture Impact Assessment. UG_1106_ARB_AIA_02.

Wildcare. *Schwegler 2H Open Front Bird Box.* Available URL: https://www.wildcare.co.uk/open-front-bird-box.html

Appendix 1 – Bird and Bat Box Location Plan

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N

Bat boxes

- Medium Hollow Bat Box
- Two Crevice Bat Box

Bird boxes

- 28mm Nest Box
- 45mm Nest Box
- Open Front Nest Box
- Oval Entrance Nest Box
- Woodpecker Nest Box

0 30 60 120 Meters

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Title: **Bat and Bird Box Plan**

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