EPS METHOD STATEMENT

European Protected Species – (Bats)

Newton Hall, Newton-in-Bowland, Clitheroe, BB7 3DY

April 2017

DOCUMENT 1

METHOD STATEMENT - BACKGROUND

A Introduction

A1 Site: Location: Newton Hall, Newton, Clitheroe, Lancashire BB7 3DY **(NGR: SD 696 504)**

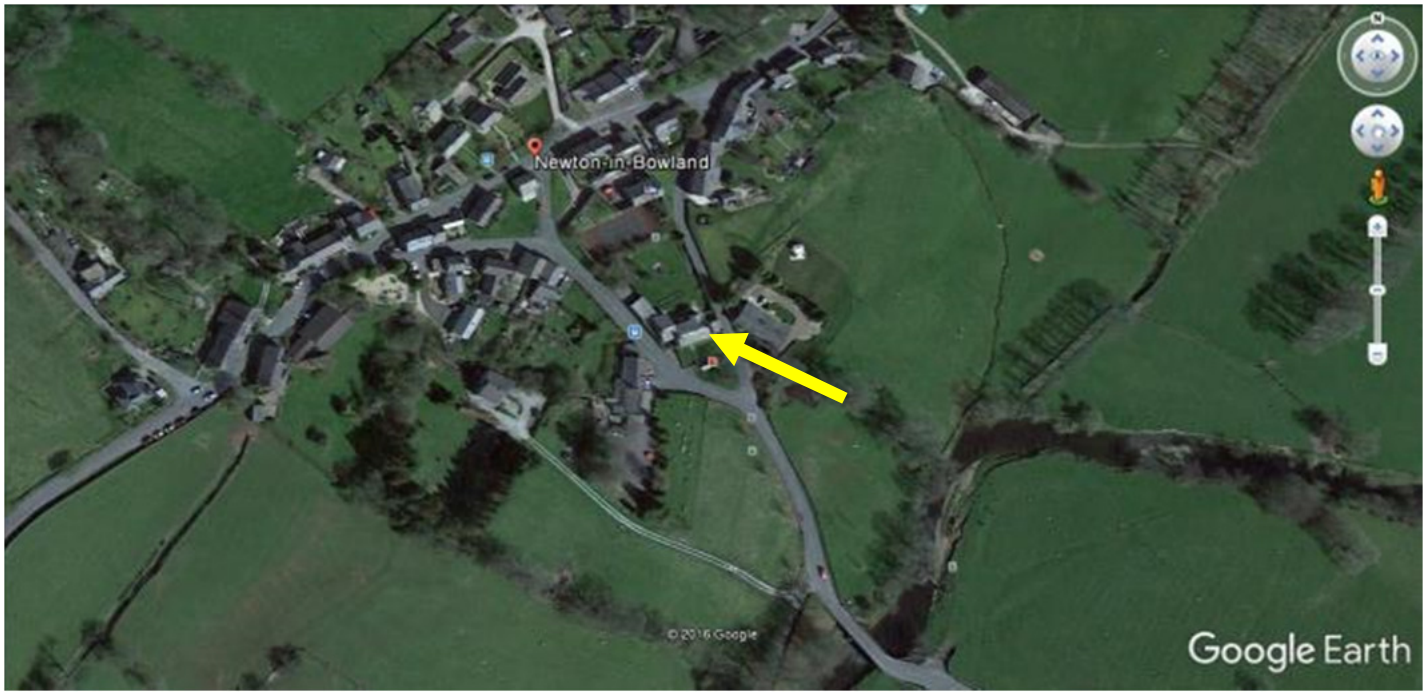


Figure 1: Location of Newton Hall (Google earth) .

A2 Buildings:

Figure 2: Newton Hall front elevation

Figure 3: Newton Hall rear elevation

Figure 4: Garage at Newton Hall

Figure 5: Newton Hall main roof void

Figure 6: Newton Hall main roof void

Figure 7: Newton Hall main roof void

A3 Roosting bats:

An initial scoping survey of the property was undertaken on 15 September 2016. Although no roosting bats were visible during the inspection, there were clear signs of bat roost activity in two areas of the building that will be affected by the proposed alterations.

(1) Main roof void - a small accumulation of relatively fresh bat droppings on the floor of the roof void indicate occasional / sporadic roosting and perching activity associated with the ridge board. It was noted that several parts of the ridge and rafter junctions showed fur greasing marks and several areas were free from spider webbing, indications that perching bats had been present. Scattered bat droppings were also noted throughout the void.

(2) A number of small relatively fresh bat droppings were present on the floor and on the upper wall in the extreme NW corner of the garage; externally there was a corresponding gap in the tongue-and groove-soffit boards above the garage door.

A3.1 DNA sampling

A faecal DNA sample tested at the Waterford Laboratory (21/11/16) confirmed the presence of whiskered bat *(Myotis mystacinus)* within the main roof void. Samples from the garage were not tested but assumed to be those of a pipistrelle species.

A4 Problem:

(1) The proposed re-roofing of the property and conversion of the main roof void is likely to result in the destruction of a bat roost unless provision can made to ensure that whiskered bats are able to continue roosting in part of the roof void after the works are completed.

(2) Demolition of the garage is likely to result in the loss of a small satellite roost of crevice-dwelling bats.

A5 Solution:

Ribble Valley Borough Council (RVBC) requires a detailed appraisal of the impact of the proposed development on all protected species that are present or likely to be present at the property.

The preferred option in all cases is the avoidance of disturbance to bats and their roosts.

The relatively low / moderate level of roosting activity within the buildings requires that reasonable avoidance measures (RAM's) are adopted to minimise the risk of disturbance, injury or death of protected species.

The surveyor recommends in this particular case, the adoption of a workable method statement rather than applying for an EPS mitigation licence. Additionally, the proposed building works should include appropriate compensation measures to allow whiskered bats to continue entering the main roof in addition to providing new roosting opportunities for crevice-dwelling species such as pipistrelles thought to be roosting in part of the garage roof.

The existence of a detailed method statement helps to establish a defence against possible prosecution in the unlikely event of bats being disturbed during the development. The method statement contains specific mitigation measures that are designed to ensure that protected are not significantly disturbed, injured or killed as a result of the proposed building and demolition works.

Natural England clearly states that *"failure to follow the method statement may result in a breach of the law and leave the developer open to prosecution".* A copy of the method statement must be available on site during the building operations and all contractors must be made aware of the document before works are undertaken.

B Details of proposed works covered by the Method Statement

1. Re-roofing of the property and replacement of damaged roof timbers as required.

2. Conversion of the main roof void (figures 5 to 7) to provide a proposed second floor living area.

3. Removal of existing garage and subsequent replacement of new building (garden room - Reference: drawing No: 5270 – SK01 Sunderland Peacock Architects).

C Survey and site assessment

C1 Pre-existing information on the bat species present at this site

There were no previous records of roosting bats or other protected species at this property.

C2 Objectives

(1) Determine which bat species are likely to be disturbed by the proposed works.

(2) Provide an impact assessment of the proposed building alterations on all protected species.

(3) Identify appropriate mitigation and compensation measures.

C3 Personnel

The inspection was carried out by David Fisher (EED Surveys) - an ecological consultant with more than 25 years of experience in field survey work and development issues relating to protected species. The surveyor has held a licence since 1989 and is a volunteer bat worker with Natural England (via the BCT), a participating member of several UK bat groups and founder member of the Bowland Kilns and Caves Research Group.

Natural England Class Licence WML-A34 - Level 1 (Registration Number: 2015 – 17599-CLS-CLS)

Natural England Class Licence WML-A34 – Level 2 (Registration Number: 2015 – 12106-CLS-CLS)

C4 Surveys undertaken at the property

An initial scoping site survey was undertaken on Wednesday 15 September 2016 between 10.30 and 12.00.

A further site inspection of the main loft was carried out on Thursday 22 December between 10.30 and 12.00.

C5 Survey results (22/12/16)

The presence of bat droppings throughout the roof void (figures 5 to 7) indicates relatively low frequency roost activity by whiskered bats *(Myotis mystacinus)* - the species being confirmed by DNA sampling.

The following roosting locations were identified within the main roof void:

(i) At the intersection of the timber rafters with the main ridge board (figure 8).

(ii) Within a small cavity above the brick partition wall and door to hallway close to apex roof (figure 9).

(iii) Within some of the mortice joints (figures 10 and 11)

Figure 8: roost points along ridge board in main roof void

Figure 9: roost and perching location on brick partition wall

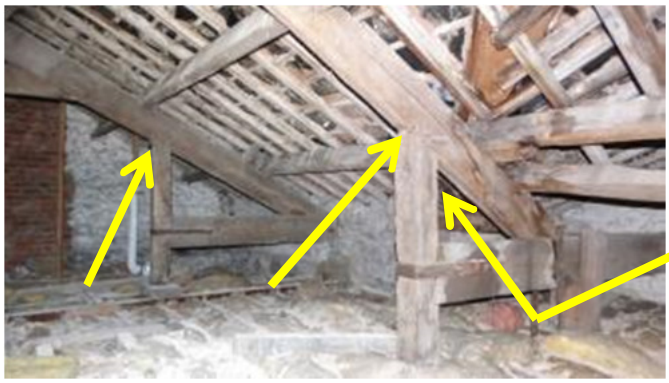


Figure 10: mortice joints provide roost features as shown

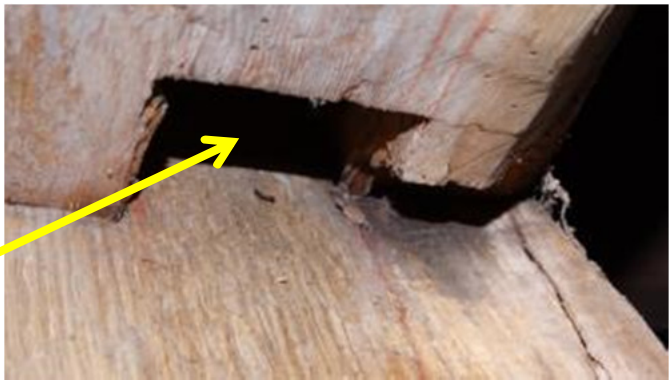


Figure 11: detail of mortice joint used by roosting individuals

A small number of bat droppings were also located within the garage on the floor and on a wall in the NW corner close to the door mechanism (figure12) corresponding with a small external gap in boards (figure13).

Figure 12: droppings on internal wall in garage.

Figure 13: access gap on external wall of garage

There are no signs of bat activity within any other part of the property.

C6 Interpretation / evaluation of survey results

Visits made on 15/09/16, 22/12/16 and 06/01/17 have failed to locate live bats. Many of the droppings found within the main roof void are a mixture of old faeces with some fresh droppings, suggesting both historic use and recent activity during the previous year.

The droppings located on the wall inside the garage (15/09/16) were relatively fresh, suggesting they were recent in origin and probably indicating roosting activity during the previous season (spring / summer 2016).

The two roosts are likely to be of seasonal use only ie. April / May to September. There is currently no evidence of bat hibernation activity throughout the autumn / winter period (October to March).

The quantity of droppings within the main roof void suggests occasional roosting activity by low numbers of bats or solitary individuals. There is no evidence that area is used as a maternity roost by whiskered bats.

The garage roof has a relatively low number of fresh droppings visible, indicating summer activity by a crevice-dwelling species, most likely to be common pipistrelle bats. This species is known to roost in several nearby properties and a maternity roost is located within 75 metres of the garage. It seems unlikely that the garage roof is a main nursery roost, more likely it is used as a satellite roost by pipistrelles from another location during the spring / summer period. Several bats (class size: 5 – 20) are likely to be present between May and August and later disperse during late August and September.

D Impact assessment

The likely impacts will be significantly reduced by careful timing of the works to avoid the critical summer period when bats are most likely to be present. Re-roofing operations on the house must be completed before the end of April and no further disturbance to roof areas should take place during May, June, July and August.

An inspection of the main roof void by a licenced surveyor will be required immediately before any roofing works are due to begin.

Roofing operations should not resume before 1 September.

Demolition of the garage must not take place between 1 May and 31 August.

Before any demolition begins, an ecologist / surveyor should inspect the roost site and carry out a supervised removal / demolition of the roof in case any bats are present. Soft demolition will require removal of the roofing felt, fascia and soffit within 2m of the bat roost by hand. Lifting of roof materials must be carried out with care to prevent possible crushing and injury to bats.

D1 Short-term impacts: disturbance

In the unlikely event of any bats being disturbed / exposed, the licenced surveyor will be available to safely capture and remove any bats from the working area. A tree-mounted hibernation roost box will be provided on site to safely house any displaced bats. The box will be erected before any works begin.

D2 Long-term impacts:

No significant long-term impacts are anticipated.

D4 Predicted scale of impact on bats

Temporary disturbance of a small night roost / mating roost main roof void - The scale of impact of the works on roosting bats at this site is likely to be **relatively low***.

Destruction of a small night roost / partial destruction; modification (garage roof) - The scale of impact of the demolition at site level on a local bat population will be **low – moderate*.**

**Reference: The scale of main impacts at site level on bat population.*
Table 6.1., page 37, Bat Mitigation Guidelines – Jan 2014

DOCUMENT 2

METHOD STATEMENT - DELIVERY INFORMATION

Summary and main recommendations		
Action	**Time constraints**	**Methodology**
1.Further survey effort	To be carried out during the period May, June or July. Evening emergence or dawn re-entry survey.	Carry out at least one dusk or dawn survey close to the garage roost (figure 13) to determine (1) whether bats are present (2) establish which species is roosting (3) confirm how many bats are present or confirm absence. (4) the type of roost.
2.Demolition of existing garage	Avoid the period May, June, July and August.	Supervision by licenced bat worker to oversee soft demolition of structure - ie. fascia - soffit and roof materials within 2 metres of roost access point. Preparatory talk to contractors to ensure they are fully aware of the required mitigation procedures.
3. Replacement roost (garage)	The new build to replace the existing garage will require design modifications to accommodate new roosting opportunities for crevice-dwelling bats (ie. pipistrelles) to compensate for the loss of the roosting area in the garage wall (figs. 12 / 13). Recommended: 1 No. Schwegler Bat Box 1FE 00748/3 wood concrete , 300mm wide x 300mm high x 100mm deep located at eaves level or just below apex as appropriate to final design. Additionally, provide 2 No. apex mortar gaps 18mm x 165mm providing access points between roofing membrane and roof tiles / slates. Avoid the use of Breathable Roofing Membranes (BRM's) in the area where bats are likely to roost (ie. within 2000 mm of the roost entrances). Timber sarking / bitumen roofing felts are preferable to BRB's which can result in fluffing of fine fibres by bats resulting in bats becoming entangled in these fibres. *(Designing for Biodiversity. A technical guide for new and existing buildings. 2nd Edition p.121 RIBA Publishing. (ISBN 978 1 85946 491 5) 2013. pp. 107 / 115*	
4.Re-roofing works on house	Avoid the critical months May to August; the optimal time to carry out roofing works is between 1 September and mid-November or during March and April.	Initial inspection of the main roof void by licenced bat worker immediately before the roof works are due to commence. Preparatory talk to contractors to ensure they are fully aware of the required mitigation procedures.
5. Providing bat access points	(1) Bat access tile / slate set 18mm gap x 165mm long with corresponding gap in underlay. 2 no. required on each roof slope above the dedicated bat loft area (total 4 no. access tiles / slates) (2) 2 No. ridge access tiles required in the roof directly above the dedicated	

	bat loft area.
6. Dedicated bat loft area Reference: Drawing No: 5270 – SK04 Jan 2017, Sunderland and Peacock Architects / RBM)	A dedicated area of the main loft (Proposed second floor) will be preserved; the area to be sealed by standard stud partition wall and provided with an access hatch. The stud wall will require thermal insulation between the converted loft area and the bat loft. The bat loft will closely resemble the existing pre-development void and aim to replicate a similar thermal regime to the original roof void. Roofing membrane: the use of breathable roofing membranes (BRM's) should be avoided in areas used by bats; current RIBA guidance advises continuing use of bitumen roofing felt or sarking boards. *(Designing for Biodiversity. RIBA 2nd Edition p.121]* Conserve all existing roof timbers (avoid any harmful timber treatment) particular attention should be given to the mortice joints (as shown in figures 10 and 11).
7.Timber treatment work	**Avoid the use of timber treatments that are toxic to mammals.** Where timber treatment and use of pesticides id considered necessary, all products must be approved under the Control of Pesticides Regulations (COPR). All approved fluids must be labelled with an HSE number with statutory hazard warnings and directions for use. Currently the commonly used chemicals are the synthetic pyrethroids. Two widely used compounds, permethrin and cypermethrin are not generally very toxic to mammals (although very toxic to fish) and tests have shown that both appear safe for use in bat roosts. Pre-treated 'tanalised timber should use only the CCA (copper, chrome, arsenic) treatment which appears to present no hazard to bats.
8. Detailed Method Statement	The local planning authority requires a detailed METHOD STATEMENT is available to ensure that the authorised works "*will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range."* NB. The existence of a method statement helps to establish a defence against possible prosecution in the event of bats being disturbed by demonstrating that all reasonable steps have been taken to minimise the impact of the development on protected species.
9. Method statement document	A copy of the method statement must be made available on site as a reference document throughout the development; all project managers and contractors should be aware of its existence. Natural England advises that "failure to follow the method statement may result in a breach of the law and leave the developer open to prosecution".
10. Legal responsibility	The onus lies with the applicant to satisfy himself / herself that no offence will be committed if the development goes ahead, regardless of whether planning permission has been granted.

Main recommendations / specifications

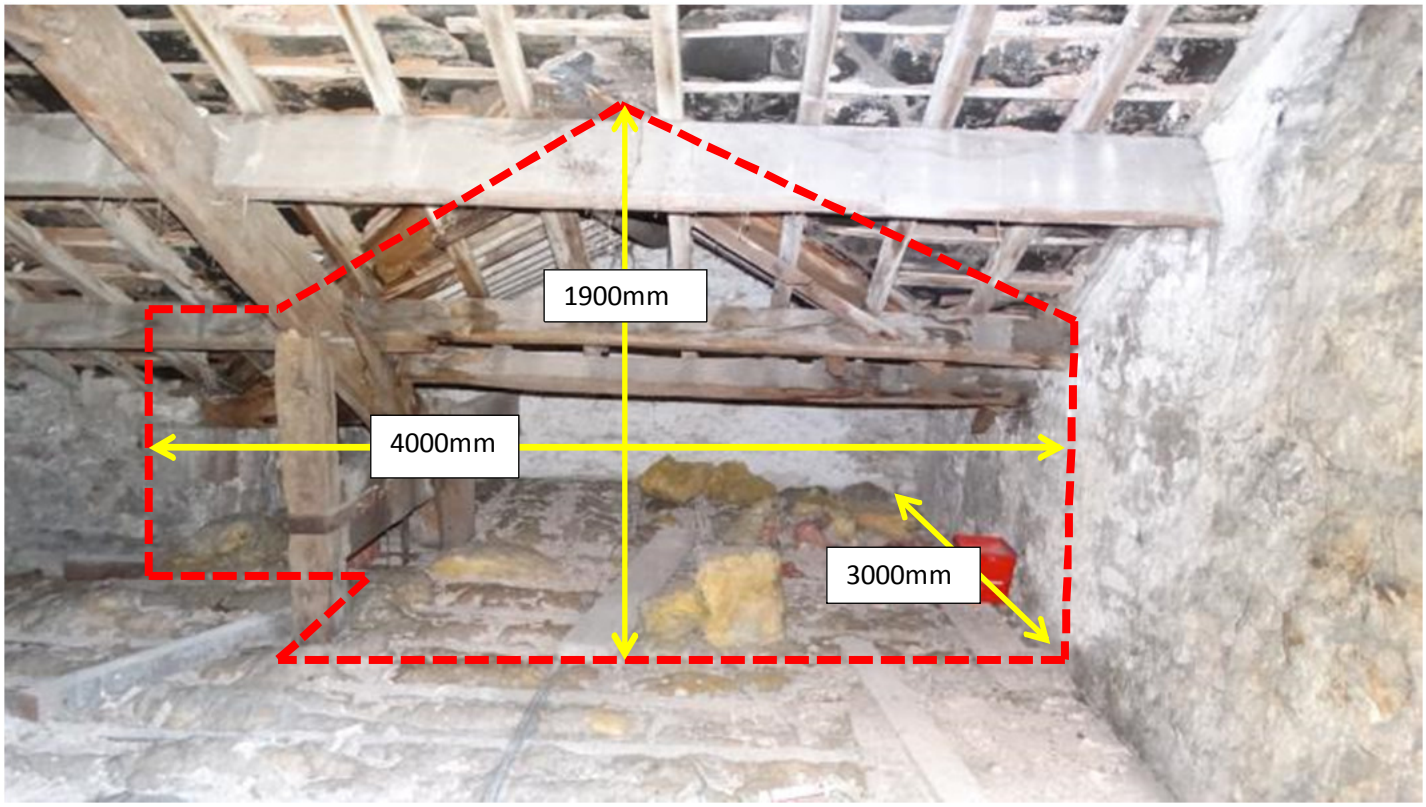
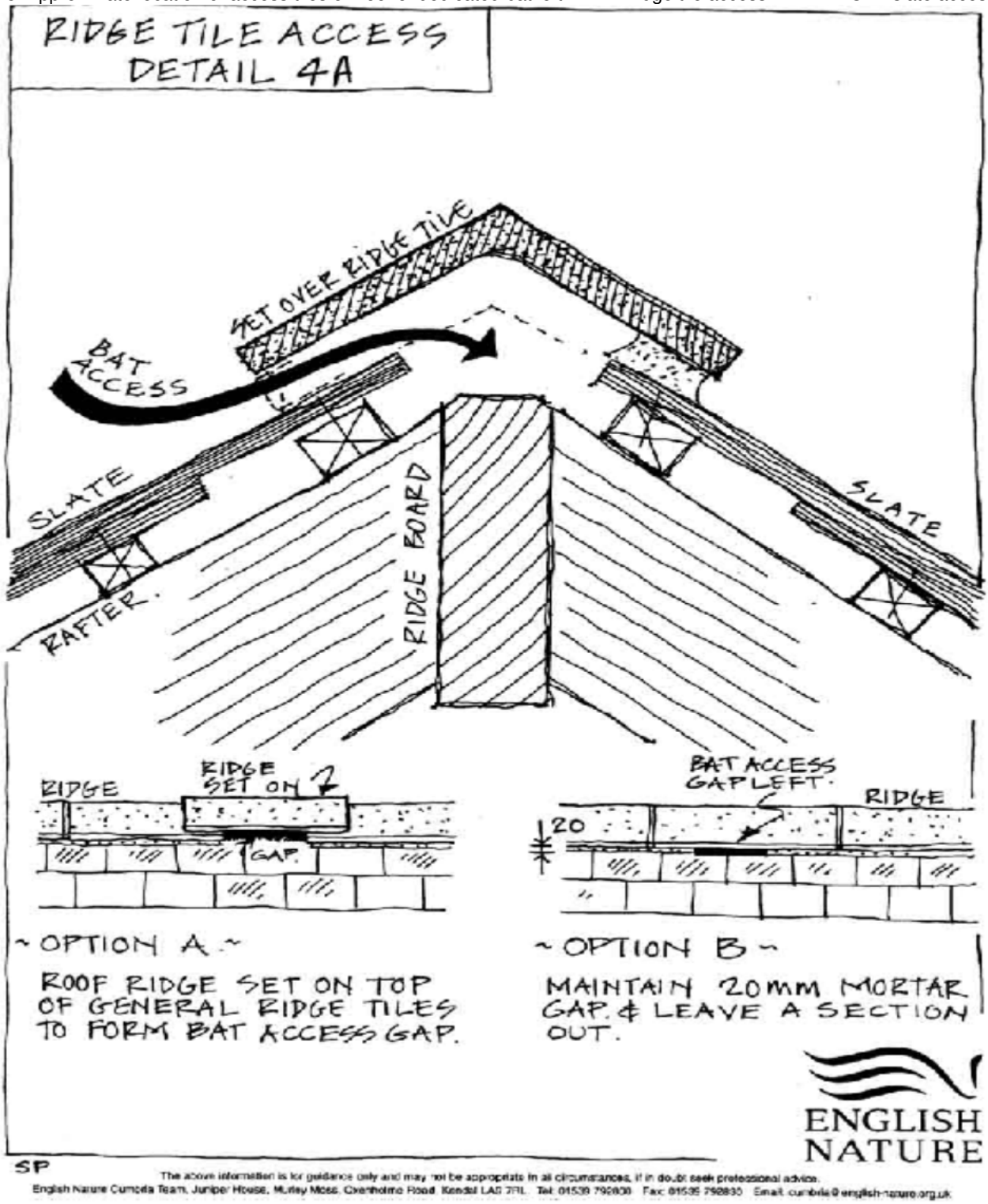


Figure 14: Approximate location and dimensions of the dedicated bat loft (refer to SPA plan – Proposed second floor)

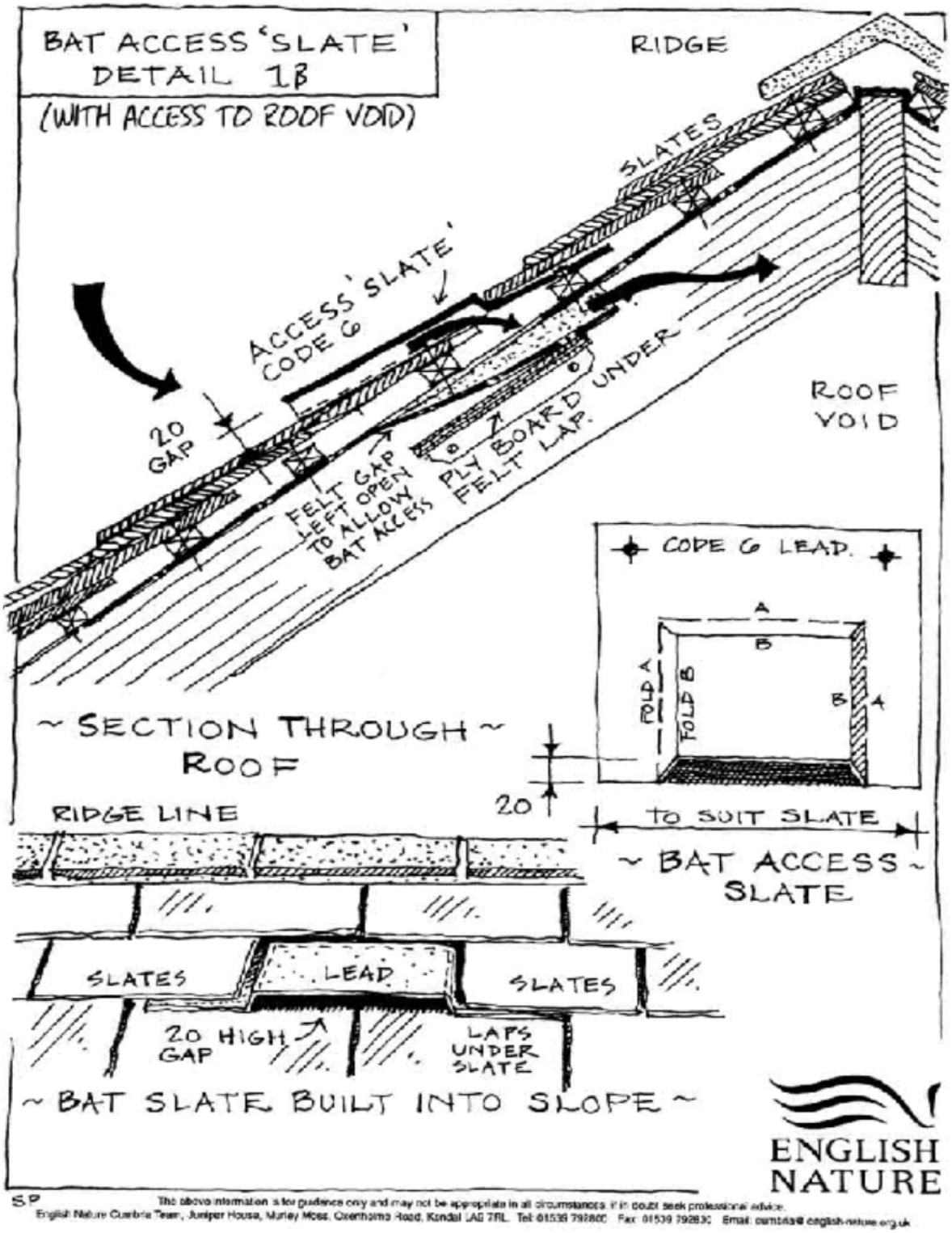
Figure 15: Approximate location of access tiles on roof of dedicated bat loft. RED: Ridge tile access x 2 YELLOW: slate access x4



RIDGE TILE ACCESS:

2 No. ridge tiles to be placed along the ridge immediately above the bat loft (as located in figure 14) with corresponding access through the roofing membrane enabling bats to enter the roof void.

NB. The maximum gap required to allow bats to enter the roof beneath the tiles is only 20mm.



BAT ACCESS SLATES: 4 No. slates are required (as located in figure 15) ie. 2 no. slates on each roof pitch. These access points are easily constructed using profiled leadwork by providing gaps no larger than 20mm

Alternatively Bat Access Tile sets are commercially available from a number of manufacturers.

*** IF IN DOUBT PLEASE CONTACT THE ECOLOGIST / SURVEYOR FOR FURTHER ADVICE ***

WORK SCHEDULE FOR BAT METHOD STATEMENT		
Activity	**Timing**	**Comments**
Pre-development works		
Summer bat survey – Existing garage roof	May, June or July At least one evening emergence or dawn re-entry survey.	Carry out at least one dusk or dawn survey close to the garage roof (fig. 13) to determine whether bats are present and to establish which species is roosting, how many bats are likely to be present and the type of roost.
Visual inspection of main roof void	Immediately before re-roofing begins.	Ecologist to discuss the mitigation procedures immediately before the contractors are due to begin re-roofing work.
Installation of hibernation box on site	The box should be in place before any building operations begin and remain in situ until all works are completed.	Ecologist to install tree-mounted bat box in garden close to house before re-roofing and / or demolition works begin.
Mid-term development works		
Ecologist to be 'on – call' for advice	Throughout the project	In the unlikely event of any bats being exposed / disturbed during the proposed works, stop work in that location and call the ecologist / surveyor for advice.
Removal of the garage roof / roost site	The work MUST avoid the critical period May, June, July and August.	Soft demolition of the roof verge required. Hand removal of fascia-soffits and removal and roofing felt. Disturbance of the roof within 2m of the roost access point (NW corner of roof) MUST be supervised by an ecologist.
Mechanical demolition of the garage	The work MUST avoid the critical period May, June, July and August.	In the unlikely event of any bats being exposed / disturbed during the proposed works, stop work in that location and call the ecologist / surveyor for advice
Main roof void / internal works and timber treatment	No specific time constraints but AVOID any timber treatment work during the summer period May to September.	Do not spray timbers during critical summer period. Seek advice from surveyor before any chemical treatment is carried out.
Post-development works		
Final inspection of roof works / alterations	On completion of works	Check by ecologist that all mitigation and compensation measures are completed as outlined in the method statement.

GARAGE DEMOLITION - MITIGATION

Figure 16: Critical area of garage roof requiring hand removal of materials within 2m of the roost area.

The removal of roofing materials prior to demolition of the garage must be supervised by an ecologist to ensure that in the unlikely event of bats being exposed / disturbed, the bats are safely handled and removed from site.

It is unlikely that any bats will be exposed in other parts of the roof or building.

PLEASE NOTE:

Site managers and building contractors must be made aware of the Method Statement before any works are undertaken.

Wildlife legislation – Bats and the law

All bat species in the UK receive full protection under the Wildlife and Countryside Act 1981 (amended by the Environment Protection Act 1990). The Countryside and Rights of Way Act 2000 amends the Wildlife and Countryside Act to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection. All species of bats are listed on Schedule 5 of the 1981 Act, which makes it an offence to:

- *intentionally kill, injure or take any wild bat.*
- *intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.*
- *intentionally or recklessly disturb any wild bat while it is occupying a structure or place which it uses for shelter or protection.*
-

The protected status afforded to bats means planning authorities may require extra information (in the form of surveys, impact assessments and mitigation proposals) before determining planning applications for sites used by bats. Planning authorities may refuse planning permission solely on grounds of the predicted impact on protected species such as bats. Recent case law has underlined the importance of obtaining survey information prior to the determination of planning consent[1].

"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by a development proposal, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision." [2]

All British bat species are included in Schedule 2 of the Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, (also known as Habitats Regulations) which defines 'European Protected Species' (EPS).

[1] Bat Mitigation Guidelines, AJ Mitchell Jones, Joint Nature Conservation Committee, (2004) ISBN 1 86107 558 8

[2] Planning Policy Statement (PPS9) (2005) , Biodiversity and Geological Conservation. ODPM.

Protected species (Bats) and the planning process[1]

For development proposals requiring planning permission, the presence of bats, and therefore the need for a bat survey, is an important 'material planning consideration'. Adequate surveys are therefore required to establish the presence or absence of bats, to enable a prediction of the likely impact of the proposed development on them and their breeding sites or resting places and, if necessary, to design mitigation and compensation. Similarly, adequate survey information must accompany an application for a Habitats Regulations licence (also known as a Mitigation Licence) required to ensure that a proposed development is able to proceed lawfully.

The term 'development' [used in these guidelines] includes all activities requiring consent under relevant planning legislation and / or demolition operations requiring building control approval under the Building Act 1984.

Natural England (Formerly English Nature) states that development in relation to bats *"covers a wide range of operations that have the potential to impact negatively on bats and bat populations. Typical examples would be the construction, modification, restoration or conversion of buildings and structures, as well as infrastructure, landfill or mineral extraction projects and demolition operations".*

[1] Planning for development Ch 2 page 10, Bat Surveys, Good Practice Guidelines, BCT (2007). (Mitchell-Jones, 2004)

Compliance

The existence of a Method Statement helps to establish a defence against prosecution for intentional (WCA), deliberate (Habitat Regulations.) or reckless (WCA) disturbance of bats or damage to roosts.

A Method Statements is normally required by the local planning authority to ensure that procedures are in place before the development works are carried out. It is the responsibility of the LPA to ensure that the proposed works do not result in a breach of the Habitat Regulations.

Reference: Wildlife and Countryside Act. / (Natural Habitats &c.) Regulations (1994) (as amended 2010).

References

Altringham, JD., (2011) Bats, From Evolution to Conservation. OUP.

BCT, (2016) Bat Surveys for Professional Ecologists, Good Practice Guidelines – 3rd Edition

BSI, (2013) British Standard for Biodiversity (BS42020) Biodiversity in planning and development.

Briggs, P., (2004) Effect of barn conversion on bat roost sites in Hertfordshire, England. Mammalia.

CIEEM, (2016) Guidelines for Ecological Impact Assessment in the UK and Ireland – Second Edition.

Dietz, C., Helversen, O., Nill, D. (2009) Bats of Britain, Europe and Northwest Africa. A&C Black.

Dietz, C., Kiefer, A., (2016) Bats of Britain and Europe, Bloomsbury.

Gunnell K, Murphy B, Williams C, (2013) Designing for Biodiversity, RIBA Publishing / BCT – 2nd Edition.

JNCC, (2010), Handbook for Phase 1 Habitat Survey – a Technique for Environmental Survey.

Mitchell, AJ and McLeish, AP., (2004), JNCC Bat Workers Manual 3rd Edition.

Mitchell, AJ., (2004), English Nature Bat Mitigation Guidelines, version January 2004

Russ, J., (2012),

RECOMMENDED REFERENCE MATERIAL

Designing for Biodiversity provides detailed information on bat access slates and ridge tiles (pages 30 – 41)

Designing for Biodiversity: A Technical Guide for New and Existing Buildings (2nd edition)
Brian Murphy, Kelly Gunnell and Carol Williams.

- Publisher: RIBA Publishing

- Date Published: Aug 2013
- Available from the RIBA Bookshop £35.00