

BAT ACTIVITY SURVEY REPORT

OCTOBER 2024

Ryebank
Chorlton
Manchester
M21 9WW

U R B A N
G R E E N

QUALITY MANAGEMENT

Project No.:	UG1910			
Project:	Ryebank, Chorlton			
Location:	Ryebank, Chorlton, Manchester, M21 9WW			
Title:	Bat Activity Survey Report			
Document Type:	BAR	Issue No.:	03	
Date:	18/10/2024			
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Revision Status:				
Rev:	Date:	Issue/Purpose/Comment:	Prepared:	Checked:
01	20/12/2024	Final masterplan drawing made available to Urban Green in Dec 2024 – potential impacts to bats updated accordingly.	Oliver Silver	Jake Healy

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1 Executive Summary

- 1.1.1.1 Urban Green has been appointed by Step Places, Southway Housing Trust and Manchester Metropolitan University (‘the Applicants’) to undertake bat activity surveys at Ryebank, Chorlton, following the results of the Preliminary Ecological Appraisal, undertaken on the site in October 2023.
- 1.1.1.2 A suite of night-time bat walkover and automated static deployment surveys have been undertaken at the site during the survey season of 2024.
- 1.1.1.3 The site was found to support a low level of bat activity overall. The north-eastern extent and southern woodland parcel on site were found to support the majority of bat activity recorded on site.
- 1.1.1.4 Five bat species were recorded utilising the site extent. Bat activity was dominated by common pipistrelle, with occasional occurrences of soprano pipistrelle and rare occurrences of brown long-eared, *Myotis* sp., and noctule.
- 1.1.1.5 The proposals for the site largely avoid direct impacts to bats through the retention (vast majority) of high-quality woodland habitat for which bats were confirmed as utilising for foraging and commuting purposes. Minor losses to woodland habitat parcels and individual trees are expected, however, these are unlikely to have a meaningful impact on the behaviour of bats in a foraging or commuting context.
- 1.1.1.6 It is recommended that individual trees and tree groups that are scheduled for felling should first be subject to further survey which focus on determining the presence or likely absence of bat roosts from trees. This will serve to avoid any potential impacts to roosting bats, should they be present within trees on site. This survey can be undertaken at any time of the year.
- 1.1.1.7 Unavoidable losses to grassland areas on site, as well as to individual trees and tree groups, will likely negatively affect the foraging behaviour (and commuting to a lesser extent) of bats on site; as such, mitigation, compensation, and enhancement measures suitable to the proposed scheme have been recommended.



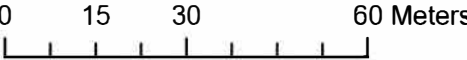
Legend: Red Line Boundary		0.85 Kilometers		N U R B A N G R E E N A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF T: +44 (0) 161 312 3131 weareurbangreen.co.uk
Client: Step Places		Issue: 01	Figure: 01	
Project: Ryebank		Scale @ A4 1:10000		
Title: Site Context		Approved by: JH	Checked by: SP	
Drawing Ref: UG_1910_SITE_CONTEXT		Author: CL	Date: 10/07/2024	



U R B A N G R E E N

Legend

- Red Line Boundary
- Pre-determined Transect Route
- NBW Starting Position



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Client: **Step Place**

Project: **Ryebank Fields**

Title: **Night-Time Bat Walkover Pre-determined Route**

Issue: **01** Figure: **02**

Drawn: **CL** Checked: **JH** Approved: **JH**

Project: **UG1910** Scale @ A3: **1:1250** Date: **08/01/2025**

Dwg No: **UG_1910_ECO_NPR_01** Revision: **01**





U R B A N
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Legend

- Red Line Boundary
- Static Locations



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Client: Step Place		
Project: Ryebank Fields		
Title: Automated Static Deployment Survey Results		
Issue: 01	Figure: 04	
Drawn: CL	Checked: JH	Approved: JH
Project: UG1910	Scale @ A3: 1:1250	Date: 16/10/2024
Dwg No: UG_1910_ECO_SDR_01		Revision: 01

2 Introduction

2.1 Scope

- 2.1.1.1 Urban Green has been instructed by Step Places, Southway Housing Trust and Manchester Metropolitan University ('the Applicants') to undertake Bat Activity Surveys, comprising Night-time Bat Walkovers (NBWs) and automated static deployments, upon land at Ryebank, Chorlton, (hereafter referred to as the 'site') and subsequently produce a technical report.
- 2.1.1.2 The main works proposals include the development of 120 dwellings with a mix of affordable housing, market housing, co-housing and age-friendly and autism friendly blocks; hereafter referred to as 'the works'.
- 2.1.1.3 The finalised masterplan drawing was provided to Urban Green in December 2024. This has been overlaid with the baseline arboricultural survey information, such that a 'Tree Removal Plan' figure could be produced (see Appendix 1). This plan details the position of the proposed residential buildings and the predicted loss of trees and woodland. This information is required to understand and assess the potential impacts to bats.

2.2 Site Context

- 2.2.1.1 The site is located at National Grid Reference SJ 8104 9458 and comprises a total area of approximately 4.86ha (see Figure 1).
- 2.2.1.2 The site is located in an urban area of Chorlton, approximately 4km south of Manchester City Centre. Old Trafford Cricket Ground and Manchester United football ground are located approximately 0.8km and 1.5km north of the site, respectively. Various green spaces are adjacent to the site including Turn Moss Playing Fields, Trafford Athletic Club and Longford Park. Due to the site's location close to city centres, main roads, train lines, tram lines, urban areas and residential areas, there is a high baseline level of disturbance.

2.3 Purpose of this Report

- 2.3.1.1 This report has been produced to demonstrate the results of bat activity surveys which were completed at the site. The surveys were conducted to establish the level of bat activity and the species diversity present within the site extent. As well as highlighting the most valuable habitats present on site for commuting and foraging bats. Appropriate mitigation and suitable enhancements are detailed (if required). The report has been produced in support of the proposed planning application.

2.4 Previous Surveys

Preliminary Ecological Appraisal & Preliminary Roost Assessment

- 2.4.1.1 A Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) was completed at the site by Urban Green in October 2023 and is detailed within report UG_1910_ECO_PEA_02 (Urban Green, 2024).
- 2.4.1.2 The site was found to comprise a mosaic of grasslands and woodland, with pockets of scrub and urban land, lines of trees, and scattered trees.

- 2.4.1.3 It was assessed that the site would provide value for foraging bats, due to the unmanaged mosaic of habitats present. The woodland parcels were deemed to provide suitable foraging grounds as well as forming a linear 'edge habitat' that may provide important commuting habitat for bats. As such, the site was assessed as supporting moderate commuting and foraging value; further survey work was recommended to establish the level of bat activity and species richness present within the site extent.

3 Methods

3.1 Desk Study

3.1.1.1 Sources of information used in the desk study are presented in Table 1.

Table 1. Desk study sources of information

Source	Date Consulted	Information Sought
Online aerial imagery	10/10/2024	Review of satellite imagery.
Greater Manchester Local Record Centre	25/10/2023	Records of bats within 1km of the site boundary.

3.2 Bat Activity Surveys

3.2.1 Night-time Bat Walkover

- 3.2.1.1 Due to the site being assessed as providing moderate commuting and foraging value to bats, Night-time Bat Walkover (NBW) surveys were undertaken in accordance with the latest Bat Conservation Trust (BCT) guidance (Collins, 2023).
- 3.2.1.2 One NBW was conducted on site during each season (spring – April/May, summer – June/July/August, and autumn – September/October).
- 3.2.1.3 Surveys commenced at sunset with surveyors stationed along potential flightlines for a minimum of the first 30 minutes of the survey, observing behaviour and recording commuting and foraging activity.
- 3.2.1.4 After the first 30 minutes of the survey, surveyors began walking at a steady pace around the site. A pre-determined route was followed during the survey; however, surveyors were given the freedom to react to live observations in the field and stop at areas of higher bat activity or detour from the route to observe bat behaviour.
- 3.2.1.5 The transect route incorporates all habitat types present within the site extent, gaining a representative sample of bat activity around the site.
- 3.2.1.6 Surveys were undertaken in pairs and were conducted using Echo Meter Touch 2 bat detectors, which recorded all bat activity throughout the surveys. Moreover, Echo Meter Touch software analysed bat sonograms in real time and predicted bat species based on the frequency of the calls.
- 3.2.1.7 The pre-determined survey transect route can be found in Figure 2. Table 2 summarises the survey details.

Table 2. Night-time bat walkover survey details

Date	Sunset time	Survey time	Surveyors	Weather conditions at sunset
23/05/2024	21:16	Start: 21:16 End: 23:16	S1 – Barnaby Gardner S2 – Ella Yoxall	Temp: 11°C Cloud cover: 8/8 oktas Wind: 1 Beaufort Precipitation (Ppt): Heavy rain prior to survey, occasional light drizzle during survey
11/07/2024	21:34	Start: 21:34 End: 23:20	S1 – Tobias Mills S2 – Joanne Reeves	Temp: 15°C Cloud cover: 2/8 oktas Wind: 1 Beaufort Precipitation (Ppt): None
11/09/2024	19:34	Start: 19:34 End: 21:34	S1 – Barnaby Gardner	Temp: 14°C Cloud cover: 8/8 oktas Wind: 1 Beaufort Precipitation (Ppt): None

3.2.2 Automated Static Deployment

- 3.2.2.1 As detailed in BCT good practice guidance (Collins, 2023), the NBWs were facilitated by the deployment of static bat detectors each month (May – September, inclusive).
- 3.2.2.2 Two static detectors were deemed suitable for the size and complexity of the site. The detectors used were Anabat Chorus static detectors. Static detectors were deployed for a period of five consecutive nights and were placed in particular habitats of interest, associated with the north and south of the site.
- 3.2.2.3 Table 3 summarises the details of each deployment.

Table 3. Automated static deployment survey details

Deployment Period	Dates	Static Number	Grid Reference	Weather Conditions
Deployment 1 - May	24/05/2024	Static 1	SJ 81043 94454	Relatively dry with occasional spells of rain.
	29/05/2024	Static 2	SJ 81141 94680	Highs of 19°C and lows of 7°C.
Deployment 2 - June	11/06/2024	Static 1	SJ 81043 94454	Relatively dry with occasional spells of rain.
	16/06/2024	Static 2	SJ 81141 94680	Highs of 18°C and lows of 5°C.
Deployment 3 - July	11/07/2024	Static 1	SJ 81043 94454	Regular spells of rain.
	16/07/2024	Static 2	SJ 81141 94680	Highs of 21°C and lows of 10°C.
Deployment 4 - August	19/08/2024	Static 1	SJ 81043 94454	Relatively dry with occasional spells of rain.
	24/08/2024	Static 2	SJ 81141 94680	Highs of 19°C and lows of 11°C.

Deployment Period	Dates	Static Number	Grid Reference	Weather Conditions
Deployment 5 -September	11/09/2024	Static 1	SJ 81141 94680	Relatively dry with little rainfall.
	17/09/2024	Static 2	SJ 81141 94680	Highs of 19°C and lows of 4°C.

3.2.3 Data Analysis

- 3.2.3.1 All bat calls recorded during the various surveys were subsequently analysed using two software packages.
- 3.2.3.2 The Echo Meter Touch 2 bat detectors conduct auto identification analysis in real-time during the surveys which is used to determine species identification during the NBWs. The calls were then run through Kaleidoscope Pro (software) to extrapolate the meta data and in turn create the associated figures.
- 3.2.3.3 Calls recorded on the Anabat Chorus detectors during the automated static deployment surveys were analysed using Anabat Insight (software).
- 3.2.3.4 All calls were first run through an auto identification tool at 95% confidence interval, then 10% of all calls manually checked by a suitably experienced ecologist. At the ecologist discretion, the percentage of calls manually checked increased from the minimum 10% value, based on the accuracy of the calls automatically identified.

3.3 Constraints to the Survey

- 3.3.1.1 *Myotis alcathoe* (*Myotis alcathoe*), brandt's (*Myotis brandtii*), Daubenton's bat (*Myotis daubentonii*) and whiskered (*Myotis mystacinus*) bat are often difficult to distinguish between by handheld detectors as well as during technical sound analysis. For the purpose of this report, any recordings of *Myotis* bat species are identified to genus level (not species) and are therefore referred to as 'Myotis' throughout the report.
- 3.3.1.2 During the survey season of 2024, the UK experienced unstable weather patterns, with periods of heavy rainfall common. As such, it was not possible to deploy static detectors during optimal weather conditions during each month. This is not anticipated to be a major constraint, as bat activity was recorded on site during each deployment period and the results were largely consistent throughout.
- 3.3.1.3 During the month of July, Static 2 malfunctioned recording no activity for the entire deployment period. Static detector 2 operated without fault for the remainder of the deployment periods, as did Static detector 1. For this reason, the absence of data from this detector, during one deployment period, is not considered significant enough to invalidate the surveys.

3.4 Lifespan of Reports

- 3.4.1.1 In accordance with the BCT guidance (Collins, 2023), the details of this report will remain valid for a minimum period of **12 months** from the date of this report (i.e. until October 2025). After this date, this assessment should be reviewed to determine whether any update surveys are required.

4 Results

4.1 Desk Study

4.1.1 Site Context

- 4.1.1.1 The site comprises a mosaic of grassland and woodland that have received limited management over the past ~20 years. The areas of woodland, predominantly span the northern and western boundaries of the site, with small parcels to the south and east of the site. Unmanaged grassland, of varying sward heights is dominant within the inner bounds of the site extent, while smaller parcels of scrub are scattered throughout. The trees present within the site extent comprise a mixture of mature and early/semi-mature specimens.
- 4.1.1.2 Longford Park lies immediately adjacent to the western boundary, which provides a large urban park, that is commonly used for recreation and is largely managed in this manner. To the north, east, and south of site lies dense urban sprawl comprising predominantly residential and commercial properties, schools, railway lines, and a busy network of roads.

4.1.2 Biological Records

- 4.1.2.1 As part of the PEA (Urban Green, 2023), local data records within 1km of the site extent were requested.
- 4.1.2.2 Forty-four records of bats were returned during the data search, including records of pipistrelle bat species (*Pipistrellus* sp.), common pipistrelle (*Pipistrellus pipistrellus*) soprano pipistrelle (*Pipistrellus pygmaeus*), *Myotis* species, noctule bat (*Nyctalus noctula*), as well as multiple records of unidentified bat species (*Chiroptera* spp.) and one record of whiskered bat (*Myotis mystacinus*).
- 4.1.2.3 Two records related to bat roosts, with the closest, a pipistrelle roost, located adjacent to the site within Longford Park, dated 2002. The remaining records were attributed to commuting and foraging activity or casualties.
- 4.1.2.4 Eight records were located within the site extent ranging from 2010 to 2022 and included unidentified bat species, unidentified myotis species, unidentified pipistrelle species, noctule, common pipistrelle, and soprano pipistrelle.
- 4.1.2.5 See Appendix 2 for a map of the associated local data records.

4.2 Nocturnal Surveys

4.2.1 Night-time Bat Walkover

Spring NBW – 23/05/2024

- 4.2.1.1 Bat activity during the survey was relatively scarce with a total of 54 passes recorded, all of which were identified as common pipistrelle. No bat activity was recorded during the first half an hour of the survey while surveyors were observing potential flight lines at the north of the site. The first pass was recorded at 21:46, which was approximately 30 minutes after sunset, once surveyors had begun to walk the pre-determined transect route.
- 4.2.1.2 Bat activity was relatively consistent between 22:01 and 22:12 where the large majority of calls for the survey were recorded, coinciding with the north-eastern extent of the site, where the surveyors stopped for a period of 15 minutes due to the influx in bat activity.
- 4.2.1.3 Bat activity was severely lacking throughout the remainder of the survey.

Summer NBW – 11/07/20204

- 4.2.1.4 Bat activity was severely limited during the survey, with only seventeen instances of bat activity recorded, comprising both common and soprano pipistrelle. The first seven bat passes were recorded during the first 25 minutes of the survey, along the western boundary of the site while surveyors were observing potential flight lines, along the woodland parcel.
- 4.2.1.5 Once surveyors began walking the predetermined transect route bat activity was occasional, with infrequent passes recorded at various points throughout the site, predominantly along the northern, and eastern boundaries.
- 4.2.1.6 No activity was recorded along the southern bounds of the site. All activity was recorded as commuting activity of individual bats or activity was heard, but not seen.

Autumn NBW – 11/09/2024

- 4.2.1.7 Bat activity was extremely low, with only five bat passes recorded during the survey. Common pipistrelle were the dominant species, with a single noctule pass recorded. Surveyors spent the first hour post sunset at the north-east of the site, due to a lack in activity.
- 4.2.1.8 The first pass was recorded approximately one hour after sunset, located along the north-eastern boundary of the site. The latter passes were recorded along the south-eastern boundary and western boundary of the site. Activity was restricted to commuting and foraging.
- 4.2.1.9 Due to the low level of bat activity surveyors walked the pre-determined transect route twice.

Summary

- 4.2.1.10 Bat activity was consistently low during the night-time bat walkovers, with a maximum of 54 passes recorded during the first survey undertaken in May.
- 4.2.1.11 Common pipistrelle were consistently recorded as the dominant species, followed by occasional records of soprano pipistrelle and rare occurrences of noctule.
- 4.2.1.12 Periods of higher bat activity during the night-time bat walkovers were commonly associated with the north-eastern boundary of the site and other linear features around the periphery of the site extent. Bat activity was rarely observed within the centre grassland parcels of the site.

4.2.2 Automated Static Deployment

Deployment 1 – May

- 4.2.2.1 Static 1 recorded no bat activity during deployment period 1, while Static 2 recorded a total of 79 bat passes over the five-night period.
- 4.2.2.2 Common pipistrelle were the dominant species recorded, accounting for 83.5% of calls, with soprano pipistrelle accounting for 12.7% of calls. Noctule and *Myotis* were rarely encountered comprising 2.5% and 1.3%, respectively.
- 4.2.2.3 Bat activity was consistently low across the entire deployment period, however, nights one and two were the highest, accounting for 65% of all activity.

Deployment 2 – June

- 4.2.2.4 A total of 444 passes were recorded across the two static detectors during the deployment period. Static 1 recorded the overwhelming majority of bat activity accounting for 94.8% of calls recorded.
- 4.2.2.5 Overall common pipistrelle were the dominant species recorded, comprising 99.1% of all calls and soprano pipistrelle accounting for the other 0.9%.

- 4.2.2.6 Bat activity was significantly higher on night 3 than on other nights with a total of 365 calls recorded, all of which were at Static 1, which accounts for 94.8% of all activity recorded during the deployment period.

Deployment 3 – July

- 4.2.2.7 As stated in Section 4.3, Static 2 malfunctioned during the deployment period and recorded no activity.
- 4.2.2.8 Static 1 recorded a total of 11 bat calls over the deployment period, all of which were recorded on night 1 of the survey. No other bat activity was recorded during the July deployment.
- 4.2.2.9 Common pipistrelle (6 calls), noctule (4 calls), and soprano pipistrelle (1 call) were all recorded.

Deployment 4 – August

- 4.2.2.10 Static 2 recorded no bat activity during the deployment period, while Static 1 recorded a total of 469 bat calls.
- 4.2.2.11 Common pipistrelle were the dominant species recorded accounting for 90% of the calls, with soprano pipistrelle present infrequently (9.4%) and noctule, brown long-eared, and *Myotis* sp. all rarely recorded, each accounting 0.2% of the calls.
- 4.2.2.12 Night 1 (173 calls) and night 3 (197 calls) recorded the majority of activity and accounted for 78.9% of all calls, while the other nights recorded irregular activity with a maximum of 47 calls recorded.

Deployment 5 – September

- 4.2.2.13 A total of 115 calls were recorded across both static detectors during the September deployment period. Static 1 recorded 55.7% of the calls, with Static 2 recording the other 44.3%.
- 4.2.2.14 Common pipistrelle were the dominant species overall, accounting for 63.5% of calls recorded. Soprano pipistrelles were second most abundant comprising 34.8% of calls, both noctule and *Myotis* were also recorded rarely during the deployment period, each comprising 0.9% of the calls.
- 4.2.2.15 Of the soprano pipistrelle calls recorded the majority (77.5%) of these were located at Static 1.
- 4.2.2.16 *Myotis* calls were only recorded at Static 2, while noctule were only recorded at Static 1.
- 4.2.2.17 No activity was recorded at either static on night 3.

Summary

- 4.2.2.18 Over the five deployment periods a total of 1118 bat calls were recorded.
- 4.2.2.19 The majority of activity was recorded at Static 1 (see Figure 5), accounting for 86.3% of all bat calls. Static 1 was located at the south of the site associated with woodland edge habitat that included mature trees. Static 2 was located at the north of the site on the edges of a young woodland parcel, associated with younger self-set trees.

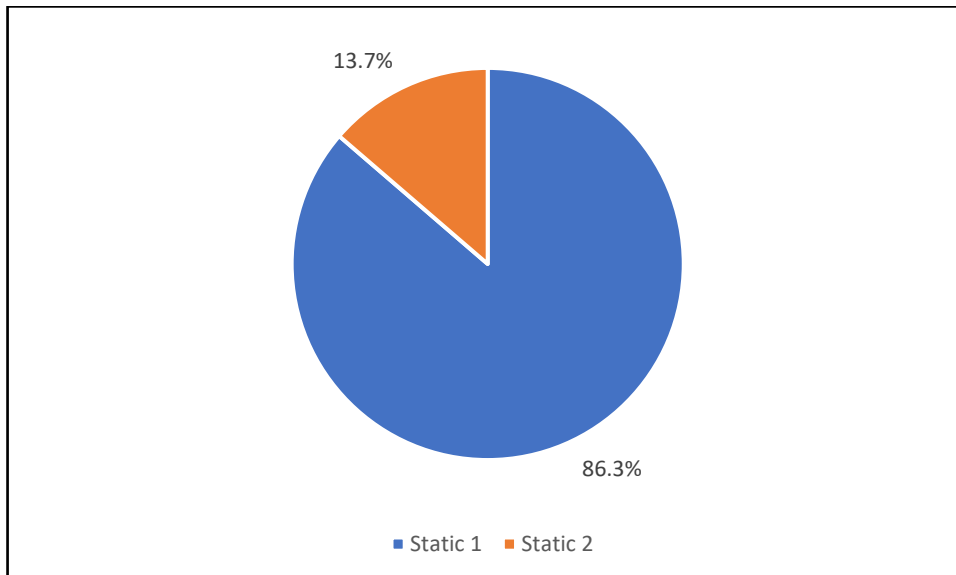


Figure 5. Distribution of total bat calls recorded between Static 1 and Static 2

- 4.2.2.20 A total of five different species/groups were identified to be using the site comprising common pipistrelle, soprano pipistrelle, brown long-eared, noctule, and *Myotis* sp.
- 4.2.2.21 Common pipistrelle were the most dominant species throughout the survey effort and accounted for 90.1% of all calls recorded. Soprano pipistrelle (8.9%) was occasionally encountered, while recordings of noctule (0.7%), *Myotis* sp. (0.3%), and brown long-eared (0.1%) were rarely present, see Figure 6.

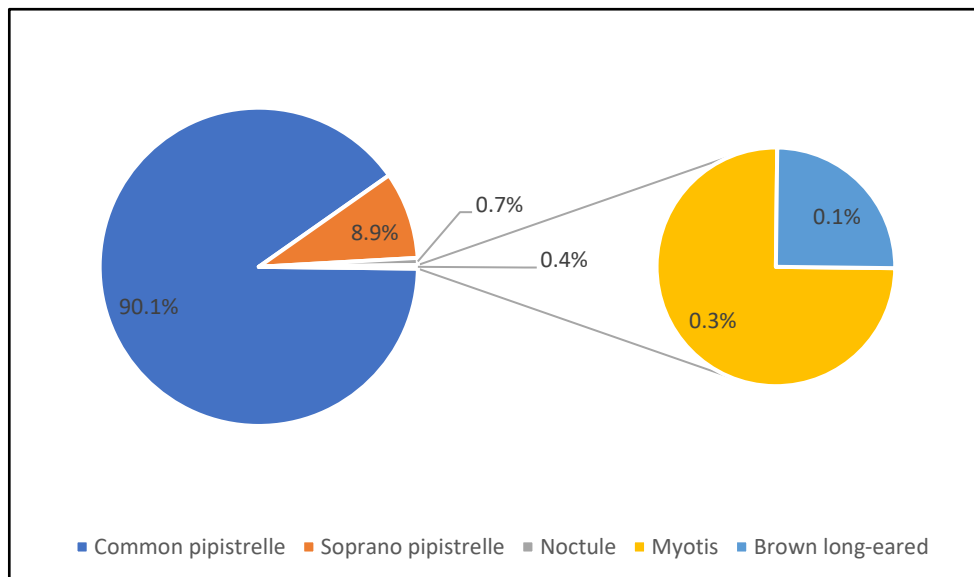


Figure 6. Species diversity of bat calls recorded on site

- 4.2.2.22 The months of June and August recorded the highest level of activity accounting for 39.7% and 41.9%, respectively. May, July and September were relatively low in activity, accounting for the remaining 18.3%, see Figure 7.

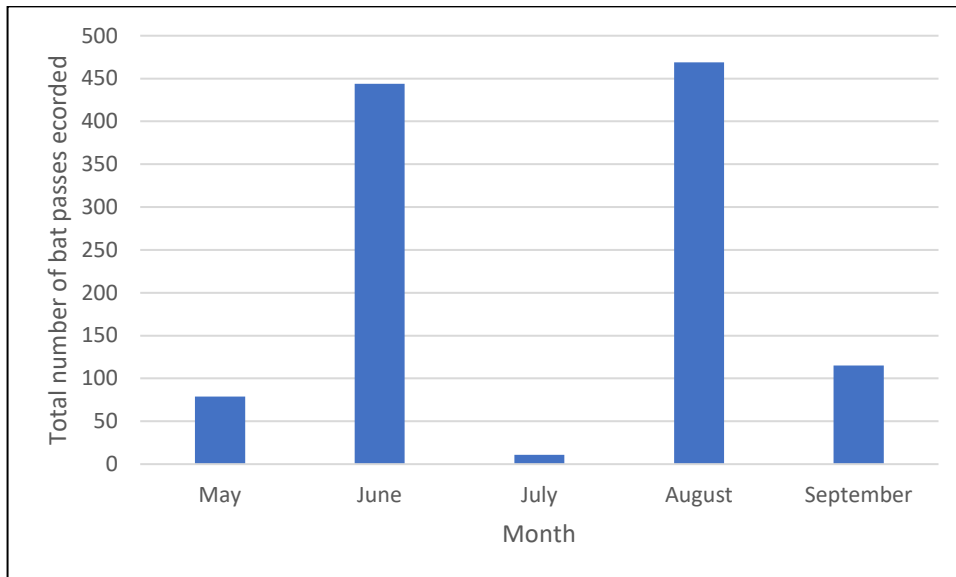


Figure 7. Total number of bat calls recorded per month

5 Assessment and Mitigation Recommendations

5.1 Project Proposals

- 5.1.1.1 The main works proposals include the development of a small residential estate comprising 120 dwellings with a mix of affordable housing, market housing, co-housing and age-friendly and autism friendly blocks.
- 5.1.1.2 Based on the Tree Removal Plan (Appendix 1), site clearance will result in the loss of the majority of grassland present within the site boundary. As a result, a large amount of suitable foraging habitat for bats is to be lost. In addition, some loss of existing woodland habitat on site is expected. The arboricultural report quantifies these losses as:
‘two sections of woodland [will be impacted] (W34 and W35, approximating 188 m²/15% and 755 m²/27%, respectively)’.
- 5.1.1.3 Foraging activities will therefore also likely be impacted in the context of woodland habitats. Notwithstanding this, commuting links to the wider landscape should not be affected.
- 5.1.1.4 Several groups of trees are scheduled for clearance as part of the development. Specifically, sections of tree group G33, three individual trees (T48, T49 and T51), four tree groups (G44, G47, G54 and G55) and sections of a further three tree groups (G38, G39 and G46) assessed as BS 5837: 2012 ‘Moderate Quality’ Retention Category ‘B’; and two individual trees (T50 and T52), three tree groups (G1, G2 and G6) and a section from a further tree group (G57) assessed as BS 5837: 2012 ‘Low Quality’ Retention Category ‘C’, as detailed in the Tree Removal Plan in Appendix 1.
- 5.1.1.5 Access facilitation pruning works (crown lifting) will also be required to trees and tree groups G5, G7, T8, T32, G43, G45 and G53, as detailed in Appendix 1.
- 5.1.1.6 Finally, the installation of permanent lighting (at the operational phase) could negatively affect the behaviour of foraging and commuting bats.

5.2 Impact Assessment

- 5.2.1.1 Taking into account the location, size, and context of the site and given the results of the NBW and static detector surveys, the site is assessed as supporting a ‘low’ (overall) level of bat activity. Bat activity was low for the majority of the survey nights, though a high fluctuation in bat activity was recorded, suggesting the site is used opportunistically by bats, potentially in relation to foraging behaviour.
- 5.2.1.2 The lack of activity recorded in July coincided with a period of prolonged wet weather, which likely explains the lower level of bat activity recorded, compared to June and August.

Habitats of Value

- 5.2.1.3 The central areas of the site were found not to be important/frequently used habitat by bats. However, the linear features, such as woodland, tree lines and scrub that are present around the periphery of the site are utilised by a range of different bat species at varying rates.
- 5.2.1.4 Areas of particular interest included the north-eastern corner of the site and the southern parcel of woodland.

- 5.2.1.5 The proposals also include the retention of large areas of woodland which are of the highest value to bat on site (inferred by the position and behaviour of individual bats recorded during the NBW surveys, see Figure 2). It is therefore anticipated that the overall impact on bats that use the site for foraging and commuting purposes will be low. Moreover, there was no concentration of bat activity recorded with the areas of woodland that are proposed to be partially cleared (see paragraph 5.1.1.2) to facilitate an access road (see Appendix 1 and Figure 2). Notwithstanding this, further mitigation recommendations and enhancements are proposed below.
- 5.2.1.6 Several groups of trees are scheduled for clearance (see Appendix 1). The NBW data does not indicate a strong connection between bat activity and these tree groups scheduled for removal. Notwithstanding this, Static detector 2 (positioned with tree groups G55 and G56) recorded the highest number of bat passes. Given no bats were recorded at this location during the NBW surveys, it may indicate that bats are using the southern boundary (lined with trees) as a commuting corridor. Given tree group G56 is being retained and is located along the southern site boundary, it is reasonable to assume that commuting behaviour will not be adversely affected.

Species Likely Impacted

- 5.2.1.7 Common pipistrelle were the dominant species utilising the site, suggesting that the site provides suitable foraging and commuting conditions for the species. Thus, this species would likely be most impacted by the proposed scheme and loss of suitable habitat.
- 5.2.1.8 Soprano pipistrelle, noctule, *Myotis* sp., and brown long-eared bats were also recorded utilising the site though on rarer occasions, suggesting that they have preferred foraging and commuting habitats within the wider landscape and would therefore be less impacted by the proposed works.
- 5.2.1.9 The BCT detail that: ‘common pipistrelle show a preference for deciduous woodland, but are known to be a generalist, using a wide variety of habitats. However, shaded wooded areas can extend the time bats spend foraging by approximately 30 minutes at both dawn and dusk.’ (BTC, 2023). This should be considered within the project proposals.

5.3 Mitigation

5.3.1 Avoidance & Further Survey

- 5.3.1.1 The proposals for the development include the retention of large areas of woodland to the north and west of the site which equates to avoidance of direct impacts to these areas of habitat.
- 5.3.1.2 It has been established that common pipistrelle are the dominant species utilising the site, which prefer to forage within deciduous woodland habitat, as such the retention of these habitats will retain suitable foraging and commuting grounds for the species.
- 5.3.1.3 The proposals also include the retention of most tree lines and woodland areas along the eastern and southern boundaries of the site; however, these areas will be fragmented by the proposed development and their functionality (in the context of bat activity) could be impacted.

- 5.3.1.4 Direct impacts, through the partial loss of woodland habitat (along the northern boundary; to facilitate an access road) and loss of tree groups (or individual trees within tree groups) to the south and centre of the site, cannot be avoided. To that end, the primary recommendation is to conduct a Ground Level Tree Assessment (GLTA) on all individual trees that are scheduled for felling. Bats must be assessed as likely absent prior to felling. Aerial Tree Inspections (ATIs) may also be required to determine likely absence, following GLTA assessments.
- 5.3.1.5 In addition, mitigation (to minimise impacts to foraging and commuting bats) in the form of compensation and enhancement have also been recommended in Section 6.3.3.

5.3.2 Mitigation

Lighting Mitigation

- 5.3.2.1 All bats have some degree of sensitivity to artificial, night-time lighting and the proposed development will result in an increase of artificial light within the site extent and in the vicinity of suitable habitat for commuting and foraging bats.
- 5.3.2.2 Therefore, it is recommended that a sensitive lighting scheme for the site is produced that considers the presence of commuting and foraging bats.
- 5.3.2.3 This scheme should implement the principles detailed within the Guidance Note on Bats and Artificial Lighting at Night (Institution of Lighting Professionals, 2023) and include the following:
- Keeping site lighting to minimum levels.
 - Implementation of dark habitat buffers around retained areas of woodland at the north and west of the site.
 - All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
 - A warm white light source (2 700Kelvin or lower) should be adopted to reduce blue light component.
 - Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats.
 - Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges.
 - Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.
 - Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered.
 - Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
 - Where appropriate, external security lighting should be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1- or 2-minute timer is likely to be appropriate.
 - The use of bollard or low-level downward-directional luminaires is strongly discouraged.
 - Part Night Lighting (PNL) may be appropriate, where street lighting close to the previously identified habitats that are of value to bats are controlled to turn on at specific times during different seasons.

5.3.3 Compensation & Enhancement

Planting

- 5.3.3.1 It is recommended that the proposals for the site should consider the enhancement of the retained woodland habitats. This could be done through the introduction of a variety of plant species that will attract invertebrate prey. These could include:

- Oxeye daisy (*Leucanthemum vulgare*),
- Michaelmas daisy (*Symphyotrichum novi-belgii*),
- Wild angelica (*Angelica sylvestris*),
- Common honeysuckle (*Lonicera periclymenum*),
- Scotch thistle (*Onopordum acanthium*),
- Lavender (*Lavandula x intermedia*),
- Hemp agrimony (*Eupatorium cannabinum*),
- Purple loosestrife (*Lythrum salicaria*),
- Rowan (*Sorbus aucuparia*), and
- Bramble (*Rubus fruticosus*)

5.3.3.2 This should (if not already actioned) be included with the Habitat Management and Monitoring Plan that will accompany the Biodiversity Net Gain Assessment for the site.

Roosting Opportunities

5.3.3.3 It is recommended that the proposals for the site include the introduction of artificial bat boxes that provide various types of roosting opportunities, including: day roosts, maternity roosts, and hibernation roosts and target the species identified on site.

5.3.3.4 A plan detailing the number, specification, and location of such features should be produced by a suitably qualified ecologist.

6 References

Bat Conservation Trust (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (Fourth Edition). The Bat Conservation Trust, London.

CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM.

Institution of Lighting Professionals (2023). GNo8/23 Bats and Artificial Lighting at Night.

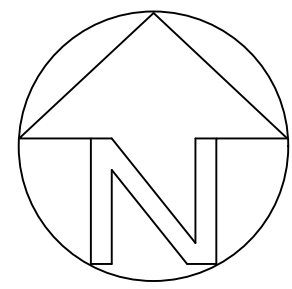
Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1. Chartered Institute of Ecology and Environmental Management, Ampfield.

Urban Green (2024a). Preliminary Ecological Appraisal. Ref: UG_1910_ECO_PEA_02.

Urban Green (2023). Arboricultural Impact Assessment. Ref: UG_1910_ARB_AIA_REV_01_FINAL

Appendix 1 – Tree Removal Plan: Based on Final Masterplan Drawing

Notes:-



	BS 5837: 2012 Retention Category A Tree, Group or Hedge
	BS 5837: 2012 Retention Category B Tree, Group or Hedge
	BS 5837: 2012 Retention Category C Tree, Group or Hedge
	BS 5837: 2012 Category U Tree, Group or Hedge
	Retained Tree
	Removed Tree
	Extents of Pruning
	Position Estimated on Site
	Redline Site Boundary

02	08/01/25	UPDATED PROPOSAL	AH	MK
01	13/12/24	UPDATED PROPOSAL	AH	MK
REV.	DATE	DESCRIPTION	DRAWN	CHK'D

Client:
STEP PLACES, SOUTHWAY HOUSING TRUST AND MANCHESTER METROPOLITAN UNIVERSITY

Project:
RYEBANK, CHORLTON

Drawn:
AB

Checked:
AH

Approved:
AB

Date:
27/11/23

Issue:
PLANNING

Title:
TREE REMOVAL PLAN

Dwg No:
UG_1910_ARB_TRP_01

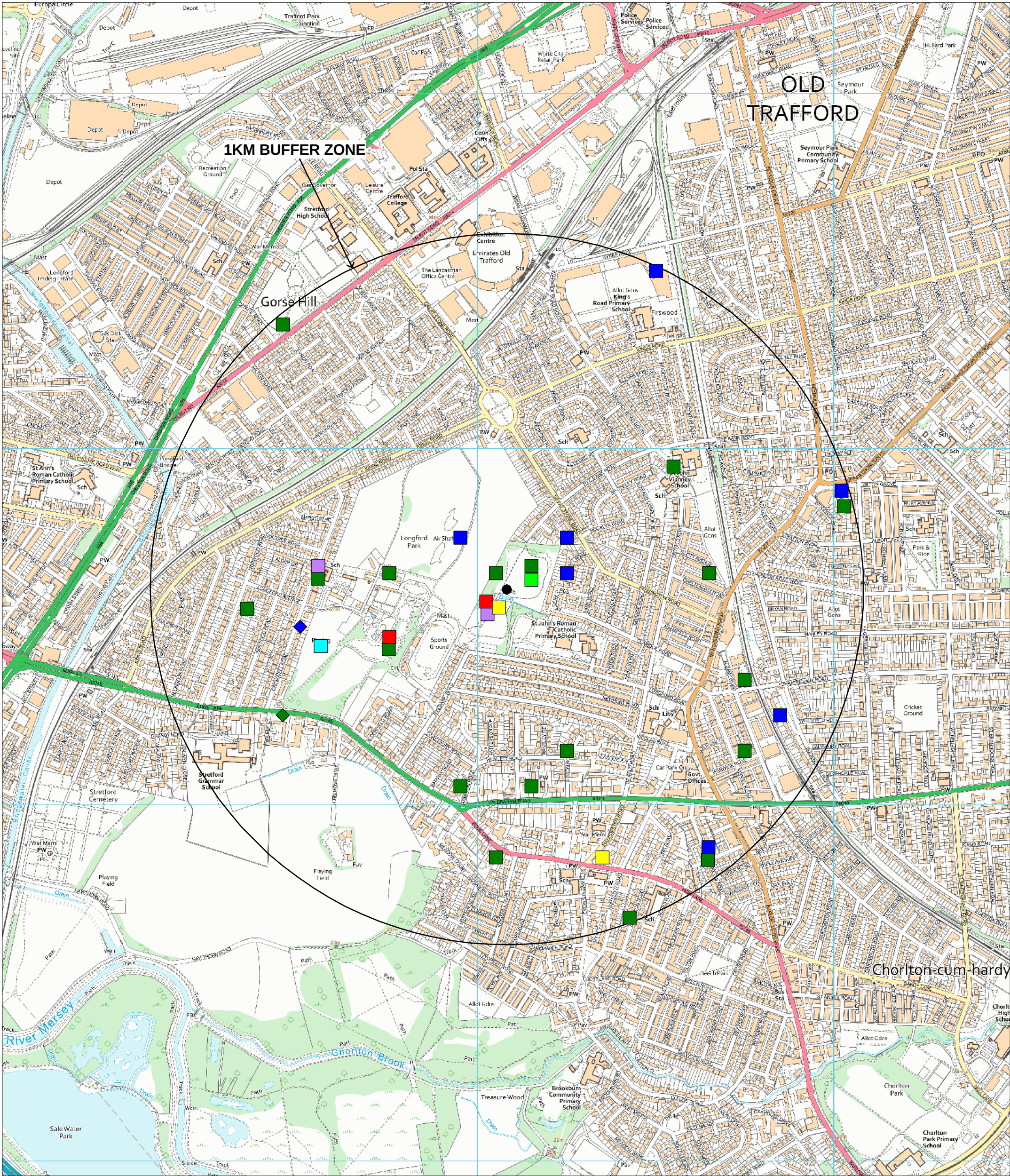
Scale @ A0:
1:500

Revision:
02



A: Ground Floor, The Tower,
Deva City Office Park, Trinity Way,
Manchester M3 7BF
T: +44 (0) 161 312 3131
weareurbangreen.co.uk

Appendix 2 – Local Bat Records Map



KEY
BAT ROOSTS

- ◆ COMMON PIPISTRELLE
- ◆ PIPISTRELLE SP

BATS OTHER SIGNS

- BAT SP
- COMMON PIPISTRELLE
- MYOTIS SP
- NOCTULE BAT
- PIPISTRELLE SP
- SOPRANO PIPISTRELLE
- WHISKERED BAT

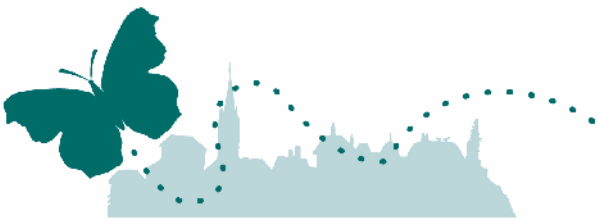
GREATER MANCHESTER ECOLOGY UNIT
ECOLOGICAL SEARCH - SJ 81081 94605
RYEBANK FIELDS - MAP 4

SCALE 1:10,000

BAT DATA COURTESY OF SOUTH LANCS BAT GROUP

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