Providing *ecology* support for *everyone*

Mr N Martucci
23 Smithy Row
Hurst Green
Lancashire
BB7 9QA

5th September 2024

Dear Nicholas

Re: Proposed development at 23 Smithy Row, Hurst Green BB7 9QA
Grid Reference SD 68547 38301

Thank you for your request for a bat survey at the above site. I understand that the proposed development is for a single storey extension to the north (rear) elevation of the existing dwelling house.

1.0 Background and Qualifications

The surveys were carried out by Pat Waring and Janette Gazzard.

Pat is a licensed bat worker (Class 2 licence), registered consultant of the Bat Mitigation Class Licence, a Chartered Environmentalist and a full member of the Chartered Institute of Ecology and Environmental Management, with a Bachelor of Science degree in Biology.

Pat has been working as an ecological consultant for over 26 years, including over 19 years as Director of Ecology Services UK Limited. This work includes provision of expert advice and guidance to bodies such as Statutory Nature Conservation Organisations, Local Planning Authorities and Lancashire Police Authority, as well as the delivery of professional training courses about bats at a national level.

Pat has recognised and extensive knowledge of bat ecology relating to buildings and trees, including the requirements and conditions necessary for bat roosting. He also has recognised skills relating to bat surveys and assessments.

Janette is a full member of Chartered Institute of Ecology and Environmental Management, with a Bachelor of Science degree in Environmental Management

Janette has over 19 years' experience working in ecology and nature conservation, including roles as a Senior Ecologist for a large multidisciplinary company and as a lead adviser for Natural England throughout the North West of England. She has a range of demonstrable skills relating to professional bat work, including building and tree surveys, assessments and judgements of value in relation to bats, as well as selection and monitoring of mitigation features.

Pat and Janette meet the requirements for knowledge, skills and practical experience as outlined in the CIEEM technical guidance (Chartered Institute for Ecology and Environmental Management (2013) *Competencies for Species Survey: Bats*. CIEEM, Winchester, Hants).

1.1 Advisory Note

The information in this letter represents the professional opinion of an ecological consultancy and does not constitute professional legal advice. You may wish to seek professional legal interpretation of the wildlife legislation associated with this area of work.

The information, opinion and advice that Ecology Services UK Ltd has prepared are true, and have been prepared in accordance with the CIEEM Code of Professional Conduct. Ecology Services UK Ltd confirms that the opinions expressed are our true professional bone fide opinions.

Ecology surveys are time-limited; as a rule, survey findings can generally be relied on for the season in which surveys took place. However, mobile species such as bats and birds may increase or decrease in numbers and change behaviours over time. Statutory agencies will often accept survey results for 12-18 months, but this varies around the country.

Ecology Services UK Ltd personnel make a professional judgement as to how long the results of our surveys will remain current. Advice and recommendations, as regards currency and its impacts on decision making are included in relevant sections below.

2.0 Methodology

An initial daytime inspection was carried out on 5th March 2024 and three bat emergence surveys were carried out on 19th July, 9th August and 30th August 2024.

The general approach to surveys, assessment and advice complies with national best Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6

Daytime inspection

Internal and external observations were made from ground level, as well as from telescopic ladders, to examine potential roost features. An endoscope, although available, was not required on this occasion. A Coast HP 10R 1000 lumens torch and close-focussing Zeiss Victory FL 8x42 binoculars were also used as aids to visibility.

Emergence surveys

- At the start and end of the surveys, a range of environmental readings, including temperature, humidity and wind speed, were taken using a Kestrel Weather Meter.

- The surveys started 30 minutes prior to sunset and continued until 90 minutes after sunset.

- Bat detectors used during surveys were as follows:
  - 1x Anabat Scout – Real time full spectrum
  - 1 x Elekon Batlogger – Real time full spectrum

- Bat echolocation was recorded onto the internal devices of both detectors during the surveys.

- Two Canon XF100 camcorders (set on 0 lux Nightshot), with two IRlight6 infra-red illuminators and Nightfox XB5 infra-red torches, were focussed on likely or known roost locations during all evening surveys, to assist with observations due to low light levels.

- Pulsar Accolade 2 LRF XP50 Pro Thermal Binoculars and a Pulsar Axion 2 XG35 Thermal Monocular were focussed on potential roost features throughout the surveys to assist with observations.

It is recognised that limiting the surveys to visits during March, July and August does not take account of bat activity on the site through the whole of the active season (April to October) or at other times of the year.

3.0 Results of the Surveys

Daytime surveys

23 Smithy Row is the end property in a row of four cottages located to the north of the village of Hurst Green. The building is occupied and comprises two storeys with external stone walls and dual pitched slate covered roof and a small stone outbuilding (former piggery) to the east.

The dwelling house walls are well mortared with no visible gaps and all windows and doors are well sealed. There are gaps associated with slate roof coverings, particularly at the rear (north elevation) as well as gaps along the roof edges on the north and south elevations. The east gable is well mortared but there are gaps associated with roof coverings along the verge.

The roof void comprises the original roof timbers with cross and ridge beams as well as some more recent timber supports. The interior walls are brick and stone and there is a dense layer of rock wool on the floor. The roof is underlined with bitumastic hessian roof liner which remains intact, although occasional small gaps due to liner sagging were noted.

A small number of bat droppings were found below a gap in the roof liner, close to the roof hatch and on top of the rock wool.

The former piggery building is a single storey outbuilding constructed of stone walls and asbestos roof. There are deep wall cavities associated the external and internal walls and these have potential for use by bats throughout the year, but particularly during the winter months as winter roost features.

Habitats and surroundings

The immediate surroundings at 23 Smithy Row comprise a well-maintained garden with mature border planting and shrubs. There is a mature apple tree to the north and semi mature trees along the north west boundary.

There are sport pitches and playing fields to the immediate north and south with open farm fields, hedgerows and large blocks of broadleaved and mixed woodland associated with neighbouring Stonyhurst College. The immediate, close and wider surroundings offer significant resources suitable for use by commuting, foraging and roosting bats, as well as providing potential shelter and foraging resources for use by local bird populations.

No artificial light spillage onto the building was observed during the survey. There are sport pitches to the immediate north where potential light spillage may occur if evening fixtures are taking place. However, this factor is not regarded as a potential constraint to bat activity within the immediate or wider landscape around the survey buildings.

Non-native invasive plant species Japanese rose and Montbretia are present within the garden planting. Montbretia is present at the base of the dwelling house along the north elevation and Montbretia and Japanese Rose are present in close proximity to the former piggery building which forms part of the proposed development site.

Emergence surveys

The weather during the emergence surveys was as follows:

Date	Temperature ^{0}C (start/end)	Humidity % (start/end)	Cloud cover % (start/end)	Rain	Wind mph (start/end)
19/7/2024	24.7/22.3	68.7/70.8	40/40	None	0.0/1.5
9/8/2024	17.2/15.7	83.4/76.8	70/20	None	5.1/1.3
30/8/2024	18.4/12.5	63.5/77.3	0/0	None	0.0/0.0

Table 1 – weather during surveys

First emergence survey	Second emergence survey	Third emergence survey
1 soprano pipistrelle bat emerged from north elevation roof edge 1 soprano pipistrelle bat emerged from east gable roof edge	2 soprano pipistrelle bats emerged from north elevation roof edge	1 soprano pipistrelle bat emerged from north elevation roof edge

Table 2 – emergence survey results

Sporadic common and soprano pipistrelle bat activity was recorded during all three emergence surveys from approximately 30 minutes after sunset. There were short periods of foraging in the garden and close to the building on all three surveys. behaviour

A noctule flew over the survey area during the first and third emergence survey (19th July and 30th August 2024).

External lighting is not a limiting factor, with only a limited amount of light spillage from windows and below roof edges observed during the surveys.

Nesting birds

Blackbird and robin were observed in garden vegetation during the surveys but no active bird nests were confirmed.

Bird droppings were found below a fascia board on the north elevation, indicating a previous nest most likely on the wall top.

There is high potential for nesting birds to utilise the gaps associated with roof edges on the north and south elevation, the piggery building and garden vegetation during the nesting season (February to September).

4.0 Conclusions

A small number of bat droppings were found inside the roof void on top of rock wool insulation; these confirm that a bat roost has been present prior to the 2024 survey.

A maximum of 2 soprano pipistrelle bats emerged from the north elevation roof edge during the emergence surveys. This confirms that a bat roost was present during the 2024 surveys.

The evidence from the surveys suggests that bats are most likely using the wall tops and/or roof coverings for roosting. Roof edge gaps can provide access into spaces between roof coverings, as well as potential access into the roof void. All of these features provide dark, sheltered warm spaces with little disturbance, and these conditions are favoured by bats for summer day roost sites.

There is no evidence to suggest that the roost is a maternity or hibernation roost.

Surveys were undertaken under appropriate environmental conditions.

As the proposed development will involve disturbance to bats and permanent destruction of their roost, a licence will be necessary in order for the work to be undertaken lawfully. The proposed works, bat species and numbers, and the number of bat roosts meet the criteria for a Bat Mitigation Class Licence.

5.0 Advice and Recommendations

5.1 Bats

Protected Species	Impacts, Issues and Rationale	Action Required
Bats	There are predicted impacts (disturbance, damage and destruction) to roosting bats at 23 Smithy Row. It is advised that a soprano pipistrelle bat roost has been confirmed at 23 Smithy Row. It is advised that the proposed development, bat species, bat numbers and number of bat roosts meet the criteria for a **Bat Mitigation Class Licence (BMCL).** This licence will need to be in place prior to the commencement of the works in order to proceed lawfully. All bat species are fully protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).	**Advice (Licence):** Engage a Registered Ecological Consultant to register the site with Natural England a minimum of three weeks (i.e. 15 working days) and no more than a maximum of twelve weeks prior to undertaking any licensable works **Prior to any works.** Please note the following: o The licence will cover a period of time that is decided by the developer. All licensable work (removal of bat roosting features associated with the building) must be completed within this timeframe, otherwise work will have to stop until a new licence is available. It is very important to try to complete all works without recourse to a further licence application. o All licensable work must be supervised by a licensed and registered ecologist; this includes erection of 1 bat box prior to works commencing, delivery of a toolbox talk prior to works commencing, any scaffolding erection around the roost area (within 5 metres of the walls and roof) and stripping of the potential bat roost features. This is a condition of the licence. **Advice (mitigation and enhancement):** Retain and/or install new bat roosting features at 23 Smithy Row by:

Protected species	Impacts, Issues and Rationale	Action Required
Bats continued		○ retaining suitable gaps along roof edges and behind fascia boards as potential roost features/access points. ○ **I**nstallation of external bat box on north elevation. Any features retained or installed must be accessible and free from obstruction including artificial lighting at all times. This will maintain and enhance opportunities for local bat populations **During and post development. Recommendation(mitigation):** Any new lighting associated within the proposed development should be designed to reduce light spill upwards and where possible there should be no light spill onto the bat roosting features and any vegetation in close proximity. This will help to avoid any impacts on bat activity, including foraging and commuting. **During and Post development.**

Table 3. Advice regarding bats

4.2 Nesting birds

Protected species	Impacts, Issues and Rationale	Action Required
Nesting birds	There are potential impacts (disturbance, damage and destruction) to nesting birds. It is advised that there is high potential for bird species to be nesting either within the building, former piggery and/or vegetation during the bird nesting season (February to September). Under the Wildlife and Countryside Act 1981 (as amended), wild birds are protected from being killed, injured or captured, while their nests and eggs are protected from being damaged, destroyed or taken. There is no provision under the Wildlife and Countryside Act 1981 (as amended) for licensing the disturbance of nesting birds, or the destruction of nests which are in use, for the purpose of development. If enforcement action were taken, the developer would need to rely on the 'incidental result of an otherwise lawful operation' defence if it were not possible to avoid an offence being committed. This defence can only be tested in court and it is therefore important to ensure all possible mechanisms for	**Advice (mitigation):** It is advised that the most appropriate way to address the risk to nesting birds is: Avoid disturbance to the building during the nesting season. Or If works cannot be delayed, the proposed work area should be carefully checked, immediately prior to works commencing. Checks should be carried out by a suitably experienced ecologist. If the risk of nesting birds remains, then monitoring for nesting bird activity should continue for the duration of works. **Prior to any work commencing (checks) and throughout works in nesting season (monitoring).** **Advice (mitigation):** If works are to be undertaken during the nesting season, all people working at the proposed development site should attend a toolbox talk delivered by an appropriately experienced person, to be made aware of the likelihood of encountering nesting birds and how to identify them, the legal protection of nesting birds and their own responsibilities as regards implementation of precautionary measures. **Prior to any work commencing.** **Advice (mitigation):** If birds are found to be nesting within or in close proximity to the work area during proposed works, it will be necessary to stop and establish an exclusion area. The extent of the exclusion area, which should be determined by a suitably experienced ecologist, will depend on the bird species and the nature of the proposed works. **At all times.**

Table 4. Advice regarding nesting birds

Non-native invasive species	Impacts, Issues and Rationale	Action Required
Japanese rose and Montbretia	There are <u>potential</u> impacts as a result of the presence of Japanese rose and Montbretia within the garden planting and immediately adjacent to the proposed development site. The proposed development will involve an amount of disturbance which could result in the spread of species, listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Section 14(2) of the Wildlife and Countryside Act 1981(as amended) prohibits 'planting' or 'causing to grow' in the wild of any plant listed in Part 2 of Schedule 9. Environmental Protection (Duty of Care) Regulations 1991. Any waste containing non-native invasive plant species is classified as controlled waste.	**Advice (mitigation):** The best approach to control the spread of non-native species within small development sites is to avoid any disturbance of the plants and/or ground around them. **At all times** **Advice (mitigation):** If the risk of disturbance to Japanese rose and/or Montbretia cannot be avoided, working methods including control, removal and safe disposal of the plant species must be adopted. For this site, hand pulling of individual plants may be sufficient. If larger areas are likely to be disturbed, specialist advice may be required in order to prevent further spread. **Prior to commencement of any work**. **Advice (mitigation):** All people working at the proposed development site should be made aware of the legal issues associated with non-native invasive species and their own responsibilities as regards implementation of precautionary measures. **Prior to any work commencing** **Advice (mitigation):** All arisings from non-native plant species left in situ (i.e. plants that have been retained during development) as part of normal gardening practises (e.g. cut, pruned and/or removed) should be disposed of responsibly. This advice also applies to infected soils, which must not be exported off site or moved within the site, to prevent spread of non-native invasive species into unaffected areas. Any cut or excavated material should be disposed of, burnt or buried. **At all times**

Table 5. Advice regarding non-native invasive species

Compliance with the actions outlined in the Tables 3, 4 and 5 will help to avoid committing offences in relation to protected species (bats and nesting birds) and non-native invasive plant species.

Please note that surveys in support of a BMCL application must be from the current or most recent active season. For the 23 Smithy Row you can only use the bat survey results from 2024 until May 2025, after which further surveys will be required.

If you require any further ecological advice or guidance in relation to the proposed works, please do not hesitate to contact me.

Yours sincerely

Janette Gazzard MCIEEM
Senior Ecologist
Ecology Services UK Ltd
Tel: 07842 694 618

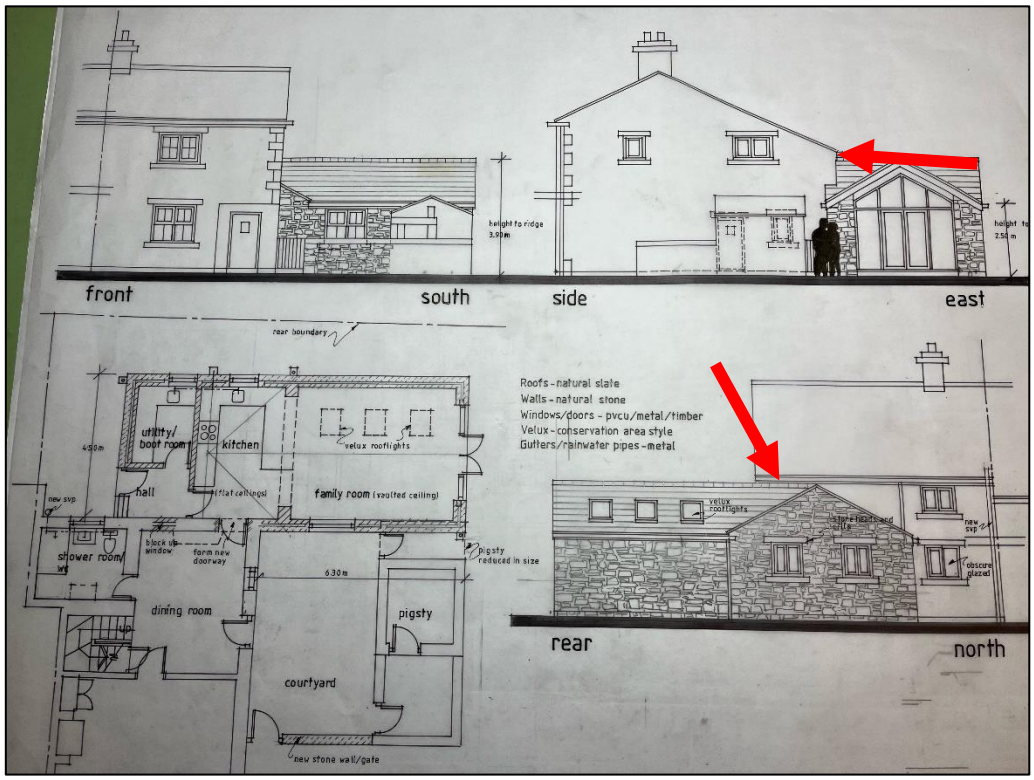


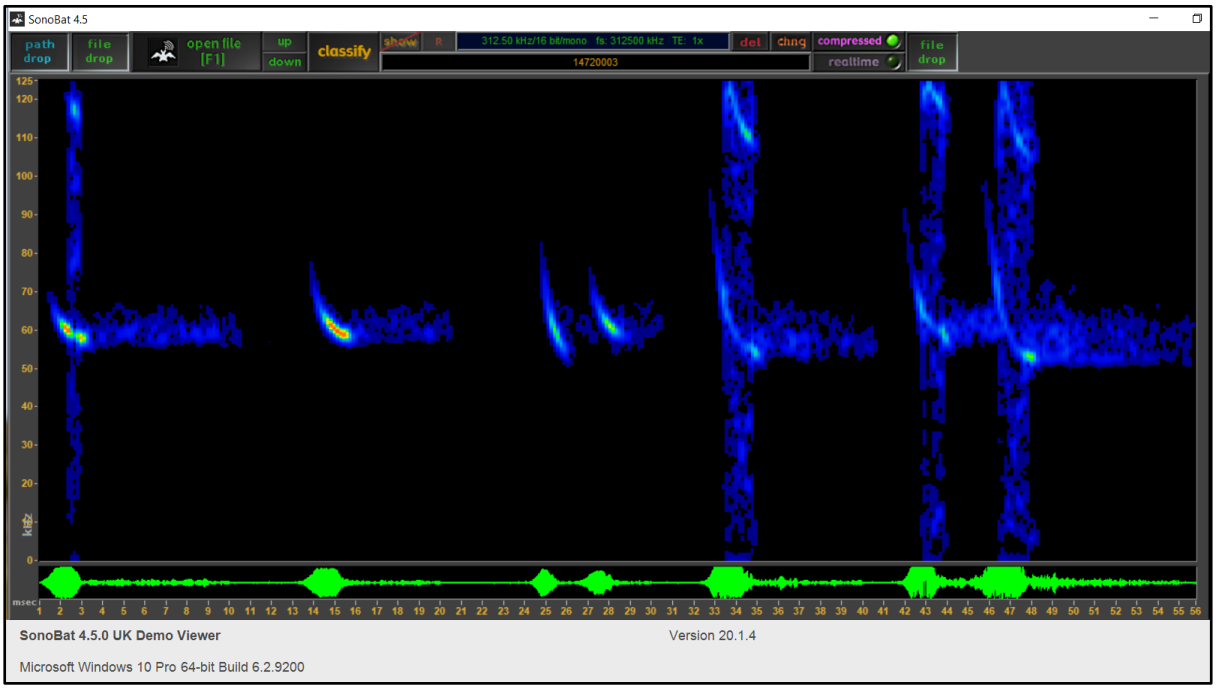
Image showing proposed plans. Note new extension ties into/close to the rear roof edge which is an area of bat roosting and access (red arrows)

Image showing north elevation and east gable at 23 Smithy Row

Image of rear roof and roof edge. Note gaps between slates (yellow dashed arrow) and timber fascia (white arrow). These features provide high potential bat roosting and bat access points on this building.

Image of roof void showing timber roof supports and bitumastic hessian roof liner. The roof void at 23 Smithy Row provides suitable conditions (draught free, dark, undisturbed space) for use by roosting bats.

Image showing bat dropping found in roof void on 5th March 2024



Sonogram of Soprano pipistrelle bat recorded on BatloggerM on 19th July 2024 after emergence from roost

Infrared image of East gable and south elevation of 23 Smithy Row. Image taken at darkest point of the survey during the second emergence survey on 9th August 2024

Image showing survey location and camera set up on the north elevation during evening surveys. Yellow arrow indicates location of bat emergence

Close up image of north elevation showing location of Montbretia (white arrow) and proposed location of new bat box (yellow arrow)

Close up image of Montbretia in flower, August 2024

Close up image of Japanese rose, August 2024