

Bat

Presence-Absence Survey

Building B3

7 Chapel Street

Levenshulme

M19 3QB

For

NADA Architects



Gritstone Ecology

Contents

1. Introduction	4
2. Methods	6
3. Results - building inspection	8
4. Results - presence-absence survey	9
5. Evaluation.....	11
5. Impact assessment.....	11
6. Required actions	12
7. References	13



Non-technical summary

A preliminary roost assessment completed by Arbtech in May 2023 assessed building B3 as having low suitability for use by roosting bats, and recommended that a single dusk or dawn survey was undertaken.

A building inspection and one dusk survey was completed on 1st August by Gritstone Ecology. No indications of use by bats were recorded during the building inspection, and no bats were recorded roosting in the building during the emergence survey.

As no bats were recorded roosting in the building, and as no indications of use by bats have been found during the surveys, it is unlikely that bats will be affected by the proposed works.

No further survey, licensing, or mitigation work is required with regard to bats.



1. Introduction

1.1. Purpose of the report

The report is written by Stewart Bradshaw for Nada Architects. Stewart carried out a building inspection and bat presence-absence survey of building B3, in August 2023. The survey report will be used to provide supporting information for a planning application on the site.

The surveys were commissioned following a preliminary roost assessment, carried out by Arbtech in May 2023. The report concluded that building B3 had low suitability for use by roosting bats, and recommended that a single bat presence absence survey was carried out.

1.2. Survey aims

The aim of the surveys was to determine the presence or absence of bats, and assess the need for further survey or mitigation.

1.3. Surveyor details

Stewart is licensed to disturb, take and handle all species of bats in all counties of England under licence number 2015-15615-CLS-CLS. He has more than 10 years of experience in ecological consultancy, including the planning & preparation of bat surveys, and mitigation licences. Experienced assistant surveyors were used during the presence-absence survey to cover all angles of the building.

1.4. Proposed development

The development proposals are for the demolition of buildings on site, and the construction of residential properties.

1.5. Site context

The building is located on Chapel Street, Levenshulme, M19 3QB, GR SJ 87494 94228, approximately 4km southeast of Manchester City Centre. The site is in a dense urban area, surrounded by houses, residential apartments, commercial properties, and and busy well-lit roads.

The site includes a brick storage shed, within a larger commercial metalworking and fabrication yard, and areas of hard landscaping.

Habitat within 50m of the building includes; houses, areas of hard landscaping, and busy well-lit roads.

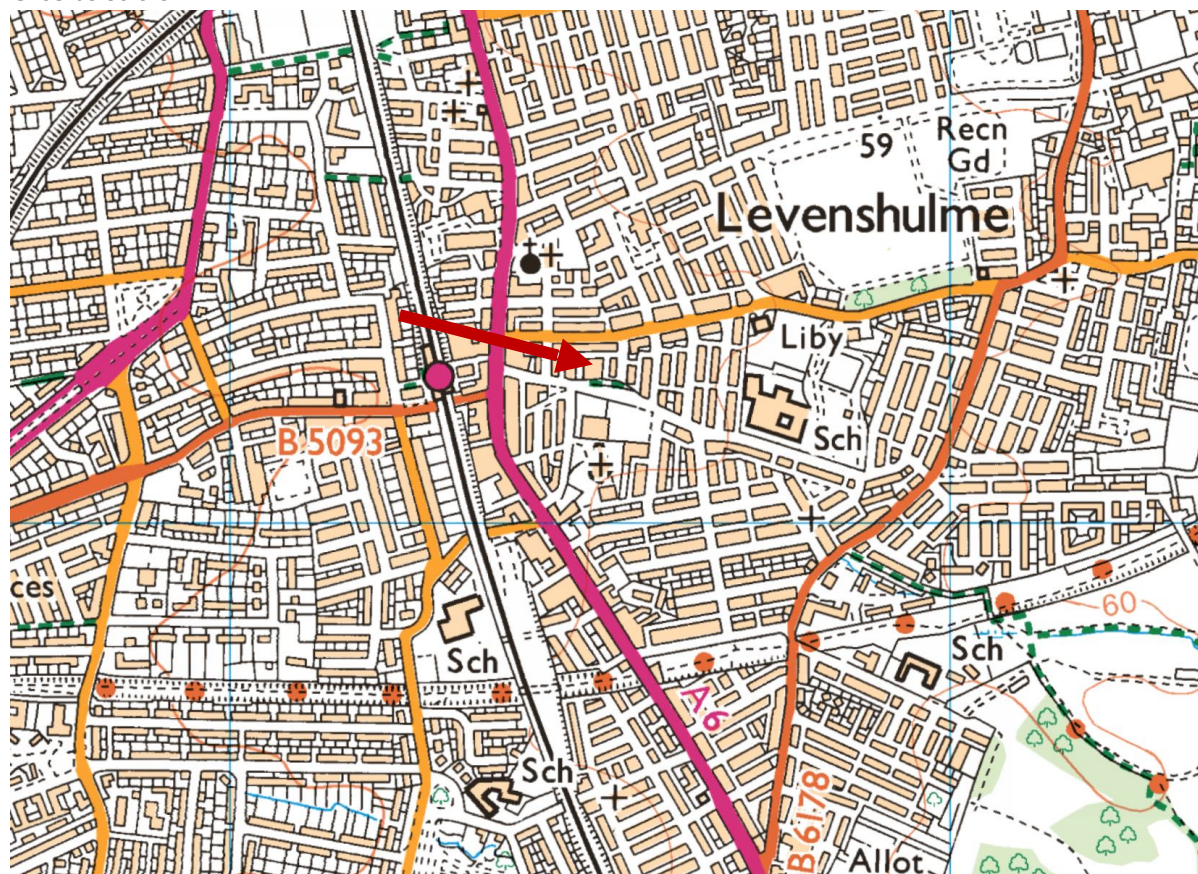
Habitat within 500m includes housing and busy roads, commercial properties, rail lines, small areas of open green-space, and occasional mature trees.

The site is located in an area of dense urban habitat, with no gardens, and few areas of open green space or trees. Additionally, the area is fragmented by busy well-lit roads, noise, traffic, and other human activity.

The site and habitats in the surrounding area provide low quality foraging, commuting, and roosting opportunities for bats.



1.6. Site location



1.6a – Chapel Street – site location.



1.6b – Building B3 - Chapel Street – aerial photograph.

2. Methods

2.1. Survey timings

A daytime building inspection and dusk emergence survey was completed on 1st August 2023.

2.2. Desk study

No formal desk study of the site was undertaken, prior to the preliminary roost assessment. A preliminary roost assessment was undertaken by Arbtech in May 2023. The report was reviewed to gather baseline data for the site.

The development has a small footprint, and impacts beyond the site boundary are unlikely. A site-specific investigation was considered more suitable.

2.3. Habitat assessment

The habitat on site and in the surrounding area was assessed using Ordinance Survey mapping, and aerial photography. Habitat features on site, and those in the surrounding area were assessed for their suitability for use by bats during the site visit.

2.4. Building inspection

A systematic search of the exterior of the building was made to identify potential or actual bat access points and roosting places, and to locate any evidence of bats such as live or dead specimens, bat droppings, urine splashes, fur-oil staining and or squeaking noises. Bat specimens and droppings are the most reliable type of evidence; the other types are not always the result of bat activity. Sometimes bats leave no visible sign of their presence on the outside of a building (even when they do wet weather can wash evidence away.)

The search included (where present) the ground beneath potential access points, windowsills, window panes, walls, behind peeling paintwork and lifted rendering, hanging tiles, weatherboarding, eaves, soffit boxes, fascia's, lead flashing, gaps under felt, under tiles / slates and in existing bats boxes. Gaps in brickwork and stonework were searched (where present). All evidence of use by bats, or features with the potential to be used by bats was recorded and photographed.

A systematic search of the inside of the building was undertaken to identify potential or actual bat access points and roosting places, and to locate evidence of bats. Bat specimens (live or dead) and droppings are the most reliable type of evidence. Other evidence can include urine splashes, fur-oil staining, feeding remains, squeaking noises, bat fly (Nycteribiid) pupal cases (Hutson 1984) or odour.

Areas inspected include;

Within rooms

- floors and surfaces
- behind wooden panelling
- in lintels above doors and windows
- behind window shutters and curtains
- behind pictures, posters, furniture, peeling paintwork, peeling wallpaper, lifted plaster and boarded up windows
- inside cupboards and in chimneys accessible from fireplaces.

Within roof spaces

- the tops of gable end and dividing walls
- the top of chimney breasts
- ridge and hip beams and other structural timbers
- mortise and tenon joints
- all beams
- the junction of roof timbers, especially where ridge and hip beams meet
- behind purlins
- between tiles and the roof lining (where accessible)
- under flat felt roofs.

The areas listed above were inspected (where present), any additional areas with potential for use were also inspected.

2.5. Presence-absence survey method

Ecologists visited the site at dusk, to listen to, and record bats, and look for bats emerging from, or returning to roosts, and compile information on species, numbers, access points, and locations. The surveys were informed by a building inspection, which identified potential roosting and access points. These points were covered by an observer during the surveys.

2.6. Equipment

The equipment listed below was available for use during the surveys and was used where required.

Clulite CB2 1,000,000 candlepower torch. Rigid Seesnake CA-300 digital endoscope with 0.9m cable reach with 17mm and 6mm imaging heads. Digital camera with 50x zoom. 8x25 close focussing binoculars, 4m ladders, bat handling gloves, DNA sampling tubes.

Elekon Batlogger M – full spectrum bat detector. The Elekon Batlogger M - records bat echolocation calls in high quality, along with temperature and GPS location data. The information is stored on an SD card, and later analysed in detail using Elekon Bat explorer software.

Elekon Batlogger A+ - passive full spectrum bat detector. The Elekon Batlogger A+ records bat echolocation calls in high quality, along with temperature data. The information is stored on an SD card, and later analysed in detail using Elekon Bat explorer software.

Wildlife Acoustics Echometer Touch II Pro - full spectrum bat detector fitted to smartphone or iPad. The device records bat echolocation calls in high quality, along with location data taken from the attached device (where available). The information is stored internally, and later analysed in detail using Wildlife Acoustics Kaleidoscope software.

Infra-red night vision video cameras and powerful infra-red lamps were used to observe the building. The cameras recorded for the full length of the survey, the videos were checked during and after the surveys were completed.

Motorola two-way radios, were used to relay information between surveyors.



3. Results - building inspection

3.1. External Inspection



3.1a - The front of the house, and driveway.

Building B3 is a brick storage shed, which was formerly part of a larger workshop to the south. The building has been sealed shut. It has a single pitched roof covered with slate roof tiles, with bitumen felt laid on top. The roof pitch faces east; gable ends face north and south. There are no chimneys, and no lead flashing is fitted. Timber fascia boards are fitted at the eaves on the east side.

Walls are solid brick with no insulating cavity, lintels are timber, sills are timber. Window frames are timber, and have been bricked up from the inside, glass is partially intact. The building is in poor condition, with a number of gaps between roofing materials and brickwork on the southern wall. Roof tiles are covered with a continuous mat of bitumen felt, with no gaps between tiles or felt.

Timber fascia boards are in poor condition, with minor gaps which could lead into the building. Walls are in reasonable condition, although there are a number of gaps and holes on the southern wall.

With the exception of gaps at the eaves, and gaps in brickwork on the southern wall, there are no features externally which are likely to be used by roosting bats.

3.2. Internal inspection

No internal inspection was possible as the building has been sealed shut.



3.3. Indications of use

No bat droppings or other indications of use by roosting bats were present externally during the building inspections.

3.4. Level of suitability

Taking into account the habitat surrounding the building, and the features present, the building has low suitability for use by roosting bats.

The survey carried out by Arbtech in May 2023 also concluded that the building had low suitability.

4. Results - presence-absence survey

4.1. Survey 1



4.1a – Surveyor locations and bat activity.

Date	Survey type	Sunrise / sunset	Start time	End time
01/08/23	Dusk	21:05	20:45	23:05

Surveyor / position	Equipment
1 - southwest of building	EM Touch II Pro & infrared camera (x2)
2 - northeast of building	Batlogger M



Temperature	Wind	Rain	Cloud	Other
18°C	Light breeze	Dry	Clear	N/A

Description

Warm dry evening following a warm day with some showers.

4.1b - Weather, surveyor locations, and equipment.

The only bat recorded during the survey was a common pipistrelle at 22:14, 69 minutes after sunset. The bat was heard passing to the south of the site.

The level of bat activity during the survey was low with no other passes recorded. A maximum of one bat was recorded in flight at any one time during the survey.

No bats were recorded emerging from the building during the survey.

The bat species below were recorded:

- Common pipistrelle - pipistrellus pipistrellus

Survey 1 - summary of activity

- No bats were recorded emerging from the building during the survey. A single pass by a common pipistrelle was recorded. No other bat activity was recorded during the survey.

Limitations

None. The survey was completed on a warm dry evening. Temperatures throughout the survey were suitable for bat activity and bats were recorded during the survey.



5. Evaluation

The building is set in an area which, in general, provides low quality habitat, for foraging, commuting and roosting bats.

The area in general, is fragmented by well-lit roads, traffic, noise, and other human activity. Fragmentation is likely to reduce the number of species present locally, and the number of individual bats.

The building has some external features which could be used by roosting bats, and which could allow access to the inside of the building. However, no indications of use were found during the building inspection, and no bats were seen to use these features during the presence-absence surveys.

All suitable features, were checked using a torch or endoscope prior to the start of the emergence survey, and observed throughout the survey. No bats, droppings, or other signs of use by roosting bats were recorded during the survey.

The building is set in an urban area with surrounded by low quality habitat for bats. It is subject to disturbance from light, noise, and other human activity, and although it has features which could be used by roosting bats, no indications of use were found, and no bats were recorded roosting in the building during the presence-absence survey.

5.1. Legal and planning context

All species of bats in the UK and their roosts are legally protected by UK and European legislation. The UK the legal protection is summarised as follows:

You will be committing a criminal offence if you:

1. Deliberately* capture, injure or kill a bat
2. Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
3. Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
4. Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
5. Intentionally or recklessly obstruct access to a bat roost even if bats are not present at the time

*In a court, 'deliberately' will probably be interpreted as someone who, although not intending to capture/injure or kill a bat, performed the relevant action, being sufficiently informed and aware of the consequence his/her action would most likely have.

If bats or bat roosts are present in the building, the proposed extension would likely result in an offence being committed.

5. Impact assessment

The development proposals are for the demolition of buildings on site, and the construction of residential properties.

The building inspections carried out by Arbtech in May 2023, and by Gritstone Ecology in August 2023 found no indications of use by roosting bats, and no bats were recorded roosting in the building during the presence-absence survey.



The Level of bat activity recorded during the surveys was low. The proposed work is unlikely to impact bats or bat roosts; and, once completed is unlikely to provide any increase in levels of disturbance for bats locally.

6. Required actions

No field signs of use by bats were found internally or externally during the building inspections, no bats were recorded roosting in the building during the dusk and dawn surveys, and no further survey or licensing work is required.



7. References

Department for Communities and Local Government (2012). National Planning Policy Framework.

Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines. (3rd ed.) The Bat Conservation Trust, London.

Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature.

Mitchell-Jones, A.J. & McLeish, A.P. (2004). The Bat Workers Manual. (3rd ed.) JNCC

