



Preliminary Roost Assessment Report

University of Manchester, Rutherford Building

Reference: 81-271-R1-1

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PRELIMINARY ROOST ASSESSMENT REPORT

University of Manchester
Rutherford Building

Prepared for:
The University of Manchester

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E3P

Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

+ 44 (0) 161 707 9612
<https://e3p.co.uk/>

Registered in England
CRN: 08725262

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PREPARED BY	C. Jones		
QUALIFICATIONS	BSc (Hons), QCIEEM Consultant Ecologist		
CHECKED BY	L. Thomas		
QUALIFICATIONS	BSc (Hons), ACIEEM Project Manager – Ecology		
AUTHORISED BY	C. Barlow		
QUALIFICATIONS	BSc (Hons), MSc, MIEnvSc, CEnv, MCIEEM Associate Director		



EXECUTIVE SUMMARY

Site Address	Rutherford Building, Manchester, M13 9QQ
Coordinates	E 384514, N 396619
Site Area	Approximately 625 m ²
Current Site Use	The site comprised an educational building used by the University of Manchester.
Proposed Development	The proposed development includes the renovation of the Rutherford building for use by the geography department.
Results	The building was assessed as having Moderate bat roosting potential due to the presence of a broken vent providing access to the cavity wall, gaps within the stone balconies, crevices within the brickwork and stone, missing tiles, and a gap along the ornamental ridge tiles. These features may support roosting bats regularly. The building was assessed as being unsuitable for hibernating bats as the basement was used by Manchester Museum and regularly incurs disturbance. Furthermore, the building is located within a largely urban area with little suitable foraging habitat surrounding the site. As such, it is unlikely the loft voids would support a large number of bats, such as a maternity colony of bats. Additionally, it is believed the loft voids mainly comprised plant rooms that would regularly incur disturbance. An active gull (<i>Larus spp.</i>) nest was present on top of the eastern chimney stack and the entirety of the roof and balconies were assessed as having nesting bird potential.
Conclusions and Recommendations	If works are deemed to affect or disturb the potential roosting features then at least two Nocturnal Bat Surveys are required on the Rutherford Building between May and September (inclusive), with one survey between May and August (inclusive). Any works to the roof, chimneys and balconies should be undertaken outside of the breeding bird season. If this is not possible, a suitably qualified ecologist should undertake a nesting bird check up to 24 hours before works commence. If a nest, or nest in construction is located, then a stand-off distance should be maintained until the young have fledged.



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1. INTRODUCTION

1.1. BACKGROUND

E3P has been instructed by The University of Manchester to undertake a Preliminary Roost Assessment (PRA) at the University of Manchester, Rutherford Building, hereafter referred to as “the site”.

This report has been prepared by Carlin Jones BSc (Hons), QCIEEM, Consultant Ecologist at E3P. Carlin has experience conducting a range of PRAs and nocturnal bat surveys across the UK, including experience with bats. Carlin holds a valid Natural England Class 1 Bat Survey Licence (2023-11074-CL17-BAT).

1.2. PROPOSED DEVELOPMENT

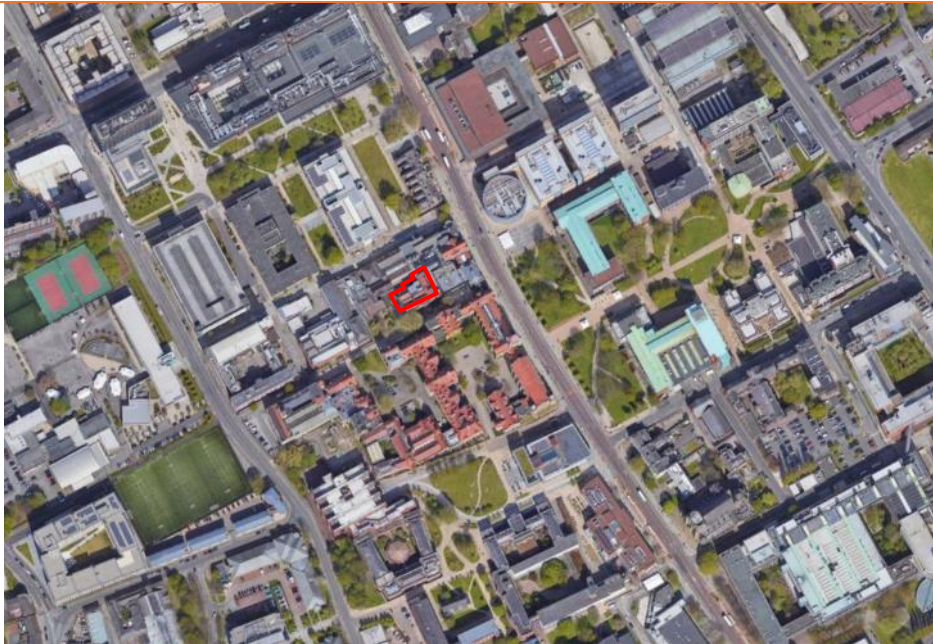
The proposed development includes the renovation of the Rutherford building for use by the geography department.

1.3. SITE LOCATION

The site is located on the University of Manchester Campus, south of Manchester City Centre. The property is located on the southern aspect of Coupland Street, which connects to Oxford Road approximately 35 m east of the site. The surrounding buildings are largely made up of educational buildings, as well as commercial buildings and small recreational spaces.

Please refer to Figure 1.1. for the approximate site location.

FIGURE 1.1 APPROXIMATE SITE LOCATION



1.4. OBJECTIVES

The objectives of the PRA are as follows:

-  Determine if bats currently, or could potentially, utilise the building for roosting.
-  Determine whether further surveys (e.g., nocturnal bat surveys) and/or further mitigation is necessary for development to proceed.

The survey findings are detailed in this report, as well as any recommendations.



2. METHODOLOGY

2.1. DESK STUDY

The following sources of information and ecological records were consulted:

-  MAGIC – A government web-based interactive mapping system, demonstrating European Protected Species Licences (EPSLs) and Natural England Licences which have been previously granted within England.
-  Information and species records from South Lancashire Bat Group.

A search via MAGIC was undertaken in June 2023 to identify EPSLs within 1 km of the site boundary. This search area is considered suitable for the size of the development and the surrounding habitat.

2.2. PRELIMINARY ROOST ASSESSMENT

A PRA was undertaken on the 02nd June 2023 by Carlin Jones who holds a valid Natural England Class 1 Bat Survey Licence (2023-11074-CL17-BAT). The weather was dry and sunny.

The survey involved undertaking a systematic search of the building externally, searching for signs of bats, and/or spaces where bats would be able to access. The methodology followed that described in *Bat Surveys for Professional Ecologists, 3rd Edition* (Collins, 2016).

The building was categorised for its bat-roosting potential (Collins, 2016) as described in Table 2.1.

TABLE 2.1 BAT-ROOSTING POTENTIAL ASSESSMENT (COLLINS, 2016).

CATEGORY	DESCRIPTION
NEGLIGIBLE	A building with no potential bat roosting features.
LOW	A building with one or more potential roost sites. However, the potential roost sites do not provide suitability for large numbers of bats (i.e., for maternity or hibernation) and would only provide suitability for occasional use.
MODERATE	A building with one or more potential roosting features, which could support bats, but is of a suitability meaning that it would be unlikely to support a roost of high-conservation status.
HIGH	A building with several potential roosting features which would be able to support a large number of bats on a regular basis and for longer periods of time.

The PRA was undertaken utilising suitable binoculars to assess all areas where safe to do so.



2.3. LIMITATIONS

The PRA survey was undertaken utilising suitable binoculars to assess the aspects of the building where access was possible and where safe to do so. Access was not possible to the eastern aspect and areas of the northern aspect due to the proximity of the surrounding buildings. As such, further features may be present on these aspects. Due to the height of the building, a full assessment of the roof was not possible.

An internal inspection of the building was not undertaken as access to the loft voids and basement was not possible. An inspection of the loft voids could not be undertaken due to the height of the loft hatches being located 5 m off the ground. The basement could not be entered due to access restrictions. This has been considered within the assessment.



3. RESULTS

3.1. DESK STUDY

3.1.1. LOCAL BAT GROUP RECORDS

Based on information from South Lancashire Bat Group, species present within the local area include whiskered/Brandt's (*Myotis mystacinus/brandtii*), brown long-eared bat (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), Daubenton's bat (*Myotis daubentonii*), Natterer's bat (*Myotis nattereri*), noctule (*Nyctalus noctula*), and soprano pipistrelle (*Pipistrellus pygmaeus*).

3.1.2. MAGIC REVIEW

Three EPSLs were located within 1 km of the site boundary following a search on MAGIC. The closest licence was located approximately 570 m to the east of the site, was active between 2015 and 2016 and was issued to allow the destruction of a non-breeding roost of common pipistrelle bats. The second was located approximately 630 m north-east, was active between 2014 and 2015 and was issued to allow damage to a common pipistrelle non-breeding roost. The third was located approximately 990 m north-east of the site, was active between 2021 and 2022 and was issued to allow the destruction of a common pipistrelle non-breeding roost. Multiple licences were identified within the wider area.

3.2. PRELIMINARY ROOST ASSESSMENT

The Rutherford Building is a three-storey Grade II Listed building with a raised basement. The walls comprised red brickwork with areas of stone.

PLATE 1 SHOWING THE RUTHERFORD BUILDING



The majority of the brickwork and stone on the accessible walls were well-sealed and pointed at the time of the survey. Small holes were present within the walls surrounding the downpipes on all accessible aspects of the building, caused by the removal of downpipe brackets. These holes could provide access to the cavity walls that could conceal further bat potential features. This could provide opportunities for a small number of crevice-dwelling bat species on a more regular basis.

PLATE 2 SHOWING SMALL HOLES IN THE BRICKWORK AND STONE



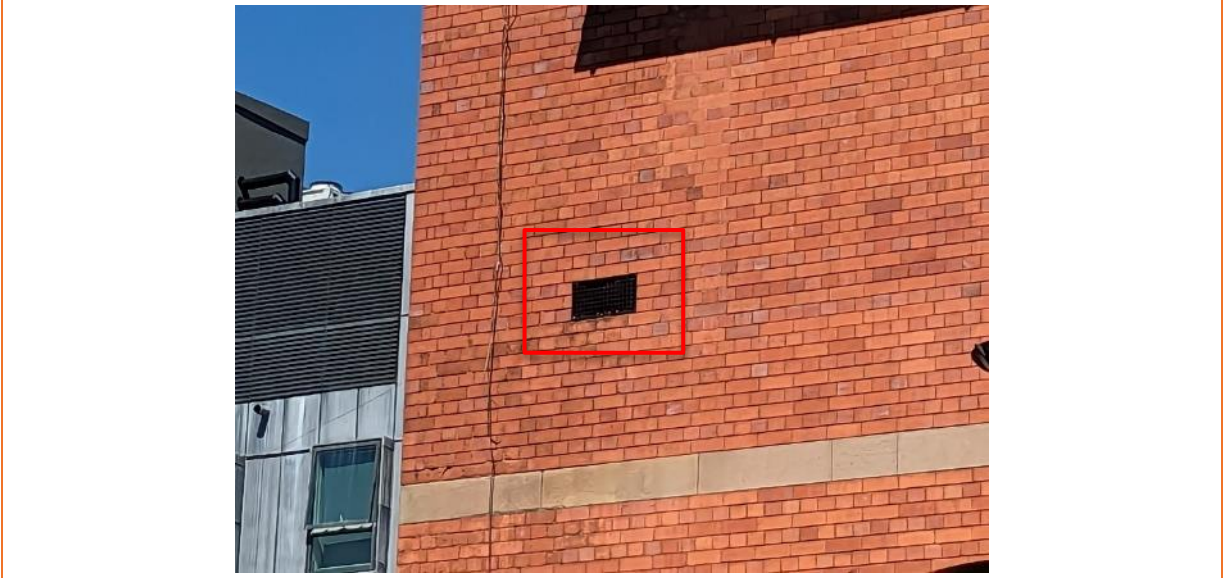
Stone balconies with wrought iron railings were present on the western aspect of the building. Gaps between the stone were present, which could provide roosting opportunities for a small number of crevice-dwelling species on an occasional basis.

PLATE 3 SHOWING STONE BALCONIES



A broken vent was present on the western aspect of the building that could provide access to the cavity wall. Further potential roosting features could be present within the cavity wall providing crevice-dwelling species with roosting opportunities on a more regular basis.

PLATE 4 SHOWING BROKEN VENT



Three chimney stacks were present on the roof of the building which comprised red brickwork walls with stone caps. The southern chimney stack featured missing mortar between the brickwork and the stone. This created crevices that crevice-dwelling species may utilise on an occasional basis.

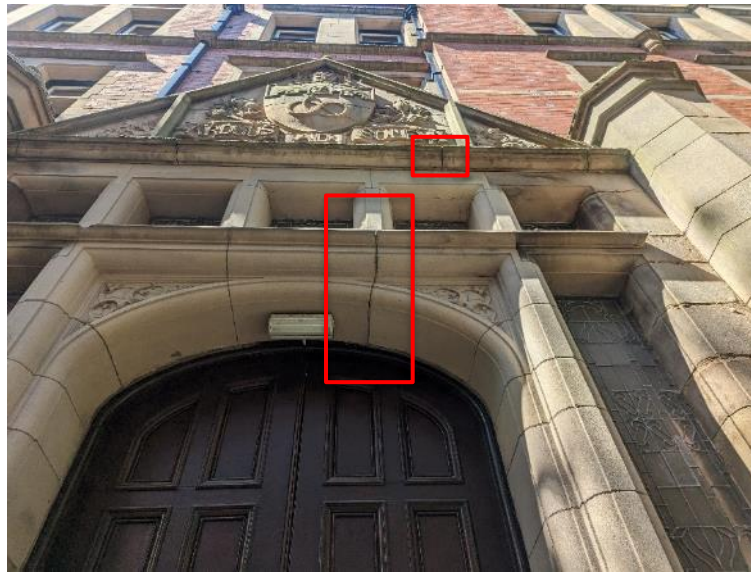
PLATE 5 SHOWING THE SOUTHERN CHIMNEY STACK



A stone-arched doorway was present on the southern aspect of the building. The mortar was missing between several of the stones creating crevices. However, due to the directionality of the crevices, they would be exposed to the elements which reduces the suitability of the features.



PLATE 6 SHOWING STONE ARCHED DOORWAY



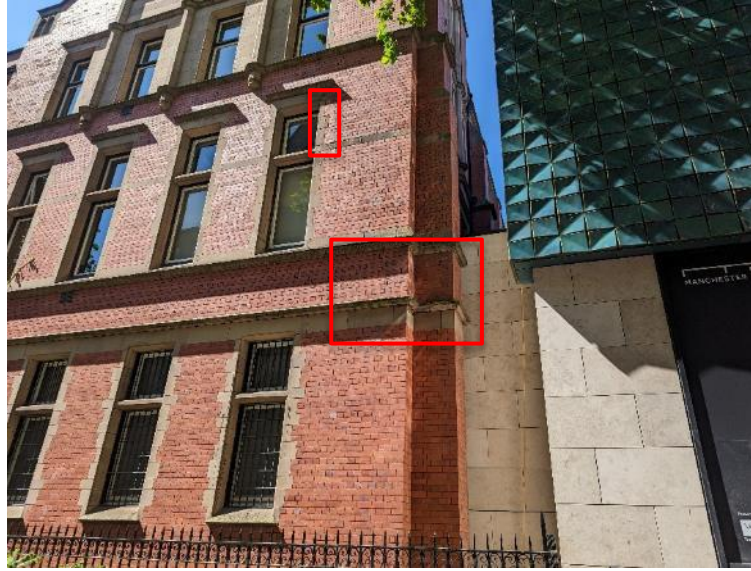
A raised basement is present on the southern and northern aspects of the building. Several areas of damage were present on the north-west corner within the brickwork that could provide access to the cavity wall and basement. The cavity wall could contain further bat roosting features that could provide roosting potential for crevice-dwelling bats on a more regular basis. Potential access to the basement is provided by the holes in the damaged brickwork and a mesh metal door. However, the basement will feature disturbance due to its use by the Manchester Museum. As such, the basement is not expected to provide hibernation potential for bats. Furthermore, the height level of the features further reduces the suitability due to the emergence and re-entry patterns of bats including the need for a clear flying space and flight path.

PLATE 7 SHOWING RAISED BASEMENT



Further areas of damage were present on the north-west corner between the first and second storey within the brickwork that could provide access to the cavity wall. That could provide roosting potential for crevice-dwelling bats on a more regular basis. Furthermore, missing mortar between the brickwork and stone was present on the north-west corner, creating a crevice that could be utilised by a small number of roosting bats on an occasional basis.

PLATE 8 SHOWING DAMAGED BRICKWORK

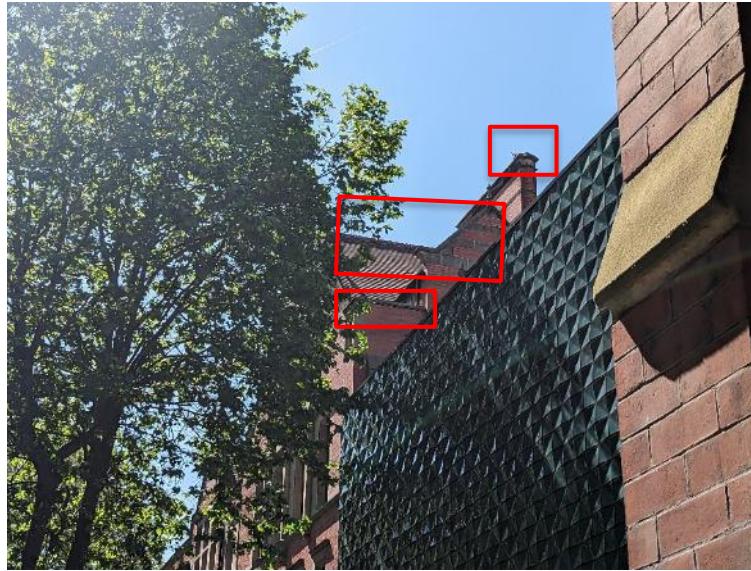


A dormer extension was present on the northern aspect of the building, comprised of brickwork and stone. Crevices were present within the brickwork, stone, and stone ridges surrounding the dormer window. The northern roof comprised slate tiles with ornamental ridge tiles. Several tiles were missing on the roof that could support roosting bats and provide access to the loft voids. Furthermore, a large gap was present along the ornamental ridge tiles that may support roosting bats and provide access to the loft voids. These crevices and gaps could be utilised by a small number of crevice-dwelling species on an occasional basis. Access to the loft voids could be provided by the missing tiles and large gap along the ornamental ridge tiles, however, the majority of the loft voids are used as a plant room and therefore reduces the suitability for roosting, hibernating and reproducing bats. Furthermore, the Rutherford Building is located within the urban city centre. As such, reduces the likelihood of maternity colonies due to the low-value habitats within the wider area. Any features present within the loft voids are likely to be used by individual bats rather than maternity colonies that are comprised of a large number of bats.

Furthermore, during the PRA, an active gull (*Larus spp.*) nest was identified on top of the northern chimney stack.



PLATE 9 SHOWING NORTHERN ASPECT



Overall, the building was assessed as having **Moderate** bat roosting potential due to its potential to support crevice-dwelling bat species on a regular basis.



4. CONCLUSIONS AND RECOMMENDATIONS

4.1. BATS

The Rutherford Building was assessed as having Moderate bat roosting potential. As such, if the potential roost features identified within the report are affected or disturbed then two Nocturnal Bat Surveys will be required on the building between May and September (inclusive), with one of these surveys completed between May and August (inclusive). The surveys are to follow the guidance set out in Collins (2016), surveyors are to be positioned at areas of greatest roosting potential and should be completed by suitably qualified ecologists. If bats are identified roosting within the building, further surveys will be required to characterise the roost with one further survey required. A European Protected Species Licence (EPSL) would also be required with up-to-date surveys from the survey season prior to the application submission.

4.2. NESTING BIRDS

It is recommended that works should take place outside of the breeding bird season (March – September inclusive). If works are required on the roof, chimneys, or balconies within the breeding bird season (March – September inclusive), a suitably qualified ecologist should inspect the area no more than 24 hours prior to the works. Should any nests, or nests in construction be located, a suitable stand-off distance should be maintained until the young have fledged. The ecologist will advise on suitable stand-off and provide a toolbox talk to all site contractors regarding their working limits and legal implications.



5. REFERENCES

- ✿ Bat Conservation Trust (2018). Bats and Artificial Lighting in the UK: Bats and the Built Environment Series.
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END OF REPORT

