BAT ACTIVITY SURVEY RESULTS REPORT

DWELLING AT BACK LANE
GRANGE MOOR
WAKEFIELD
WF4 4EJ

JULY 2026

Bat Activity Survey Results Report

Dwelling at Back Lane
Grange Moor
Wakefield
WF4 4EJ

A report for

Benjamin Hellawell
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AHJ architects

A report

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1. INTRODUCTION

1.1 BACKGROUND AND REASON FOR SURVEY

PENNINE ecological have been commissioned by Nigel Lewis (owner) to undertake bat presence/absence surveys of the dwelling at Back Lane, Wakefield. The survey is required following a Preliminary Roost Assessment undertaken by Pennine Ecological, which concluded the detached property on site to be of low suitability to support a bat roost(s) Pennine Ecological, (2026).

It should be noted that following the first survey, a commo pipistrelle bat was recorded emerging. For continuity with the PEA, the building reamined as low suitability. A second dusk emergence survey was conducted and only a single bat emerged. The surveys were conducted in the peak period of the bat survey season and it was deemed disproportionate to conduct a third survey as this was unlikley to significnatly alter the roost type identfied.

Therefore, in accordance with current Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Collins, J. Bat Conservation Trust (2023)*, two presence/absence surveys have been undertaken (see Figure 1.1 below).

Figure 1.1: Extract from in Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Collins, J. Bat Conservation Trust (2023)

Table 7.2. Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).

Low roost suitability or PRF-I	Moderate roost suitability	High roost suitability or PRF-M
One survey visit. One dusk emergence survey[a] (structures). No further surveys required (trees).	Two separate dusk emergence survey visits[b].	Three separate dusk emergence survey visits[b].

a Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see para 5.2.44). In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

b Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended that surveys are spaced at least three weeks apart, preferably more.

The survey was undertaken to determine whether the proposals to redevlop the site would result in adverse impacts to bats which may potentially be roosting within the building.

The results, conclusions and recommendations following the surveys, including any indicative mitigation to inform an application to Natural England for a European protected species mitigation licence (EPSML), where necessary, will be supplied within this report.

In accordance with Biodiversity Net Gain: Good practice principles for development (CIEEM et al, 2019), measures have been recommended proportionate to anticipated impacts to ensure that the proposed development results in a biodiversity net gain.

Information pertaining to bat legislation and planning policy is included in Appendix A.

1.2 SITE LOCATION AND CONTEXT

The building subject to survey is a dwelling along Back Lane, Grange Moor, Wakefield, WF4 4EJ.

The Ordnance Survey central grid reference for the site is SE 21986 16037.

An aerial image of the building subject to survey is shown below.

Figure 1.2: Aerial image of dwelling at Back Lane.

2. METHODOLOGY

2.1 SURVEY METHODS

Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Collins, J. Bat Conservation Trust (2023) states:-

Expertise and professional judgement:

- The guidelines do not aim to override or replace knowledge and experience.
- It is accepted that departures from the guidelines (e.g., either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate.
- However, in such scenarios an ecologist should provide evidence of (a) their expertise in making this judgement and (b) the ecological rationale behind the judgement.
- Equally, it would be inappropriate for someone with no knowledge or experience to read these guidelines and expect to be able to design, carry out, interpret the results of and report on professional surveys, simply by following the guidelines without the ability to apply any professional judgement.
- Training and experience is necessary to carry out all of the surveys described in these guidelines and interpret the survey results appropriately.

The survey methods have been determined using the experience of the surveyors and knowledge of the specific nature of the site.

Two dusk emergence surveys were undertaken on the 24th June and 14th July 2026 This is considered to be within the main active season for bats (April to September inclusive).

The number of surveys and surveyors was adequate relative to the roost potential that was identified for the site i.e., moderate potential and requiring two surveys by two surveyors to monitor potential roost features (PRF's) on the property at any one time.

Surveys were undertaken in good weather conditions and there were no visual constraints. Surveyors observed the roost features for at least 15 minutes prior to sunset and 1 hour 30 minutes after sunset.

The surveyor was aided with bat detection equipment (EMTouch) that would enable surveyors to locate and record high frequency bat calls that are emitted by bats. The surveyor was also aided with an infrared night vision camera (Nightfox Whisker Binoculars)

to assist visually observing the features once light levels dropped. The recordings were analysed following the survey to verify field observations.

The surveys were completed by the following people:

- Patrick Leatham BSc (Hons) MCIEEM – Pennine Ecological ecologist with over 13 years' experience of undertaking bat surveys (preliminary roost assessments, bat activity surveys, and bat transect surveys). Accredited agent on Stuart Macpherson's bat licence (2021-10079-CL18-BAT). Lead surveyor for the surveys.

- Luke Pilling – Pennine Ecological ecologist with four years' survey experience undertaking bat emergence surveys and preliminary roost assessments.

- Victoria Pilling - Seasonal ecologist with one years' survey experience undertaking bat emergence surveys.

2.2 SURVEY LIMITATIONS

The surveys were undertaken in suitable weather conditions and within the recommended BCT survey timeframes.

3. RESULTS

3.1 BAT ACTIVITY SURVEY RESULTS

Survey details including dates, times and weather conditions are provided in Table 3.1 and the results of the dusk surveys provided in Table 3.2.

NVA Screenshots from each surveyor location taken at the surveys darkest points and emergence locations are provided in Figure 3.1, 3.2, and Figure 3.3.

Common flight paths and bat activity can be found in Figures 3.4 and 3.5.

Table 3.1: Bat Activity Survey Details

Time of Survey	Sunset/Sunrise Time	Date	Weather Conditions
21:26 – 23:11	21:41	24/06/2026	Cloud (oktas): 0 Wind (Beaufort): 1 Rainfall: no rain Start temp: 24°C End temp: 23°C
21:14 – 22:59	21:29	14/07/2026	Cloud (oktas): 6 Wind (Beaufort): 2 Rainfall: no rain Start temp: 19°C End temp: 17°C

Table 3.2: Bat Activity Survey Results

Survey Results	Time	Species	Activity
Dusk survey 1 24/06/2026	**21:26 – 23:11**	**Summary: 1no. bat emerged. Moderate activity.**	
	22:09	**Common pipistrelle**	**1no. bat emerged from the west side of the south facing elevation from under the eaves.**
	22:16 – 22:38	Common pipistrelle	3no. bats frequently foraging along the hedgerows within the south of the site garden.
	22:48	Common pipistrelle	1no. bat touching the eaves on the southwest corner repeatedly before flying off south.
	22:55	Common pipistrelle	Heard not seen.
Dusk survey 2 14/07/2026	**21:14 – 22:59**	**Summary: 1no. bat emerged. Moderate activity.**	
	22:05	**Common pipistrelle**	**1no. bat emerged from the south side of the west facing elevation from under the eaves.**
	22:07 – 22:48	Common pipistrelle	2no. bats frequently using the garden south of the site to forage.

Survey Results	Time	Species	Activity
	22:19	Common pipistrelle	1no. bat touching the eaves on the southwest corner repeatedly before flying off south.
	22:29	Noctule	Commuting over site, flying from west to east.

Figure 3.1: NVA Screenshots at darkest Point – 24/06/2026

Figure 3.2: NVA Screenshots at darkest Point – 14/07/2026

Figure 3.3:Image of Emergence Locations

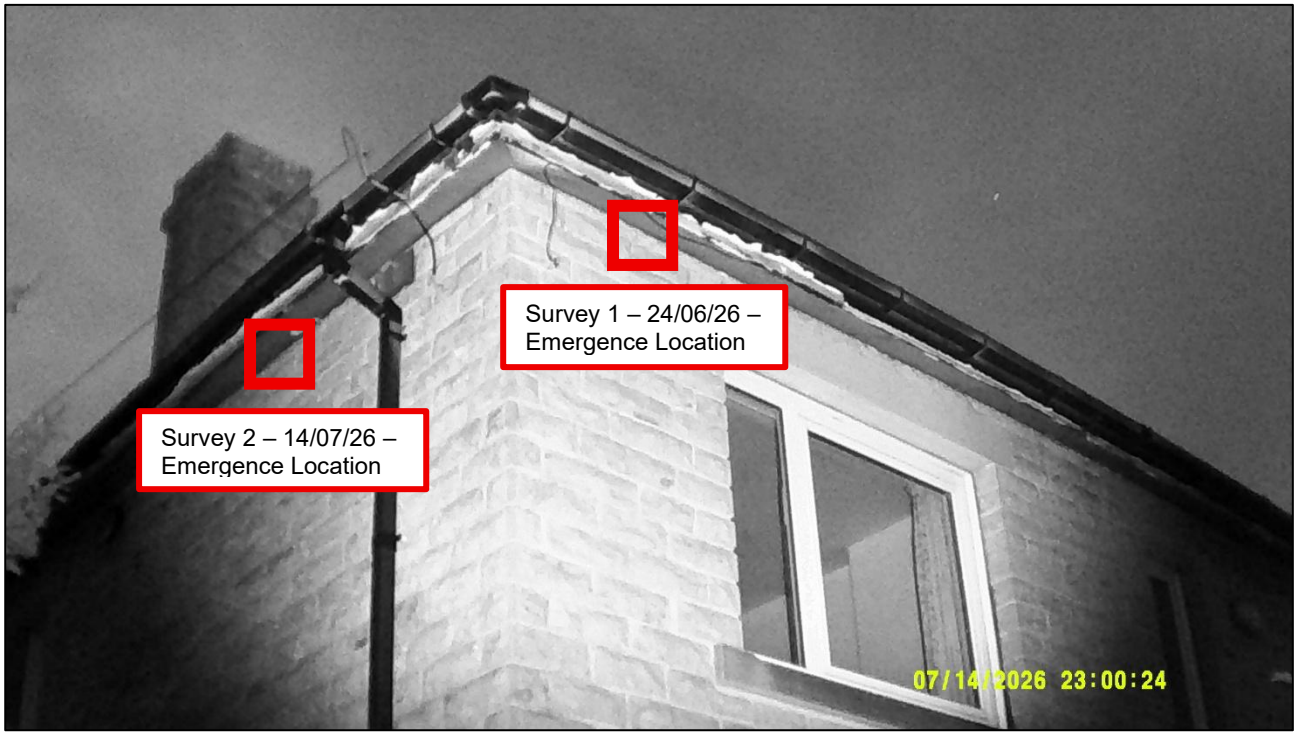
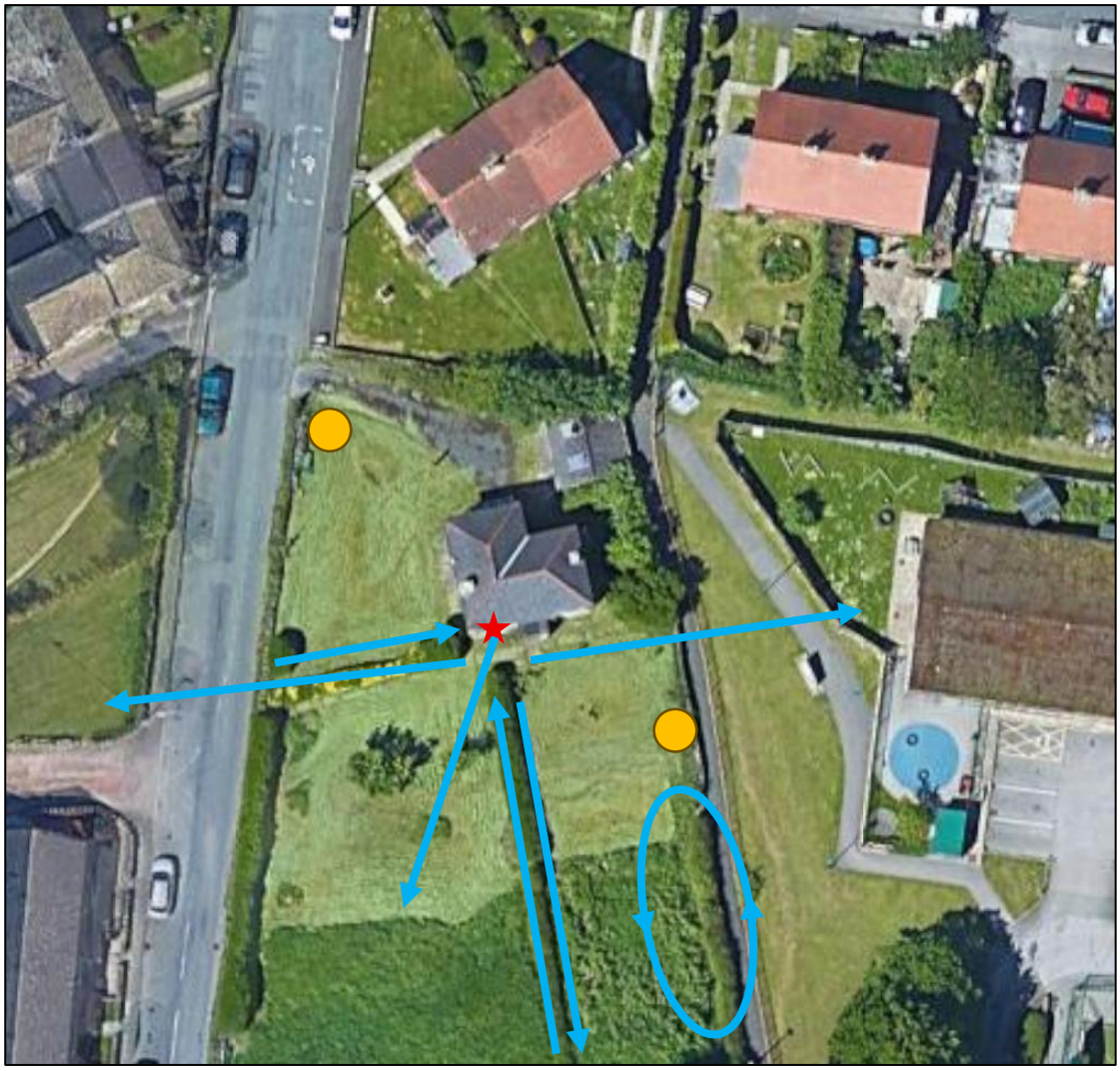
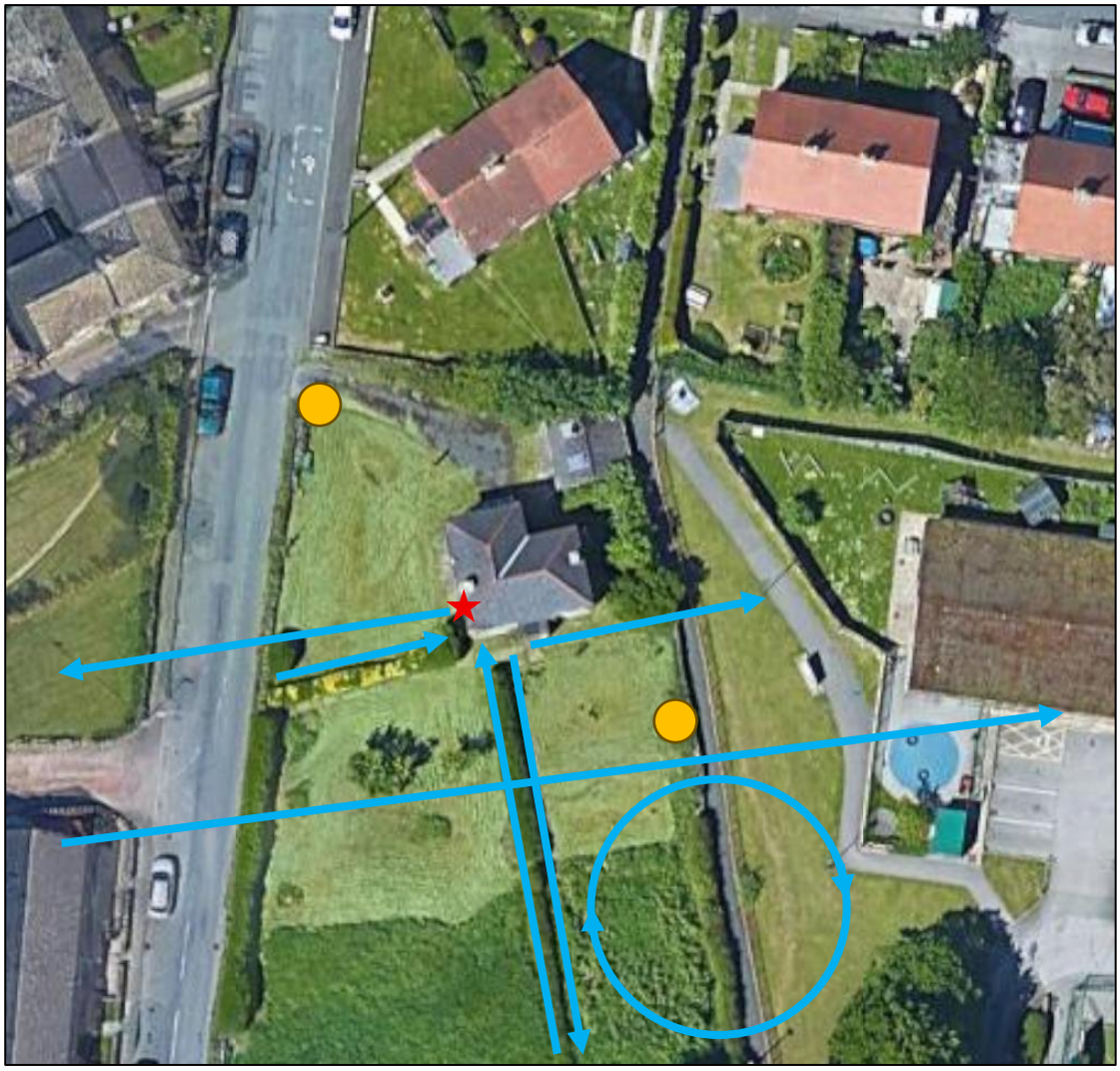


Figure 3.4: Bat Activity – 12/06/2026



Surveyor Locations	
Common Flight Paths	
Emergence Location	

Figure 3.5: Bat Activity – 06/07/2026



Surveyor Locations	
Common Flight Paths	
Emergence Location	

4. CONCLUSION & RECOMMENDATIONS

4.1 BAT SURVEY CONCLUSION

From the surveys undertaken, it can be concluded that the dwelling at Back Lane, Grange Moor is being used by at least 1no. common pipistrelle bats for roosting purposes. Based upon the evidence, the dwelling is host to a 'Day Roost' for common pipistrelle.

The BCT good practice guidelines describe a 'Day roost' as: "a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer."

The proposals will involve demolition of the building and as such the 'Day roost' is anticipated to be destroyed.

Appropriate mitigation will be required to ensure compliance with current legal legislation and conservation policy. A European Protected Species Mitigation Licence will be required to legally destroy a place that is actively used for breeding, resting, or sheltering by bats.

However, before a licence can be applied for, all planning issues must be resolved. In order that the Local Planning Authority LPA can implement its obligations under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579), appropriate and proportionate mitigation will need to accompany the planning application which will demonstrate that the "favourable conservation" of the species concerned can be maintained (see below).

From the evidence gained during the surveys, the site is considered to be of 'low' conservation significance for the common pipistrelle species[1]. Therefore, the proposed mitigation is proportionate to this assessment. If at any time the assessment of the roost is revised to a higher level, the mitigation will be revised accordingly.

4.2 RECOMMENDATIONS / MITIGATION

The following procedures and mitigation recommendations are designed to allow the LPA, in association with their ecological advisers, to determine a Planning Application where a European Protected Species has been identified and will be affected by the work for which the Planning Application seeks consent.

In addition, Local Planning Authorities in accordance with the obligations placed upon them by way of their duties under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579) have to take into consideration the presence of a

[1] Significance level based on information provided in *English Nature: Bat Mitigation Guidelines, 2004*. Bats and their current status

European Protected Species before determination of an application where it/they have been identified.

The LPA need to consider the mitigation in relation to the potential success of a Natural England licence application and/or if in their opinion the mitigation is considered as being appropriate, or if it is over and above what is required; if they determine that the mitigation is appropriate then a Planning Condition should be attached requiring the roost provision to be implemented.

If the LPA consider that the mitigation is over what is necessary but require “enhancement” as part of their Local Biodiversity/Net-Gain Planning Policies this should be included in the terms of Consent. The acting bat ecologist deems the proposed new roost creation as appropriate and not over and above what is required.

Notwithstanding that Planning Consent is granted or equally if the work is undertaken outside of the planning system, whereby projects that do not require planning consent may affect bats or their roost, including disturbance, it does not absolve the applicant, site owner, developer or any other party involved with the work from ensuring that an application is made for a Natural England development licence, to legally undertake work that will affect bat(s) or their roost(s).

If work is undertaken without a licence and bat(s) or their roost(s) is/are affected, then a breach of current wildlife legislation will occur for which penalties are severe.

4.2.1 Summary of Mitigation

The mitigation proposals outlined in this report are seen to be the most productive way forward that will retain long term roosting opportunities for bats.

There will be localised loss of scrub, hedgerows, and trees within the property at Back Lanes garden. However there is not thought to be any significant changes to the adjacent habitats beyond the site boundary and thus impacts to foraging or commuting habitat is anticipated to be minor.

To ensure that bats are not left without a roost while the work takes place, 1no. Schwegler 2F bat box or Schwegler 2FN bat box (or suitable equivalents) will be mounted on a post which must be in-situ before any works commence. It is recommended that the post is set up at a similar height and aspect as the eaves. The box will act as receptors should bats have to be captured and relocated during the work schedule.

The receptor bat box will act as receiver boxes if bats have to be captured by hand and relocated to them by the ecologist during the work schedule; they will be retained permanently post-development to provide permanent roost opportunities for bats.

4.2.2 Assigned Ecological Clerk of Works

At the pre-commencement stage, a suitably qualified ecologist will provide an induction 'toolbox talk' on possible bat presence and present/discuss document features taken from the licence i.e., Licence, Method Statement, Mitigation Figures and Work Schedule to be kept on site for the duration of the work.

Prior to any work being undertaken the presence/absence of bats will be established (as far as is possible) by undertaking detailed investigation of the areas at which bats have been observed using the building; typically, in the southwest corner of the building along the eaves. The ecologist will supervise careful dismantling of all places that will be removed as part of the proposed work which have been identified as offering roost access or roost potential at the ecologist discretion. In addition, wherever opportunities for bats exist in other parts of the building the supervised dismantling will extend to these areas with strategies for safely removing bat(s), as long as a maternity colony is considered not to have taken up occupancy of the building.

All dismantling of roost features will be undertaken during favourable weather conditions.

Additional lighting which will be installed must be directed away from any bat roost access points, flight paths and foraging areas.

Mitigation proposed is subject to the approval of the Natural England EPS team; all proposed roost provisions outlined hereafter will be dedicated for bats and permanent.

(i) Work undertaken by the Ecologist

<u>Capture / Exclusion</u>

Once an EPSML licence is in place, the contractor will provide a safe means of access to allow the ecologist to investigate the confirmed roost area for bat presence.

In addition, wherever opportunities for bats exist in other parts of the buildings and structures the supervised dismantling will extend to these areas at the discretion of the ecologist in attendance. A bat licenced ecologist may need to oversee the works until they are satisfied that there is a low likelihood of bats being present within.

In the event of bat(s) being present, it/they will be removed, placed in a secure box with soft tissue and immediately transferred into the receptor bat boxes that will have previously been erected on a suitable feature. Once it has been established by the ecologist that bat(s) are absent the works will continue to completion.

In the unlikely event that bats are found outside of supervision time, then as legal requirement and conditions of the granted licence work will immediately cease and the ecologist contacted for further advice; contractors must not touch, handle or in any way cause bats to move.

(ii) Work undertaken by the Contractor

A number of viable ingress points and roosting opportunities were identified within the dwelling at Back Lane, notably including gaps along the eaves along the south and east facing elevation, specifically on the corner where the bats were identified to emerge from, which will be lost during the demolition; new roost provision is therefore recommended to be built into the design of the proposed works (to be finalised subject to the provision of development plans during the EPSML application process):

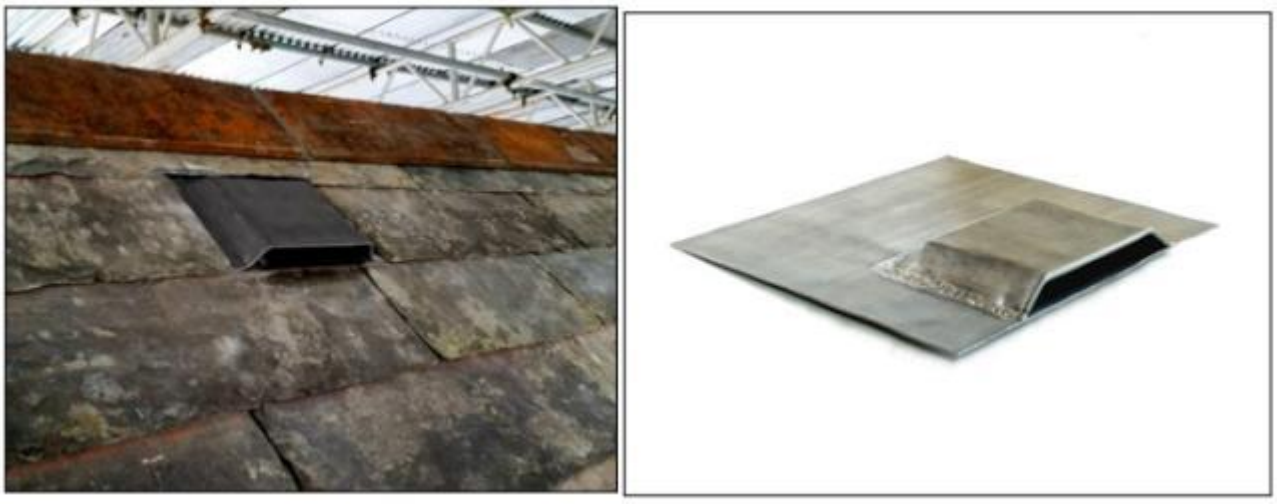
- Multiple bat access points will be integrated into the new buildings;

- As part of this roost creation process it is imperative that traditional bitumen 1F roofing felt will be the chosen underfelt/roof lining as opposed to any breathable roofing membrane (BRM). Modern breathable roofing membranes (BRM) entrap bats through wear and tear in the synthetic polymers used to protect the breathable membrane causing bats harm, injury, and death. Where bitumen 1F felt is not the chosen roof lining for the building, an area of the felt may be instated in a 1m2 area around the access points; however, this must be separated from the rest of the roof space using timber roofing batons to prevent bats moving out of this area.

<u>Bat Access Slates</u>

Lead access slates create an integrated access point within stone or slate tiles. These slates should be positioned where bats have been seen emerging from the roof (Figure 4.1).

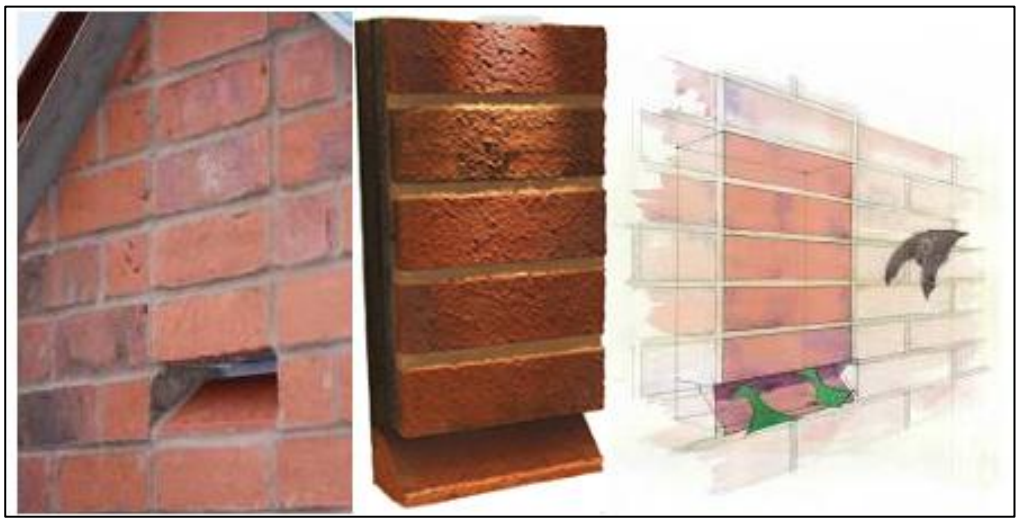
Figure 4.1: Image showing bat access slates



<u>Integrated Bat Boxes</u>

The Habibat Bat Box (Figure 4.2) is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of a building. The bat bricks should be placed with the entrance holes at the top, at wall plate level, and on the south-western section of any new buildings.

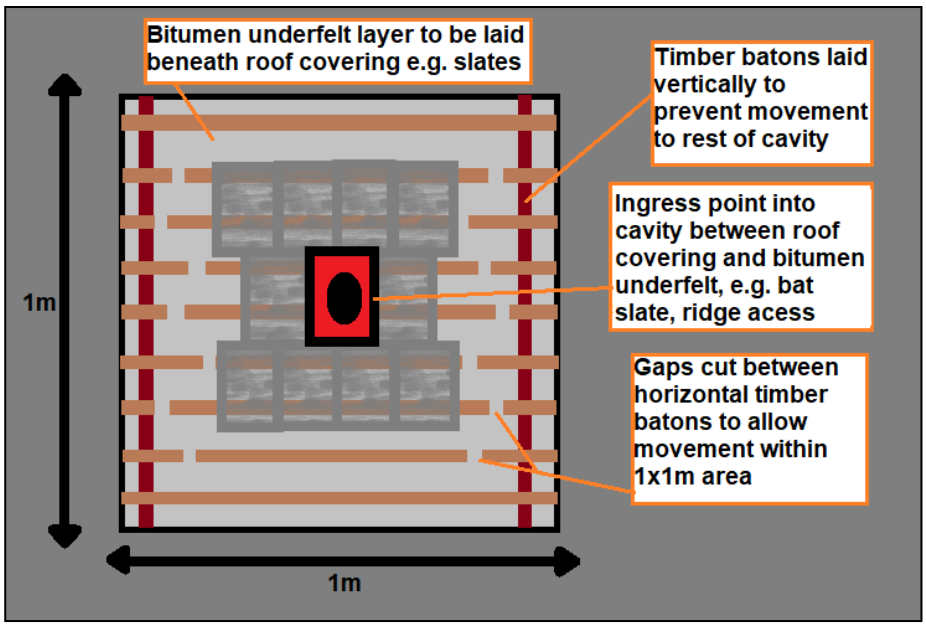
Figure 4.2: Image showing Integrated bat boxes



Traditional Bitumen 1F Roofing Felt

It is imperative that traditional bitumen 1F roofing felt will be used as the chosen local underfelt/roof lining, as opposed to any breathable roofing membrane (BRM) (Figure 8). Modern BRM entrap bats through wear and tear in the synthetic polymers used to protect the breathable membrane causing bats harm, injury, and death. Where bitumen 1F felt is not the chosen roof lining for the building, it is essential that there is no access to areas lined with BRM from the ingress point (i.e. integrated bat box). An area of the felt may be instated in a 1m^2 area around the ingress point; however, this must be separated from the rest of the roof space using timber roofing batons to prevent bats moving out of this area.

Figure 4.3: Layout of felt around an ingress point



4.2.3 Further Design Recommendations

(i) External Lighting

In all cases illumination of peripheral boundary areas should be avoided. Where lighting is required, this must be low level, low intensity and directed downwards away from boundaries. In particular, direct lighting of the northern and eastern boundaries should be avoided. The following principles will apply;

- Where and if lighting is required, this will be directed internally within the site avoiding spillage towards boundary habitats.

- The use of low powered sodium lights or similar will be used and these will be fitted with cowls / covers that prevent lateral light spillage towards boundary habitats.

- Wherever possible and only if required low level (1-1.5m high) bollard lighting will be used.

- If required lights will be fitted with timer controls that minimise the duration of lighting.

Lighting requirements will follow guidance provided by the Bat Conservation Trust; links are provided below.

- Bat Conservation Trust's Artificial Lighting Guidance. Webpage link https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting

- Bat Conservation Trust and Institute of Lighting Professionals Guidance Note 08/23: Bats and Artificial Lighting in the UK. Webpage link https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/

REFERENCES

Bat Conservation Trust and Institute of Lighting Professionals Guidance Note 08/23: *Bats and Artificial Lighting in the UK.* Webpage link https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/

CIEEM et al, 2019. *Biodiversity Net Gain: Good practice principles for development*. Available from: www.cieem.net/data/files/Publications/Biodiversity_Net_Gain_Principles.pdf

Collins, J. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).* The Bat Conservation Trust, London.

Pennine Ecological (2026). *Land at Back Lane, Grange Moor - Preliminary Roost Assessment.*

Google Earth. Accessed various dates. Latest access 31/07/2026

Appendix A: Bat Legislation and Policy

Legislation

All British bats and their roosts[2] are afforded protection under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579). When dealing with cases where a European Protected Species (EPS) (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions.

The relevant sections of the Wildlife and Countryside Act 1981 (as amended) make it an offence to:

- Intentionally or recklessly damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;
- Intentionally or recklessly disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any structure or place which any such animal uses for shelter or protection.

The relevant sections of the Conservation of Habitats and Species Regulations 2019 make it an offence to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species;
- Deliberately disturb wild animals of any such species; and,
- Damage or destroy a breeding site or resting place of such an animal.

Where it is likely that the scheme would result in contravention of this legislation, a bat mitigation licence would be required to allow the works to proceed. As part of this process, the application must meet 'three tests' for licencing under the Conservation of Habitats and Species Regulations 2019. Planning guidance and case law also require the Local Planning Authority (LPA) to address these three tests when deciding whether to grant planning permission. The three tests are as follows:

- Regulation 55 (2) (e) states that a derogation license can only be issued for preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;
- Regulation 55 (9) (a): that there is no satisfactory alternative; and

[2] The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "a breeding site or resting place of such an animal" and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation

- Regulation 55 (9) (b): that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Policy

Section 15, Paragraph 186 of the National Policy Planning Framework (as revised in December 2023) states:

186. When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Bats in West Yorkshire

Up to ten bat species have been recorded in West Yorkshire, most of which use built structures (e.g., residential properties, bridges, and culverts) as well as features in trees (e.g., knot holes, woodpecker holes, peeling bark and torn limbs). The most frequently encountered species are the common and soprano pipistrelle bats; their abundant status in West Yorkshire is reflected throughout the UK.