

CALLIARD'S MILL, SMITHY BRIDGE, OL15 8HW

Preliminary Bat Roost Assessment and Nocturnal Bat Report

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Report Control Sheet

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1. INTRODUCTION

1.1. SCOPE & PURPOSE

- 1.1.1. Collington Winter Environmental Ltd was commissioned by Solid Void to undertake a Preliminary Roost Assessment (PRA) at Calliard's Mill, Smithy Bridge, OL15 8HW. This report has been produced to inform planning permission for the site where the existing building would be split into four terraced houses.
- 1.1.2. The scope of works pertains to one building on site which is a former mill and is now utilised as a residential dwelling.
- 1.1.3. The author of this report is Michael Boucher, Graduate Ecologist at Collington Winter and has been overseen by Caitlin O'Connor, Senior Ecologist at Collington Winter who holds a Level Two Bat Survey Licence from Natural England (2025-80228-SCI-CL18). Caitlin is highly experienced managing schemes and has produced many ecological reports to inform planning applications.

1.2. LOCATION & SITE CONTEXT

- 1.2.1. The site is located to the northwest of Smithy Bridge. The northern boundary is defined by residential housing, while the western, eastern, and southern aspects are bordered by areas of agricultural land. The River Roch flows across the site from the northeast to the southwest, providing a linear feature for commuting bat species, as it is sporadically lined with trees and connects to more extensive areas of agricultural land (Figure 1.2.2). Within the wider landscape, land use comprises an approximate 50/50 mix of agricultural fields and residential development.
- 1.2.2. See Figure 1.2.1 for Site Location.

Figure 1.2.1 Building location.



Figure 1.2.2 Site Location and habitat connectivity.



- Red dot indicates site location.
- Yellow lines indicate linear features connecting areas of optimal habitat.
- Blue areas indicate areas of optimal habitat for roosting and foraging.

1.3. OBJECTIVES

1.3.1. The objectives of the PRA are as follows:

- Identify any areas of bat roosting potential within the building
- Assess the value of the building for roosting bats
- Search for signs of bats
- Provide recommendations on any further surveys or mitigation required for bats

2. METHODOLOGY

2.1. DESK STUDY

2.1.1. An initial desk-based assessment of the site was undertaken to collate baseline data. The desk study included:

- Review of aerial and OS maps for habitat information.
- Review of potential habitat links on and off site, to determine the potential zone of influence of the proposed development.
- Locations of granted European Protected Species Licences (EPSL) within 3 km of the site based on consultation with Magic.gov.uk.
- Consultation of local council strategic development plans and other planning considerations.

2.2. PRELIMINARY ROOST ASSESSMENT

2.2.1. A Preliminary Bat Roost Assessment (PRA) of the site was undertaken by Michael Boucher and Andrew Taylor, who holds a Level One Bat Survey Licence from Natural England (2025-80349-SCI-CL17), on the 8th of August 2025 at 12pm, prior to the first nocturnal bat survey. The weather was dry and clear, temperature 16 degrees Celsius.

2.2.2. The survey was undertaken following guidance set out in Collins (2023). This includes undertaking a detailed internal and external inspection of any features to compile information on potential and actual bat entry/ exit points, roosting locations and evidence of bats.

2.2.3. The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 4th edition (Collins 2023).

2.2.4. Potential flightpaths and foraging habitats were assessed as per categories listed in Table 4.1 below (Collins 2023).

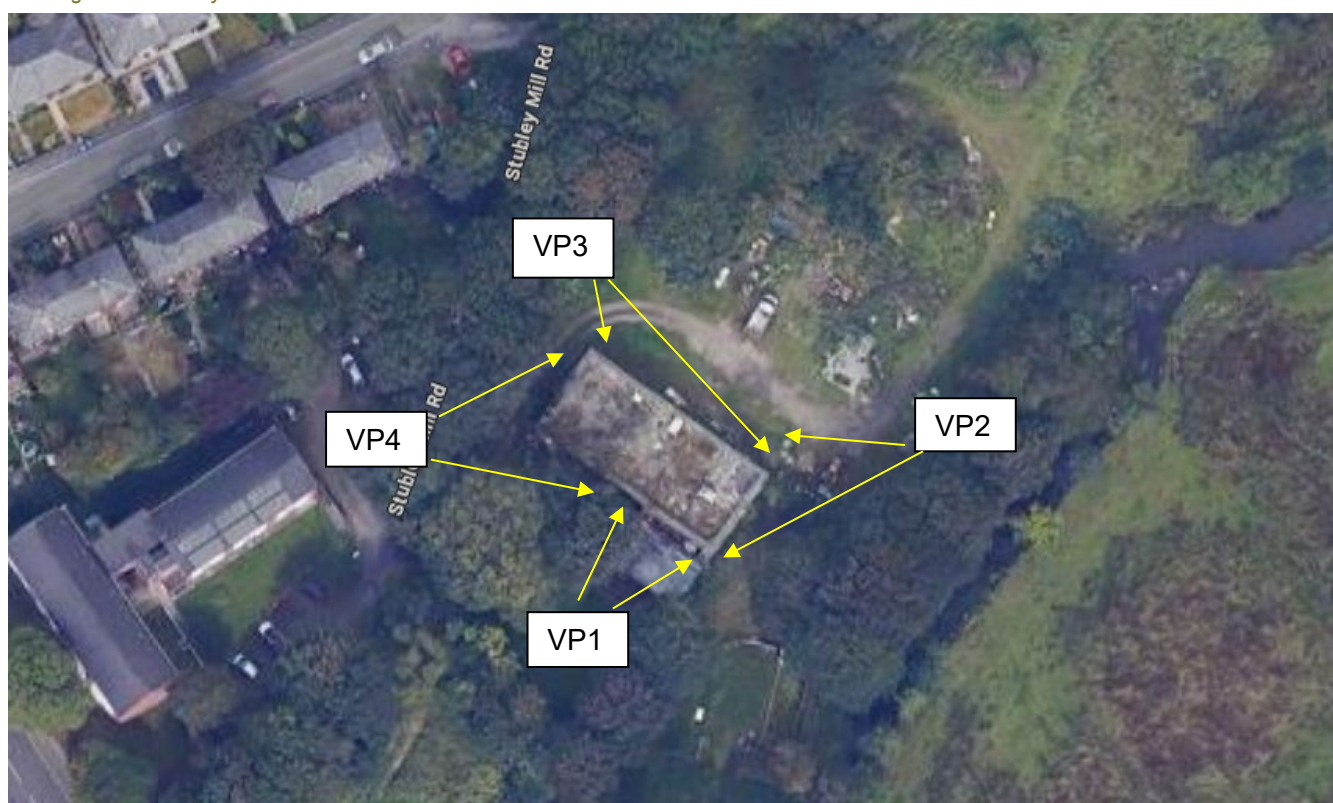
Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible ^a	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ^c).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^b and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

2.3. NOCTURNAL BAT SURVEYS

- 2.3.1. Based upon the evidence collected during the PRA it was suggested that the building held **low** bat roosting potential and therefore **one** further nocturnal bat survey was recommended to be undertaken between May and August during the optimal survey season. This survey will provide data to fully inform planning permissions and any subsequent European Protected Species licensing.
- 2.3.2. The nocturnal bat survey was undertaken on the 26th August 2025 by two qualified surveyors using two NightFox Whisker infra-red cameras and echo meters.
- 2.3.3. The location of the cameras and surveyors is detailed below, (refer to Figures 2.1). The yellow arrows show the direction and fields of view of the NVA cameras.

Figure 4.1 Surveyor Locations



- 2.3.4. The surveys were undertaken in line with guidance as set out in Collins (2023, as amended). Qualified and trained surveyors used Echo Meter Touch Pro bat detectors to identify bat species throughout the survey. The camera footage was reviewed by competent ecologists within 7 days of the survey using relevant media players.
- 2.3.5. The survey analysis utilised additional tracking software provided by Wildlife Imaging Systems, to determine exact emergence points and activity mapping across the site.
- 2.3.6. Please refer to Table 4.2.1 below for details of each survey and associated surveyors.

Table 4.2.1 Surveyor Locations

Date	Sunset/ Sunrise Time	Start	Finish	Surveyors	Weather Conditions
26/08/2025	20:14	19:59	21:44	Rhiannon Hobbs Olivia Leversedge	Temp at start: 16 Celsius Cloud Cover: 1/8 Oktas Wind: 0 max (Beaufort scale) Rain: 0

2.4. SURVEY LIMITATIONS

- 2.4.1. Parts of the exterior of the building were clad with ivy which may have concealed potential roosting features. However, the exposed parts of the building showed features only suitable for low numbers or individual bats. Furthermore, as the building had no voids present this was not deemed a significant limitation as the extent of any features obscured by the ivy would have been minimal. To mitigate this limitation, infrared cameras were set up to catch any emergences around these obscured areas.
- 2.4.2. Due to the nature of bats being a transient species, this report offers only a snapshot in time. It is therefore only valid for a maximum of 12 months from date of issue, Collington Winter Environmental Ltd cannot guarantee the accuracy of the information contained within it should this report be used outside of this period.

3. SURVEY RESULTS

3.1. DESK STUDY

3.1.1. The following statutory sites were located within 3 km of the site boundary.

- Rochdale Canal SSSI, SAC 330 m to the south.
- South Pennine Moors SSSI, SAC 2.4 km to the east.

3.1.2. The site falls into the zone of influence and is considered to have optimal connectivity to one of these sites due to the proximity.

- SSSI, SAC Rochdale Canal 330 m to the south.

3.1.3. There were four records of European protected species licenses (EPSL) located within 3 km of the site based on consultation with Magic.gov.uk (Table 3.1.1)

Table 3.1.1 Granted European protected species licenses within 3km.

Case reference of granted application	Species on the licence*	Distance from site (KM)	Direction from Site	Licence Start Date	Licence End Date	Does the Licence				
						impact on a breeding site	allow damage of breeding site	allow damage of a resting place	allow destruction of breeding site	allow destruction of a resting place
EPSM2009-525	C-PIP;S-PIP	0.73	Northwest	26/05/2009	31/08/2009	N	N	N	N	Y
2015-8632-EPS-MIT	C-PIP	0.75	Northwest	27/03/2015	01/10/2020	N	N	N	N	Y
2016-19740-EPS-MIT-1	C-PIP	1.65	West	01/04/2016	31/03/2021	N	N	N	N	Y
2016-19740-EPS-MIT-2	C-PIP	1.65	West	20/06/2016	01/04/2021	N	N	N	N	Y

Species on the licence*	Species name	Latin
C-PIP	Common Pipistrelle bat	<i>(Pipistrellus pipistrellus)</i>
S-PIP	Soprano Pipistrelle bat	<i>(Pipistrellus pygmaeus)</i>

3.2. PRELIMINARY ROOST ASSESSMENT

General Description

3.2.1. The building comprises a former mill building which is arranged over two floors, with a garage occupying the lower floor and living areas above. The lower floor is partially set into the ground, with a ramp on the north-west side providing access up to the rear garden. The building has a flat roof with a concrete eave that projects slightly beyond the roof edge. On the southern elevation, a combined greenhouse and balcony extend from the main structure; the lower section is built from glass panels, while the balcony above is enclosed with wooden fencing. The remaining elevations of the building are constructed primarily from brick and concrete.

3.2.2. Photographs of the different aspects of the building can be found in the Appendix.

3.2.3. Each potential roosting feature (PRF) is described below and assigned a target note (TN), photographs of the features can be found in the appendix with locations plotted on a target note map.

Southwest Aspect

3.2.4. On the upper floor of the southwestern aspect, six windows run from left to right. The second window from the right has missing brick between the exterior brickwork and the window frame, particularly in the bottom right corner, which creates a PRF for crevice dwelling bat species such as common pipistrelle (TN1).

3.2.5. The concrete eave is perpendicular to the brickwork and does not currently present any obvious PRFs. Areas of mortar loss are present within the central section of the brickwork, though these are not deep enough to constitute

PRFs and are considered superficial.

- 3.2.6. Over the far-left window concrete has been used to repair damaged bricks, the concrete has become worn and cracked creating lifts but not sufficiently to form a PRF.
- 3.2.7. On the far left of the southwest aspect is an area of extensive ivy growth, which has caused crumbling sealant underneath the concrete eave creating PRFs for crevice dwelling bat species (TN4). The ivy may also conceal further PRFs however given the limited extent of the other PRFs on the building it is thought these will be limited and suitable for only small numbers or individual crevice dwelling bats.
- 3.2.8. On the lower floor, three windows run from left to right with damage on the bottom left two windows associated with poor sealing. This leads upwards and exposes internal insulation however the feature was not deemed large enough to hold more than low numbers of bat.
- 3.2.9. A crack in the eave is causing a split in the overhang which may provide a crevice PRF (TN2).
- 3.2.10. Overall, the ivy cover on the left-hand side is restricting visibility and making identification of further roosting features difficult. A few small PRFs were identified across the remainder of the aspect which would be suitable for small numbers of crevice dwelling bat species such as common pipistrelle.

Northwestern Aspect

- 3.2.11. This elevation is extensively covered in ivy, limiting visibility. A crack was seen in the eave on the right-hand side of the building however it could not be determined how deep it was therefore this was classed as a PRF as it may provide suitable roosting conditions for crevice dwelling species (TN5).
- 3.2.12. Overall, these features present potential roosting opportunities and the restricted visibility due to the ivy may mean more are concealed beneath.

Northeastern Aspect

- 3.2.13. A large patch of dead ivy is pulling away from the building, creating a potential crevice feature between the brickwork and dead root. Several splits were noted within the overhang and daylight was visible through the split to the east but not through the split on the western side, suggesting variable depth (TN6).
- 3.2.14. Overall, the building itself does not create significant PRFs however the dead ivy provides a crevice feature for potential roosting.

Southeastern Aspect

- 3.2.15. The southeastern aspect exhibits gaps within the overhang and ivy covers the left-hand side of the aspect; however, no definitive PRFs were identified (TN7).

Internal Assessment

- 3.2.16. The roof was found to be flat with no associated voids. It was well sealed throughout, with plasterboard in place, and no PRFs were identified internally. Small areas of insulation were visible but offered no suitable roosting opportunities.
- 3.2.17. The lower floor is utilised as a garage and workshop, subject to regular human disturbance and flooded with artificial as well as natural light. Gaps were noted between the shutters and adjoining wall, as well as within the brickwork on the northwest and eastern aspects. Despite these features allowing internal access to the building, no evidence of bat presence, such as droppings or feeding remains, were recorded.

3.3. SUMMARY OF PRELIMINARY ROOST ASSESSMENT

- 3.3.1. The survey of the building identified no actual evidence of live bats, droppings, urine staining or feeding remains.
- 3.3.2. The external inspection did, however, identify numerous features which offer bat roosting potential for crevice dwelling species. Therefore, the building was rated as having LOW bat roosting potential.

4 NOCTURNAL BAT SURVEYS

4.1. SURVEY RESULTS

DUSK EMERGENCE SURVEY (26/08/2025)

- 4.1.1. Bat activity was recorded consistently throughout the survey; however, only common pipistrelle (*Pipistrellus pipistrellus*) species were observed foraging in proximity of the vantage points.
- 4.1.2. At approximately 20:25 (around 10 minutes after sunset), a common pipistrelle was observed foraging along the tree line to the northwest of the site. The individual arrived from the wider landscape, and no emergence was recorded from the building by either the surveyors or the infrared cameras. By 20:30 (15 minutes after sunset), a peak count of two common pipistrelles foraging actively along the tree line and around the building was noted. Although common pipistrelles typically emerge 15–30 minutes after sunset, survey results confirmed that none of the bats recorded were associated with emergence from the building. Foraging activity subsequently increased, with a constant presence of four to five individuals until around 21:00. After this time, activity continued intermittently.
- 4.1.3. No emergences were recorded across any of the VPs, footage from the infrared cameras was reviewed and areas around the ivy were specifically rereviewed to ensure no roosts had been concealed.
- 4.1.4. The dark point camera screenshots from the survey showing the field of view of each camera can be found in the appendix.

4.2. ASSESSMENT

- 4.2.1. The survey recorded regular foraging and commuting activity by common pipistrelles, with initial detections beginning at 20:12 and peak activity of four to five individuals sustained until around 21:00, before declining to intermittent levels. Activity was concentrated along the tree line to the northwest of the site and around the building itself.
- 4.2.2. **No emergences from the building were observed during the survey period.**

5 RECOMMENDATIONS AND MITIGATION

5.1. LIGHTING MITIGATION

- 5.1.1. All bats have some degree of intolerance to artificial lighting and could be impacted by the proposed development, should no mitigation for lighting be considered, however, given the information collected from the survey effort, the species assemblage and activity levels were deemed very low, therefore best practice guidelines should be followed over a detailed design, specifically maintaining dark areas around the treelines where possible.
- 5.1.2. Any proposed new lighting should follow the guidance outlined in the Institute for Lighting Engineers document "Guidance for the Reduction of Obtrusive Lighting" (2005) and BCT's "Bats and Artificial Lighting at Night" (2023).
- 5.1.3. An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered within the design stage of the scheme, to minimise impacts of lighting. The recommendations are as follows:
- Keep site lighting to minimum levels.
 - Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
 - Lighting should feature peak wavelengths greater than 550nm.
 - Light placement should be downward facing to prevent excess horizontal or vertical light spill.
 - The use of integrated fittings such as cowls, shields, louvres and hoods, that effectively contain light spill from unintended areas.
 - The use of hard landscaping features to block light and create dark corridors.
 - Avoid illuminating habitats of value.
 - Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use.
 - Column heights of lighting can be considered to minimise light spill.

5.2. SUMMARY

- 5.2.1. No bat emergences were observed from the building during the survey; therefore, over the course of the survey no roosts were identified. Resultingly, mitigation is only required to minimise potential lighting impacts on the surrounding tree lines, which provide foraging and commuting habitats.

6 BIBLIOGRAPHY

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7 APPENDIX

PRA Photographs

Description	Photograph	
TN1		
TN2		
TN3		
TN4		

TN5	
TN6	
TN7	

Target Note Map

Dark point screenshots from the survey