

Clough Bank B

Preliminary Bat Roost Appraisal Report

Manchester Airports Group

December 2023

Quality Information

Prepared by	Checked by	Verified by	Approved by
AC Senior Ecologist	LM Senior Ecologist	AD Associate Director	Vin Bamford Technical Director
			

Revision History

Revision	Revision date	Details	Authorized	Name	Position

Prepared for:

Manchester Airports Group

Prepared by:

AECOM Limited
100 Embankment
Cathedral Approach
Manchester
M3 7FB
T: +44 161 601 1700
aecom.com

© 2023 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1.	Introduction.....	5
	Background	5
	The Site.....	5
	Purpose of the Preliminary Bat Roost Assessment Report	5
2.	Legislation	5
3.	Methodology	6
	Desk Study.....	6
	Field Survey	6
	Limitations.....	6
4.	Results	7
	Desk Study.....	7
	Field Survey.....	8
	Buildings	8
	Trees and Woodlands	8
5.	Conclusion and Recommendations	9
	Appendix A – Figure	10
	Appendix B - Photographs	11

1. Introduction

Background

This Preliminary Bat Roost Assessment Report has been prepared by AECOM on behalf of Manchester Airports Group (MAG). The purpose of this report is to inform the design and mitigation requirements in relation to bats for the development of a carpark, known as Clough Bank B, hereafter referred to as 'the Scheme'. The extent of the Scheme is shown by the red line boundary on Figure 1 in Appendix A. All land situated within this red line boundary is hereafter referred to as 'the Site'.

The Site

The Site is located to the west of Manchester Airport and is accessible from Wilmslow Old Road to the north-east. The central Ordnance Survey (OS) Grid Reference for the Site is SJ 810843. To the east of the Site is the Runway Visitor Park, to the northeast is Wilmslow Old Road and to the south, west and northwest is Cotteril Clough, with its associated Cotteril Clough Brook. Cotteril Clough is a Site of Special Scientific Interest (SSSI) and a Site of Biological Importance (SBI). The M56 motorway is approximately 850 m northwest of the Site at its closest point.

The Site generally comprises of grassland, hedgerows, scrub, open mosaic habitat and derelict farm and buildings.

Purpose of the Preliminary Bat Roost Assessment Report

This Preliminary Bat Roost Assessment Report presents information obtained during the following:

- A desk study conducted in September 2023, pertaining to records of bat species within a 2 km radius of the Site (referred to as the Study Area); and,
- A field survey of accessible land within the Site (the area covered by the survey is hereafter referred to as the 'Survey Area') on 17th and 25th October 2023.

The purpose of this Preliminary Bat Roost Assessment Report is to identify potential bat roosts and assess their suitability and to provide preliminary high-level recommendations and requirements for further survey. Further bat surveys and ecological impact assessments (including detailed mitigation measures) will be required in connection with a European Protected Species Mitigation Licence (EPSML).

2. Legislation

All species of bats are fully protected under the Wildlife and Countryside Act 1981 (as amended) and Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (as amended). Under this legislation it is an offence to:

- Intentionally or recklessly kill, injure or capture a bat;
- Intentionally or recklessly disturb a bat when it is occupying a roost; and
- Intentionally or recklessly damage, destroy or obstruct access to bat roost.

A bat roost is defined as being 'any structure or place that is used for shelter or protection', and since bats regularly move roost site throughout the year, a roost is protected whether or not bats are present at the time.

It is illegal to carry out work affecting bats or their roosts. Licences to permit otherwise illegal activities relating to bats and their roost sites can be issued for specific purposes and by the relevant licensing authority, which in

England is Natural England. EPSMLs are issued under the Conservation of Habitats and Species Regulations 2017 (as amended). It is an offence not to comply with the terms and conditions of an EPSML once issued.

Seven of the UK bat species are listed as species of principal importance within Section 41 of the NERC Act (2006): barbastelle bat (*Barbastella barbastellus*), Bechstein's bat (*Myotis bechsteinii*), noctule (*Nyctalus noctula*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared bat (*Plecotus auritus*), greater horseshoe bat (*Rhinolophus ferrumequinum*) and lesser horseshoe bat (*Rhinolophus hipposideros*).

3. Methodology

Desk Study

The desk study methodology is outlined in the Phase 1 Habitat Survey Report¹, a summary of the results pertaining to bats is provided within this report.

Field Survey

The field survey was conducted on 17th and 25th October 2023 by an ecologist who is registered to use the Natural England bat survey class licence. An initial Daytime Bat Walkover (DBW) was conducted to identify trees, woodlands and buildings that contain or are likely to contain Potential Roosting Features (PRFs), as defined by the Bat Conservation Trust (BCT) guidance². They are then assigned a bat roost suitability in accordance with Bat Conservation Trust (BCT) guidance³.

Following this, a Preliminary Bat Roost Assessment - structures and a Ground Level Tree Assessment (GLTA) was conducted, which involves a more detailed assessment of Potential Roost Features (PRFs) of structures and trees which were identified during the DBW as being potentially suitable for roosting bats.

The Preliminary Bat Roost Assessment – structures involved a detailed external assessment, from the ground, of structures within the Site to identify access points, roosting places, and evidence of use by bats. The bat roosting suitability, assigned during the DBW, is then confirmed or amended.

Similarly, the GLTA involved a detailed assessment of the exterior of trees, from the ground, to identify PRFs. The bat roosting suitability, assigned during the DBW, is confirmed and additionally, PRFs are individually assigned PRF-I (a PRF only suitable for individual or small numbers of bats) or PRF-M (a PRF suitable for multiple bats).

During the assessment, close focussing binoculars and a high-powered torch were used to determine whether any features were present which may be suitable to support bats in accordance with criteria within the standard BCT guidance⁴.

The preliminary roost assessment also considered the geographic location, surrounding habitat and connectivity to the wider landscape of the Site.

Limitations

The aim of a desk study is to help characterise the baseline context of the site and provide valuable background information that would not be captured by a single site survey alone. Information obtained during the course of a desk study is dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular species does not necessarily mean that the species do not occur in the desk study area. Likewise, the presence of records for species does not automatically mean that these still occur within the area of interest or are relevant in the context of the site.

¹ AECOM (2023). Clough Bank B Phase 1 Habitat Survey Report.

² Collins, J.(ed) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4thedition). The Bat Conversation Trust. London.

³ Collins, J.(ed) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4thedition). The Bat Conversation Trust. London.

⁴ Collins, J.(ed) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4thedition). The Bat Conversation Trust. London.

Access was restricted due to areas of dense vegetation, preventing full access around some structures. Additionally, given the buildings are derelict, access was restricted to external access for health and safety reasons. However, it is not considered that this limitation affected the assessment of suitability for roosting bats.

The Site boundary has been refined since the field survey, specifically to the west and south, where it now includes a woodland. Therefore, this woodland has been assessed as a whole, rather than individual features, however, it is currently understood this woodland will not be directly impacted, with landscape works only to be undertaken within proximity to the woodland.

4. Results

Desk Study

Most of the records returned by Greater Manchester Ecology Unit (GMEU) are situated within the Site and to the areas to the west of the Site. Additionally, there are a total of six granted EPSMLs with 2 km of the Site for bats, one of which is found within Cloughbank Farm which is located within the central area of the Site but not within the redline boundary and is not part of the Scheme. Table 1 provides a summary of the desk study results for bat species.

Table 1. Existing Bat Species Records

Species	Number of records	Most Recent	Closest ⁵
Brown long-eared bat (<i>Plecotus auritus</i>)	2	2018	Cloughbank Farm
Common pipistrelle (<i>Pipistrellus pipistrellus</i>)	16	2021	Cloughbank Farm
Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	13	2019	Cloughbank Farm
Nathusius' Pipistrelle (<i>Pipistrellus nathusii</i>)	2	2013	1.75 km west
Noctule (<i>Nyctalus noctula</i>)	3	2013	850 m west
Whiskered bat (<i>Myotis mystacinus</i>)	3	2019	Within the Site
Daubenton's bat (<i>Myotis daubentonii</i>)	1	2013	800 m west
Natterer's bat (<i>Myotis nattereri</i>)	1	2019	1.2 km west
Whiskered/Brandt's bat (<i>Myotis mystacinus</i> / <i>Myotis brandtii</i>)	2	2013	950 m west
<i>Myotis</i> sp.	2	2014	950 m north
Pipistrelle sp. (<i>Pipistrellus</i> sp.)	1	2013	780 m west
<i>Nyctalus</i> sp.	1	2013	1.7 km west

Source: GMEU, 2023

⁵ Where features are situated outside of the Site boundary, the distance and direction is given at the closest point of the designated site from the Site.

Field Survey

Buildings

There are former residential buildings to the northeast of the Site, known as Vicarage Cottages, two of which are derelict houses, with a small garage and row of wooden sheds and an outbuilding. More centrally to the Site are derelict metal barns and a prefabricated mobile office building.

Table 2 provides a summary of the roost suitability of the buildings within the Site and their locations are shown in Appendix A on Figure 1 and photographs in Appendix B.

Table 2. Building Roost Suitability

Building Number	Roost Suitability	Description
1	Confirmed Roost	Vacant residential building with rendered walls, plastic soffit and fascia boards, pitched slate roof in general good state of repair. Some damaged slate tiles and gaps in the soffits which may provide access to the roof void, which, given the building materials, is suitable for a roost of high conservation status, such as a maternity roost. Previously confirmed as a roost during surveys carried out by AECOM.
2	Confirmed Roost	Vacant farmhouse with brick walls, wooden soffit and fascia boards in poor state of repair. Pitched slate roof in reasonable state of repair, however, multiple broken and loose tiles which may provide access into the roof void, which, given the building materials, is suitable for a roost of high conservation status, such as a maternity roost. Previously confirmed as a roost during surveys carried out by AECOM.
3	Negligible	Small derelict garage, with corrugated asbestos roof, single layer prefabricated concrete walls.
4	Negligible	Derelict wooden outbuilding with a lean-to, corrugated metal roof, with wood panels or corrugated plastic walls.
5	Negligible	Row of small derelict sheds made of wood panels.
6	Negligible	Prefabricated derelict mobile office building. In very poor state of repair, with a highly exposed and damp roof void.
7	Negligible	Large derelict corrugated metal barn, in very poor state of repair and largely exposed. Internally, single skin breeze block and brick walls.
8	Negligible	Large derelict metal barn in poor state of repair, mostly collapsed and exposed. Internally, single skin breeze block and brick walls.

Trees and Woodlands

The woodland to the west, northwest and south (Woodland 1) encompasses the Cotteril Clough SSSI/SBI and is partially mapped (outside the Site) as Ancient Woodland. It is situated on a clough with a small watercourse (Cotteril Clough Brook), roughly central, and is a mixture of mature and semi-mature trees with a well-developed under canopy. Stock fencing separates it from surrounding habitats. Species within the woodland comprised oak (*Quercus* sp.), sycamore (*Acer pseudoplatanus*), willow (*Salix* sp.), ash (*Fraxinus excelsior*), hawthorn (*Crataegus monogyna*), alder (*Alnus glutinosa*), bramble (*Rubus fruticosus*), and birch (*Betula pendula*). The ground layer is relatively sparse with locally dense ivy (*Hedera helix*) and also comprised of species including dog's mercury (*Mercurialis perennis*), bramble, and various fern species. A small stand of Japanese knotweed (*Reynoutria japonica*) was also identified in the northern area of the woodland.

Additionally, there is a mature oak (Tree 1) within the Site, found in a small linear woodland along Old Wilmslow Road.

Table 3 provides a summary of tree and woodland suitability for roosting bats. The tree and woodland locations are shown in Appendix A on Figure 1 and photographs in Appendix B.

Please note, where trees or woodlands within the Site were assessed as None – no Potential Roosting Features or unlikely to contain PRFs, as defined by the Bat Conservation Trust (BCT) guidance⁶, they have been omitted from the report and Figure 1.

Table 3. Summary of Tree and Woodland Bat Roost Suitability

Tree	Roost Suitability	PRF Categories Present	Description
Tree 1	PRFs present	PRF-I	Mature oak with branch cavity and broken branches.
Woodland 1	PRFs present	Not assessed	The woodland has multiple mature trees which are likely to provide suitable roosting features for bats, though these are generally more centralised in the woodland. The area of woodland within the Site appeared to be less mature, though still may provide trees with suitable roosting features for bats.

5. Conclusion and Recommendations

There are two structures (Building 1 and Building 2) within the Site which were categorised as being a confirmed roost. Therefore, Buildings 1 and 2 will require update surveys to confirm the presence of a bat roost, and to confirm the roost characterisation to inform a EPSML. Buildings 3 – 8 were categorised as being Negligible suitability for roosting bats. Therefore, no further survey is required for these buildings, however, an appropriate Precautionary Working Method Statement (PWMS) will be required for their removal given the proximity of known bat roosts at Vicarage Cottages and Cloughbank Farm to ensure that roosting bats are not disturbed.

Tree 1 was identified as having PRF-I present, should this tree be removed it will need to be carried out under an ecological watching brief and soft felled in sections.

Woodland 1 was identified as having PRFs present, but, given the current design is not expected to impact trees within the woodland, no further survey is recommended. However, if works impacting this woodland are required, a GLTA for trees to be impacted will be required to inform the requirement for further survey and appropriate mitigation.

No works or impacts to Buildings 1 and 2, Woodland 1 can be undertaken prior to these recommended surveys. Additionally, a 30 m buffer will be required to these features for works, likely to cause an impact.

Table 4. Recommendations

Feature	Recommendation	Timing
Building 1 and 2	Three separate dusk emergence surveys	Between May and August, Surveys should be a minimum three weeks apart.
Building 3 – 8	An appropriate PWMS to be implemented for their removal	Prior to works
Tree 1	Soft felled/watching brief	Prior/during works
Woodland 1	GLTA to trees which may be impacted as part of the works	Prior to works.

⁶ Collins, J.(ed) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4thedition). The Bat Conversation Trust. London.

Appendix A – Figure



AECOM

PROJECT
Clough Bank B

CLIENT
Manchester Airport Group

CONSULTANT
AECOM Limited
100 Embankment
Cathedral Approach
Manchester, M3 7FB
www.aecom.com

LEGEND

- Scheme Boundary
- Potential Roost Feature - I Present
- Potential Roost Features Present
- Bat Structure
- Suitability
 - Confirmed
 - Negligible

NOTES
Maxar, Microsoft

ISSUE PURPOSE
DRAFT

PROJECT NUMBER
60719865

FIGURE TITLE
Clough Bank B Preliminary Bat Roost Appraisal

FIGURE NUMBER
Figure 1

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

Appendix B - Photographs

Feature	Photograph
---------	------------

Building 1 = confirmed roost	
------------------------------------	--



Building 2 – confirmed roost	
------------------------------------	--



Feature	Photograph
---------	------------

Building 3 – negligible bat roost suitability	
--	--



Building 4 – negligible bat roost suitability	
--	--



Feature	Photograph
---------	------------

Building 5 - negligible bat roost suitability	
--	--



Building 6 - negligible bat roost suitability	
--	--



Feature	Photograph
---------	------------

Building 7 - negligible bat roost suitability	
--	--



Building 8 - negligible bat roost suitability	
--	--



Feature	Photograph
---------	------------

Tree 1 – PRF-I



Woodland 1



