The Conservation of Habitats and Species Regulations 2010 (as amended)

Bats – Method Statement template to support a licence application

The Method Statement will be used to determine the impact of the proposal on the favourable conservation status (FCS) of the species concerned (Regulation 53(9)(b)).
You are strongly advised to refer to the Bat Mitigation Guidelines.
Please use recent photographs to support your application.

Customer Services
Wildlife Licensing
Natural England
First Floor
Temple Quay House
2 The Square
Bristol, BS1 6EB.
T. 0845 601 4523
F. 0845 601 3438

Important advice:
The format below must be used. Please enter text below each heading keeping information as concise as possible.

All maps/figures that will become part of any annexed licence granted must be submitted as separate documents (with the site name and date included on the map/figure. See section I for list – all others may be included within the Method Statement document (e.g. survey maps/figures) if preferred).

A separate work schedule must also be submitted on form WML-A13a-E5a&b to accompany the Method Statement.

A Executive summary

Provide an overview (no more than 1 side of A4) of what works are proposed and how the impacts identified will be addressed in order to ensure no detriment to the maintenance of the population at a favourable conservation status.

Sunny Bank is a cottage which is proposed for an extension, with an attached outbuilding which is proposed for conversion.

There are 3 confirmed brown long-eared bat roost sites in crevices in the outbuilding, as well as a formerly recorded common pipistrelle roost under a tile, which comprise summer day and night roosts for at least 2 bats.

The conversion and roof work will cause loss or modification of the existing roost sites, and without mitigation may injure or kill bats.

Mitigation proposed includes:

- Exclusion of crevices prior to conversion works commencing (September to early October)
- Timing of re-roofing when bats are least likely to be present (October to April)
- Provision of three permanent tree bat boxes to provide undisturbed roost during works
- Supervised soft-strip of roof to ensure any bats present are caught by hand by the ecologist and transferred to bat box.
- New roof space created above Building 1b ('barn) to tie into existing roof space above Building 1a (cottage) to provide a continuous roof space of 15 m x 2 m x 0.75 m for bat use.
- Creation of five ridge tile access points to allow bats to roost under ridge tile
- Creation of six tile access points to allow bats access into roof space
- Creation of one access point in the north gable end to allow bats access into roof space.
- Roof space to be lined with traditional bitumen underfelt and crevices provided inside the roof space by attaching rough-sawn planks onto rafters just below the ridge.
- Retention of one existing crevice roost site under south-east eaves

The mitigation proposed will ensure the populations of bats will remain at favourable conservation status throughout the works and in the future.

B Introduction

B1 Background to activity/development:

Include a brief summary of:

- Why the activity and a licence are necessary (*e.g. bridge structure repairs are required and will affect a known maternity roost of Daubenton's bats, which will be temporarily lost whilst works are being undertaken; renovation works to an office building will result in the permanent loss of three day roosts of common pipistrelle bats; demolition of an existing hospital to be replaced with flats will result in the loss of a brown-long eared bat maternity roost*).

Conversion of outbuilding attached to cottage and re-roofing of cottage will cause permanent loss of 3 brown long-eared night and day roosts and a common pipistrelle day roost.

- Include the site/project name and provide an OS grid reference to 8 figures (e.g. format AB 12345678).

Sunny Bank, Longsdon SJ964537

- Include current status of planning permission (if applicable) *e.g. full planning permission with all relevant wildlife conditions discharged; permitted development; demolition with prior notification of demolition issues resolved*. If the proposal is for demolition only of a structure supporting a bat roost/s, please confirm whether there are plans to develop the site in the future and if so when.

Full planning permission, relevant condition regarding bats to be discharged once licence has been granted and submitted to the planning authority.

B2 Relationship with other nearby development and cumulative impacts

B2.1 Is the current application part of a larger development project? For example, is it part of a phased or multi-plot housing development that will require more than one bat licence? Enter Yes, No or N/A in the text box below. If yes, note a separate ***master plan*** document will be required.

N/A

Important Advice: If yes to the above, please note that sections in this Method Statement on impact assessment and mitigation measures must explicitly relate *only* to impacts from the works currently proposed.

A project-wide master plan must detail the overall impact assessment and mitigation and explain where, and why, each of the bat licences will be required. The master plan must be included as a separate document to this application: see http://www.naturalengland.org.uk/Images/WML-G11_tcm6-9930.pdf for details that are to be included in this separate document. The separate master plan is expected to take due regard of the overall project to ensure that in-combination effects are considered, and mitigation and compensation measures are both sufficient and coherent.

If the current development is part of a larger development project, summarise very briefly here how the current application relates to the larger project and how the in-combination effects are considered and mitigation/compensation is sufficient.

Important Advice: to accompany this Method Statement also include Figure. B2.1 for a Master plan overview - and see section I "Map checklist" at the end of this document.

B2.2 Apart from any mention in B2.1, please inform us of any past or future development or other projects (in the last 5 years or next 5 years) in the vicinity which may have significantly impacted or are likely to significantly impact on the same population/s of bats as this application (e.g. loss of maternity or hibernation roosts). You must make reasonable efforts to establish this, including discussions with your client and the Local Planning Authority – stating below what you undertook. A brief summary of the project/s should be provided including the site name and location, dates and if known the licence reference number(s).

Please note we are not expecting details of every licence/planning permission issued within the vicinity of the site – we are only concerned with projects that have the potential to significantly impact or have impacted on same population of bats (maternity and hibernation roosts). Note: Natural England is aiming to make available licensing records from the last 5 years publically available.

The closest bat licensed project is approximately 2.5 km to the north-east, EPSM2013-5593 and was for damage/destruction of a brown long-eared breeding roost between Sep 2013 and Oct 2015. The next closest licensed site is approximately 3.5 km to the north-west, EPSM2010-2186 and was for

damage/destruction of brown long-eared resting place between Sep 2010 and Aug 2012. See Figure B1.9.
A search of Staffordshire Moorlands planning portal was undertaken, focusing on Wood Road, Longsdon and surrounds, for any current planning applications where bats were present, but none were found.

Important Advice: locations of other bat mitigation sites in relation to this proposal must be shown on Figure B2.2.

C Survey and site assessment (also see section 5 of the Bat Mitigation Guidelines)

C1 Pre-existing information on the bat species at the survey site:
Please undertake a historical data search within a 2km search radius and provide a summary of the results of this search. For example, records from local environmental records centres, local bat groups and previous survey work undertaken at the site is all relevant.

- Should no historical records be found from your search please state this – and specify what searches you undertook.
- Note that you must not include records from National Biodiversity Network (NBN) without first obtaining written permission from the relevant Data Provider.

Previous bat survey of the site by Apex Ecology in September 2012 found 20 brown long-eared bats present, and it was assessed that a breeding roost was present. A single common pipistrelle was also found to emerge from the roof of the cottage during this survey.

A request for archive records of bats within 2 km of the site was made to Staffordshire Ecological Records (SER). SER returned 45 records of bats; Common pipistrelle, soprano pipistrelle, brown long-eared bat, noctule, Daubenton's bat and a Myotis species. The closest record was of a grounded juvenile common pipistrelle bat on Wood Road (address unspecified). There were multiple records of common and soprano pipistrelles, noctule and Daubenton's bat in flight over the nearby Cauldon canal and River Churnett.

C2 Status of the bat species: Detail conservation status at the local, county and regional levels. Please complete the following table, justifying your assessment, and add additional lines where necessary. If the status is unknown then please enter 'unknown'.

Species	Conservation status assessment		
	Local	**County**	**Regional**
Brown long-eared bat	Common	Common	Common and widespread but is listed as a UKBAP species.
Common pipistrelle bat	Common	Common	Common and widespread.

* ****Please note*** *that you can add more rows to the table: right click in any cell outside the grey box area. Choose Insert > Insert rows below.*

C3 Objectives of the survey to inform this proposal: Please complete the following table, entering 'Yes', 'No' or N/A' to indicate the objective of your survey and provide comments/explanation where necessary:

Survey objective	Yes / No / N-A	Comments
Determine presence / absence of bats	Yes	Surveys aimed to identify presence of roost sites and species.
Determine bat usage of site (e.g. maternity, hibernation, night roosts in various structures (specify)).	Yes	Surveys in July and September aimed to check for presence / location of breeding roosts, transitional and day roosts.
Identify foraging, commuting or swarming sites (explain)	No	Survey focused on identifying roosts but observations were made regarding level of foraging on site and any likely commuting routes.

Other (explain)	N/A	

C4 Site/habitat description: Please provide:

- Brief descriptions of the site, including total size of the development site (ha) (most often within the red line planning boundary) and areas of the site with potential value to bats (ha).

The site comprises an existing occupied cottage (Building 1a) with an attached unconverted 'barn' (Building 1b), both of which cover an area of approximately 0.0075 ha. The property includes a large sloping garden with abundant shrubs and trees and a canal frontage, and is approximately 0.1525 ha.

- Brief descriptions of the structures on site, differentiating between those surveyed and not surveyed, with an explanation why. Ensure structures are referenced and consistently indicated on relevant figures and tables.

The cottage (Building 1a) is a two storey building of brick walls and a clay tile roof, on a north-east to south-west alignment. The cottage has a low roof space, which was not fully accessed due to reported unsafe floor beams. The barn (Building 1b) is at the end of the cottage, within the same roof line, but is an unconverted room (no floors or roof space inside) with a stable door, window and boarded hatch on the gable end. A small hatch in the upper stone dividing wall allows access into the roof space of the cottage. The barn was inspected internally and externally.

- A description of adjacent areas/offsite habitats, specifying any relevance to bats, including descriptions of habitat/s relevant to bat commuting/foraging behaviour.

The site is on a tree-covered hill side with a denser area of woodland known as Hollinhay Wood approximately 200 m to the east. The Cauldon Canal is within 50m of the cottage to the south, and just beyond that runs the River Churnett. There are houses along Wood Road with plenty of potential off-site roost sites and abundant foraging on site and in the surrounding area.

- Please also include annotated (cross reference the structures) and dated photographs (showing both internal and external survey areas) as these are very useful as an assessment aid. These can be inserted below or submitted as a separate (referenced) document.

See separate PDF C4 Photographs of Survey Areas

C5 Field survey(s):

Please complete the following tables and add additional lines where necessary (*right click in any cell outside the grey box area. Choose Insert > Insert rows below)*. Please enter 'N/A' if the table is not applicable to your survey:

Visual inspection

Date of each survey visit **(e.g. format 01/06/13)**	**Structure reference / location**	**Equipment used (e.g binoculars, endoscope)**	**Weather –** ***(Include temps, precipitation, Beaufort wind scale etc)***
21/07/15	Building 1a & 1b	Endoscope, high powered torch, ladder, binoculars	17 ℃, dry, Wind 2, Cloud 100%
Comments (to include # of surveyors used for each visit): 2 surveyors			
10/09/15	Building 1a & 1b	Endoscope, high powered torch, ladder, binoculars	15 ℃, dry, Wind 1, Cloud 0%.
Comments: 2 surveyors			
Comments:			
Comments:			

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the above table states the number of surveyors used for each survey visit undertaken.

Eleanor Weir 2015-12689-CLS-CLS
Matthew Moore assistant ecologist.
Carl Capewell assistant ecologist

Dusk survey

Date of each survey visit **(e.g. format 01/06/13)**	**Start and end times and time of sunset**	**Structure reference / location**	**Equipment used (include make of bat detectors and logging equipment)**	**Weather –** ***(Include start and end temps, precipitation, Beaufort wind scale etc)***
21/07/15	Sunset: 21:21 Start: 21:12 End: 23:00	Building 1a & 1b	Batbox Griffin Batbox Duet & Zoom	Start:17C, Dry, Wind 2 End: 17C, Dry, Wind 2
Comments (to include # of surveyors used for each visit): 2 surveyors				
10/09/15	Sunset: 19:37 Start: 19:27 End:21:10	Building 1a & 1b	Batbox Griffin Batbox Duet & Zoom	Start: 15C, Dry, Wind 1-2 End: 14C, Dry, Wind 3-4
Comments: 2 surveyors				
Comments:				
Comments:				

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

Eleanor Weir 2015-12689-CLS-CLS Matthew Moore assistant ecologist. Carl Capewell assistant ecologist

Dawn survey

Date of each survey visit **(e.g. format 01/06/13).**	**Start and end time and time of sunrise**	**Structure reference / location**	**Equipment used (include make of bat detectors and logging equipment)**	**Weather –** ***(Include start and end temps, precipitation, Beaufort wind scale etc)***
30/07/15	Sunrise: 05:23 Start: 03:45 End: 05:29	Building 1a & 1b	Batbox Griffin Batbox Duet & Zoom	Start: 11C, Dry, Wind 0-1 End: 10C, Dry, Wind 0-1
Comments (to include # of surveyors used for each visit): 2 surveyors				
Comments:				
Comments:				
Comments:				

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

David Allen experienced ecologist Matthew Moore assistant ecologist

'Other' survey (please specify e.g. hibernation, remote, etc)

Date of each survey visit **(e.g. format 01/06/13).**	**Start and end times**	**Structure reference / location**	**Equipment used (include make of bat detectors and logging equipment)**	**Weather –** ***(Include start and end temps, precipitation, Beaufort wind scale etc)***

Comments (to include # of surveyors used for each visit):				
Comments:				
Comments:				
Comments:				

Please provide surveyors names *(including Class Licence registration number if applicable)* and ensure the <u>above</u> table states the number of surveyors used for each survey visit undertaken.

Please explain any constraints on the survey/s undertaken (time of year, cold weather, refused access, safety issues preventing access etc – justify as necessary and include evidence where required). If access was refused please provide evidence (letter/email) to demonstrate this.

Not possible to undertake full inspection of roof space above cottage due to safety concerns about timbers. Roof space inspection limited to binoculars and clulite from loft hatch.

Also complete the following:

- If DNA analysis of droppings has been undertaken, please indicate below (Yes, No, N/A) and ensure that **Figure C5b** (if applicable – see below) details the locations where the samples were taken.

N/A

- Please confirm (Yes, No, N/A) that a walk over survey/check has been carried out within 3 months *prior* to application submission to ensure that conditions have not changed since the most recent survey was undertaken. Provide details of any changes to conditions and habitats and/or structures on site since the surveys were undertaken. If no walk-over survey/check has been undertaken please explain why.

Yes, no changes.

C6 Survey results: Summarise your findings in the tables below and cross reference to **Figure C6** (which must also include flight lines, access points, dimensions of existing roosts, locations of surveyors etc). If you did not undertake a specific survey type please add N/A to the relevant table/s. Raw data is to be appended to the Method Statement (including sonograms, DNA analysis results etc).

Roost t*ypes to be referenced as:* *Day, Night, Feeding Perch, Transitional, Satellite, Maternity, Hibernation, Foraging Area, Commuting Route, Swarming Site, Other.* See end of document for "Definitions" of these roosts.

When completing "**Notes/observations" include** reference *to direct observations, extent and age of droppings, presence of field signs, emergence or re-entry, echolocation analysis. Also include DNA results if applicable and include nil results)*

Visual inspection results

Date (e.g. format 01/06/13)	**Species**	**Roost type** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
21/07/15	Brown long-eared bat	Day (occasional), possible hibernation	Building 1b	In crevice above door lintel	Possibly above door	Crevice itself is small (10cm wide x 3cm high) but bat likely to fly around building 1b pre-emergence.
Notes/observations: Two fresh long-eared droppings found inside crevice but no bats present suggesting an						

occasionally used day roost. Crevice may be potentially suitable for hibernation or as transitional roost.
Notes/observations:
Notes/observations:
Notes/observations:

Provide further (brief) comments/explanation if required:

Dusk survey results

Date (e.g. format 01/06/13)	**Start and end times**	**Species**	***Roost type*** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
21/07/15	22:01	Long-eared bat	Day	Building 1b	Likely in brickwork or along top of eaves	1 gap in missing eaves brick to right of window	Probably a crevice in eaves or brickwork.
Notes/observations: Bat emerged and flew over surveyors head.							
Notes/observations:							
Notes/observations:							
Notes/observations:							

Provide further (brief) comments/explanation if required:

Dawn Survey results

Date (e.g. format 01/06/13)	**Start and end times**	**Species**	**Roost type** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
30/07/15	04:05	Long-eared	Night	Building 1a	Likely in brickwork crevice next to window frame	Gap in brickwork to left of window	Appears to have been roosting in crevice.
Notes/observations: Bat emerged 1.5 hours before sunrise indicating a probable night roost.							
Notes/observations:							
Notes/observations:							
Notes/observations:							

Provide further (brief) comments/explanation if required:

'Other' results – please specify.

Date (e.g. format 01/06/13)	**Species**	**Roost type** *(to be consistent with the above listed types)*	**Structure reference** *(consistent with relevant figures and other text)*	**Roost location**	**Access points (include # of them)**	**Dimensions of existing roosts or explanation of where the roost is (as appropriate)**
Notes/observations:						
Notes/observations:						
Notes/observations:						
Notes/observations:						

Provide further (brief) comments/explanation if required:

C7 Interpretation/evaluation of survey results (also see the Bat Mitigation Guidelines section 5.8 and Figure 4 for conservation significance of roost type): Please complete the following table:

Structure reference *(ensure consistency with other text and Figures)*	**Species**	**Count / estimate of number of individuals**	**Site status assessment (e.g. hibernation, maternity, feeding roost, swarming site etc)**	**Conservation significance of roost**	**Use and importance of the site throughout the year** (e.g. used by different species at different times, hibernation potential, etc)
Building 1b	Brown long-eared bat	1 – 3	Day and night roost	Low	Could be used as an occasional roost throughout year, and potentially for hibernation.
Building 1a	Common pipistrelle bat	1	Day roost	Low	Could be used as an occasional roost throughout the year.

Provide further (brief) comments / explanation if required:

NB. 2012 surveys at this site found a likely maternity roost (assessed due to 20+ bats present) of brown long-eared bats to be present in September. Natural England were consulted during the planning phase and the Wildlife Adviser (Simon Taylor) indicated that as our 2015 surveys showed no sign of a maternity roost, that we should base our assessment and mitigation on the existing status of the roost. A single common pipistrelle was also recorded using the cottage roof in 2012, and we would suggest it is possible this species may still use the roof on an occasional basis even though it was not recorded roosting during the surveys undertaken in 2015. Thus it is requested that this species is also included on the licence.

Important Advice:

Survey maps that must be included in this section of the Method Statement, or as separate documents if preferred, are listed in *section I "Map checklist" at the end of this document.*

Insert survey figures, photographs etc below here if not submitting them as separate documents:

D Impact assessment <u>in absence of mitigation or compensation for each species / roost type</u>

(also see section 6 of the Bat Mitigation Guidelines). Where appropriate you must take into consideration cumulative impacts of your proposals on the bat species and populations identified in your survey in each section.

D1 Initial impacts: The impact/s of activities undertaken on site pre-development and during works must be considered and explained. **Consider disturbance** (such as human presence, noise, vibration, dust, lighting, access obstruction due to scaffolding and plastic sheeting etc), **temporary damage and temporary loss of roosts and injuring/killing.**

E.g. Unsupervised contractor removing roof tiles has the potential to crush 3 common pipistrelle bats using the roof tiles as day roosts. Major negative impact at a site level; Demolition of an extension to a building will take place adjacent to a maternity roost of common pipistrelle bats situated under the soffit board of the retained building. Potential for significant disturbance if demolition works are undertaken during the maternity period through vibration, noise and dust. Medium negative impact on a local level.

If unsupervised, contractors stripping roofs of building 1a & 1b may harm or kill 1 common pipistrelle bat using roof tiles as day roosts. Moderate negative impact on a site level. Works may cause disturbance through noise, vibration, light and dust inside Building 1a roof space and Building 1b. This may disturb 1 -2 brown long-eared bats if present, potentially at any time including hibernation. Minor negative impact on a site level. Scaffolding could block access to a brown long-eared day and night roost on south side of Building 1b. Minor negative impact on a site level.

D2 Long-term impacts: Consider and explain the impacts of the proposed works on the different species populations at a site, local, regional, and national level**.**

D2.1. Roost modification: e.g. changes to roosts/access points, new entrances (including human access e.g. for servicing/maintenance etc), change in size of roost space, changes in air flow, temperature and humidity, light etc. Please detail the access points into each roost and the type/s of roosts which will be modified.

E.g. Non-mitigated changes to the roof structure, which requires replacing, will lead to the modification of 3 access points into a common pipistrelle maternity roost which will result in bats being unable to enter or exit the roost. Moderate negative impact on a local level.

If mitigation is not undertaken to replace access points under tiles during re-roofing, a roost for a common pipistrelle bat may be modified with bats unable to roost in future. Minor negative impact on a site level.

D2.2. Roost loss: Loss or deterioration of roosting sites, access points, habitat, etc must be considered. Please detail the access points into each roost and types of roost/s which will be lost.

E.g. Demolition of building reference X in June will lead to the loss of a night roost in the porch used by 1 lesser horseshoe bat and the loss of a maternity brown-long eared bat roost in the loft space. This will lead to the death and/or injury of bats including dependent young and permanent destruction (loss) of both roosts. Moderate negative impact at a site level for lesser horseshoe bats and moderate negative impact at a local level for brown-long eared bats.

Loss of crevice roost and flying space inside Building 1b for 1 brown long-eared bat. Without mitigation this could lead to possible death/injury of bat and permanent loss of roost which could be used at any time of year including hibernation. Moderate negative impact at a site level for brown long-eared bat. Loss of two brown long-eared crevice roosts on south side of building (under eaves and by window). Without mitigation this could lead to possible death/injury of 1 -2 brown long-eared bats and permanent loss of day roost and night roost which could be used at any time of year including hibernation. Moderate negative impact on a site level.

D2.3. Fragmentation and isolation: Will the proposed works results in these impacts? E.g. loss of linear features such as hedges, tree lines, increased lighting, severance of flight lines by roads/rail lines, separation of breeding/hibernation sites from feeding grounds, etc.

E.g. In addition to the removal of common pipistrelle day roosts in trees along the proposed road, removal of hedgerows, shown on Figure D, and the construction of the new road will fragment a significant commuting and foraging route for a lesser horseshoe maternity roost. This may cause a reduction in the long term success of the breeding colony of lesser horseshoes by restricting existing foraging range or killing bats on the road. Potentially major negative impact at a site and local level.

N/A

D3 Post-development interference impacts: e.g. extra street lighting or other external lighting, use of loft space as storage, increased noise. Please also consider other direct or indirect post development impacts which may include disturbance/ injuring/killing.
E.g. Security lighting being installed will shine on the brown-long eared bat maternity roost access points which may affect emergence patterns and lead to a reduction in foraging times. This may cause a reduction in the long term success of the breeding colony or cause the roost to be abandoned. Moderate to high negative impact at a site and local level.

Potential for increased illumination from windows and possible security light when Building 1b is occupied. This could discourage 1 – 3 brown long-eared bats from roosting at the site or emerging promptly. Minor negative impact at a site level.

D4 Predicted scale of impact of this development/activity on species status (also see section 6.5 of the Bat Mitigation Guidelines and the BCT's Bat Survey Good Practice Guidelines): Please complete the following table to explain what this is likely to be at the site, local/county and regional levels for each roost type and species. Add additional lines when necessary

Roost types to be referenced as: Day, Night, Feeding Perch, Transitional, Satellite, Maternity, Hibernation, Foraging Area, Commuting Route, Swarming Site, Other.

Species & #s (which will be affected at the time works will be undertaken)	**Roost type**	**Predicted scale of impact** ***(place X in relevant column)***			**Notes** (include impact on roost – damage / destruction /modification etc)
		Site	**County**	**Regional**	
Brown long-eared bat (3)	Day, Night	Medium	Low	Low	Destruction of 3 roosts, potential for injury or killing of up to 3 bats
Common pipistrelle bat (1)	Day	Medium	Low	Low	Destruction of 1 roost, potential for injury or killing of up to 1 bat

* ****Please note*** *that you can add more rows to the table: right click in any cell outside the grey box area. Choose Insert > Insert rows below.*

Provide further comments/explanation as required (this helps understand how the impacts will be mitigated or compensated for when assessing section E):

Although loss of 3 day roosts and 1 night roost are medium impact on site level, overall the impact on the pipistrelle and brown long-eared bat populations in the county is likely to be low due to the two species being common and widespread, and fairly adaptable.

Important Advice:
Please ensure that a separate 'Impact map' is provided (Figure D) which must show all structures or habitats (clearly referenced) that will be disturbed, damaged or destroyed, detailing where the roosts and access points are etc. Also *see section I "Map checklist" at the end of this document.*

E Mitigation and Compensation (please also see section 7 and 8 of the Bat Mitigation Guidelines)

E1 The mitigation solution being proposed in the method statement should be the one that delivers the 'need' with the least impact on the bat population.

Please explain why this design was chosen over other potential solutions - set out what other designs were considered and why they were not feasible (*e.g. if the proposal is to construct a new stand-alone roost, explain why it is not possible to retain the roost in the existing structure etc).*

It is proposed that through the conversion of Building 1b, a roof space will be retained for bat use which will have direct flight access into the existing roof space above Building 1a. The roof space will have a height of 0.75m as this is the maximum which can be attained due to the structure of the building. It will have a floor width of 2 m. It will have a length of 4.5 m above the existing Building 1b, and will have direct flight access in to the existing roof space above Building 1a, which is currently 0.75 m x 10 m, giving an overall roof space size of 0.75 m height, 15 m length and 2 m width.

There will be 6 tile access points into the roof space (2 on north-west side and 4 on south-east side), one access point into the roof space via a slot in the top of the north-east gable wall and five ridge tile access points to allow bats to roost under ridge tiles. The roof space will be lined with traditional bitumen underfelt throughout.

Untreated rough-sawn planks will be installed either side of the ridge beam to create crevices for roosting bats.

An existing roost site under the eaves on the south-east elevation will be available for bats to use in future by retaining an access point of at least 20 mm x 30 mm to a crevice on the wall top of at least 100 mm x 100 mm.

It is proposed that there will be 3 permanent tree bat boxes (2 x Schwegler 2FN and 1 double-chamber timber bat boxes) installed on mature trees in the garden. These will be at least 4 m high and range from south-east to south-west facing and provide alternative roosts during and after works.

E2 Capture and exclusion (If not applicable to your proposals please state 'N/A' in the relevant text boxes): Include details on:

- The methods proposed - to include timings, effort, methods (please clearly state what will be used, e.g. use of endoscopes, one way excluders, capture by hand (and state in which referenced structures), disturbance by noise or light, destructive search by soft demolition etc) and equipment to be employed.

Exclusion of Crevices:

- Erection of two Schwegler 2FN and 1 double-chambered timber bat boxes on trees in the property to provide alternative roosts during the disturbance from the works.
- Exclusion of bats to be undertaken in September and completed by early October (based on weather conditions) prior to bats entering hibernation which is possible within crevices in the barn.
- Exclusion undertaken during a forecast of several consecutive nights of good weather (dry, no high winds or frosts, overnight temperatures 8ºC+).
- The licensed ecologist will undertake an endoscope survey of all crevices and cracks inside and outside of the barn which are due to be lost. Cavities that can be thoroughly inspected and confirmed absent of bats will be immediately plugged with upholsterer's foam. If the crevice is too deep to be able to confirm absence of bats, a standard one-way exclusion device will be fitted.
- Any crevices in the walls which will form part of the roof space will be retained where structurally sound to do so.
- The one-way exclusion device as shown in the Bat Workers Manual will be a short length of pipe of 40 mm diameter, scored inside to provide grip and slightly angled downwards. An open ended firm plastic bag taped around the end of the pipe will allow bats to exit but not re-enter. The pipe will either be kept in place in the crevice by upholsterer's foam stuffed around it. If the crevice is too small, a piece of acetate film (e.g. laminating plastic or OHP sheet) will be nailed over the crevice to allow bats to exit but not re-enter.
- Any exclusion devices will remain in place for at least 5 days of suitable weather conducive to bat activity (i.e. (no heavy/continuous rain or high winds, and overnight temperatures 8ºC+). If unfavourable weather is encountered during the 5 days, the period will be extended until the weather improves. After this period, the exclusion device will be removed and the cavity blocked with upholsterer's foam or immediately re-pointed.

- Once the exclusion has been completed, the re-roofing and conversion works may commence.

Destructive search by soft-strip of roof:

- There will be a supervised soft-strip of the roof of Building 1a & 1b under supervision of the licensed ecologist. This will be completed between 1 October 2016 and 30 April 2017.
- The supervision will involve an initial tool-box talk to contractors to ensure they understand the procedures that need to be followed. This will be followed by the licensed ecologist supervising careful removal of roof tiles and roofing felt which may be used by roosting bats. Where possible, the tiles will be prised up rather than hammered. If necessary an endoscope will be used to check for bats before the tile or structure is removed, particularly in the areas where bats typically roost.
- Any bats found will be captured by hand by the licensed ecologist and transferred to a soft carrying bag. They will be immediately transferred to one of the tree bat boxes.

- Should your proposals include capture (taking) please specify numbers of each species that will be affected at the time the works are to be undertaken. Note*: this may be different in many cases to the number of bats using the roost at its optimum time as timings for works will be at a time when bats are least likely to be present.*

Expected capture: Maximum 3 brown long-eared bats and 1 common pipistrelle bat

- Weather conditions during which licensed activities will be carried out, release sites, care of bats, unexpected discovery of bats, what would be done with any injured bats found etc.

The exclusion will be carried out over several nights where the weather conditions are suitable for foraging bats, i.e. no high winds or heavy rain, night temperature over 8ºC).

If any bats are found during the licensed works not in a crevice, they will be captured by hand by the Ecologist and carefully placed into a cloth holding bag. Work will temporarily stop whilst the Ecologist transfers the bat immediately to a bat box. No other persons on site will capture or handle bats.

If a bat is found which appears injured, it will be temporarily cared for by the licensed ecologist by placing it carefully in a prepared carrying box (including breathing holes, a soft cloth and access to drinking water) and local bat carers (via Staffordshire Bat Group / BCT Bat Helpline) will be contacted.

E3 Bat roost and access point retention, modification and creation: Please detail how all impacts to each species (as identified in sections C and D) will be mitigated. If not applicable to your proposals please state 'N/A' in the relevant text boxes.

E3.1 Retention of existing roost(s) – *Works may include, for example, maintenance works that result in no material changes to the roost but may cause disturbance or temporary damage e.g. t*emporary exclusion of a roost to allow investigative and repair works to a bridge.
Provide details of all works including:

- Number and description of roosts to be retained, with an explanation of how they will be retained.

N/A

- Number of access/entrance points to be retained and how this will be achieved. If enhancements to the roosts will be provided, such as through crevice provision, please detail.

N/A

- Mitigation for any other impacts e.g. new lighting at the site.

N/A

E3.2 Modification of existing roost(s) - *Works may include, for example, reduction in roof void height, change of tiles and roof lining (stating the type of membrane that will be used), alteration of access point through replacement of soffits etc.*
Provide the following:

- Dimension details of modified roosts or access points ensuring that it is clear what the original dimensions were and what the dimensions of the modified roost will be.

The existing area of Building 1b is approximately 5 m in height, 4 m wide and 4.5 m in length. As this will be converted into living space, the area that bats can use will be restricted to a newly created roof space within this part of the building, which will be 0.75 m in height, 2 m wide and 4.5 m in length. However, there will be flight access into the existing roof space over Building 1a (giving an overall roof space for bat use of 0.75 m in height, 2 m wide and 15 m in length).
To ensure bats can use the whole length of the roof space, netting observed in the existing roof space will be removed during re-roofing.
Rough-sawn untreated timber planks will be nailed to rafters either side of the ridge board, to provide crevices for bats to roost in.

Re-roofing will be undertaken and existing tiles replaced. Traditional bitumen underfelt (Type 1F) will be used. Access points into the roof space will be provided with a minimum of:

- One horizontal slot in top of north gable wall of 100 mm x 20 mm to allow bats access directly into roof space.
- 6 tile access points (minimum 20 mm x 30 mm) - 2 on north-west side, 4 on south-east side - with a small gap cut in the roofing felt to allow bats access into the roof space.

5 ridge tile roosts by creating gaps of 20 mm x 50 mm under ridge tiles by leaving mortar out on one side. The tile will not be filled with mortar underneath, to allow a space for bats to roost underneath the tile.

An existing roost site under the south-east eaves which is currently accessed via a missing eaves brick (approx. 40 mm x 60 mm) will be retained, but the access point may be reduced to 20 mm x 30 mm if required for structural reasons.

- Details of any other modifications to be made to roosts.

N/A

- Mitigation for any impacts of lighting on the modified roost/s if appropriate.

Any security lighting on the south-east side of Building 1 a will be below first floor level, downward pointing and on a motion-timer.
Any lighting needed for health and safety on the north side of Building 1b will be at ground level rather than on the building and of low light levels (e.g. bollards / low level path lighting)

- Scale drawings of the modified roost and bat access points, orientation, location (including an 8-figure grid reference for the modified roost) – to be submitted as a Figure E2 – see below.

E3.3 New roost creation (including bat houses, cotes and bat boxes etc).

Note – creation of compensation for high impact cases (e.g. loss of a maternity roost) must be protected in the long term.
Any bat boxes or roost structures part of a licence proposal which do not show signs of bats must be retained for a minimum of 5 years from date of completion of the development/works. Typically this will be around 5 years for low conservation status roost compensation (e.g. bat boxes) and longer for other significant roosts (e.g. bat houses, lofts etc). The exact time period will be specified in any licence issued. For high conservation status roost loss, the compensation roost/s must still be protected in the long term by another means (such as a s106 agreement), which is particularly important if the structure is likely to change ownership.

Provide the following:

- New roost dimension details or features (to include bat tiles/boxes as applicable).
- Access points and size of access points.
- Location details (including an 8-figure grid reference for bat houses or bat lofts relating to the structure. 8-figure grid references are not required for positions of individual boxes, tiles etc).
- Aspect. Explain how the internal conditions of the roost will be created.
- Details of the materials to be used e.g. timber, sarking, felt etc.
- Justification for any variation from the original roost and/or deviations from recommendations in the Bat Mitigation Guidelines. (*Diagrams of widely available standard bat box designs are not required; just refer to bat box name and reference number, e.g. Schwegler 1FF*).
- Mitigation for any impacts of lighting if appropriate.
- Structures for access for monitoring / maintenance purposes (if applicable)

Bat boxes
Three bat boxes on suitable trees (2 Schwegler 2FN, 1 double-chamber timber box) which are within the garden of Sunny Bank. Installed under advice of Named Ecologist – 3 - 6 metres high, facing south-east to south-west, with no branch or leaf clutter surrounding the box. More than one box may be positioned on the same tree.

E3.4 Other habitat re-instatement or creation (e.g. retention of existing flight lines, retention or creation of appropriate vegetation around roost entrances where applicable) – please include details of:

- Habitat replacement (following works resulting in temporary impacts) or creation not covered by sections E2 to E3 such as hedgerow/woodland planting or enhancement. State the length of hedgerow planting and areas (ha) of other planting to be provided such as woodland and anticipated establishment period etc.

N/A

- Creation of flight lines/routes of connectivity.

Foraging area enhancements, etc

- Mitigation for any impacts of lighting if appropriate.

E3.5 Wider biodiversity gains:
Please indicate if enhancements, over and above what is necessary to mitigate the impact of the activity of the licence proposal, are being provided. Please indicate if enhancements are included to satisfy the requirement of a planning permission, and if so state the relevant planning condition, or other consents in your response below. Please also state if an applicant wishes to provide more than is typically required to mitigate for the impacts. Enter N/A if this is not applicable to your application.

Note: *Any licence granted will only cover mitigation and compensation required to fulfill licensing requirements, but will acknowledge additional biodiversity enhancements*.

N/A

Important Advice:
Scaled maps/plans of mitigation/compensation must be provided as separate maps/figures (also ***see section I "Map checklist" at the end of this document)***:

- **Figure E2a** to show the locations and structures where all capture and exclusion activities will be undertaken (ensure this is clearly labelled and consistent with other mandatory maps/figures).
- **Figure E2b** if non-standard capture and exclusion apparatus is proposed please include diagrams/photographs.
- **Figure E3** to show specifications for mitigation / compensation to be provided and annotate where it will be provided. Should the scheme be large or complicated it may be necessary to submit more than one figure.

NOTE: It must be possible to compare these with the survey results plan (**Figure C6**) and 'Impacts' Figure (**D)**.

E4 Post-development site safeguard: Further guidance and explanation on post-development monitoring requirements are included within our 'How to get a licence' document http://www.naturalengland.org.uk/Images/wml-g12_tcm6-4116.pdf. Also see Section 8.7 of the Bat Mitigation Guidelines.

E4.1 Habitat/site management and maintenance: Is any specific post-development habitat management and site maintenance planned? If 'No; state 'N/A'. If 'Yes' include the following:

- The period (years and months) for which habitat management and maintenance will take place. Ensure that this is consistent with the post development works detailed in section **E5b** of the **Work Schedule document, WML-A13-a-E5a&b**.

N/A

- Details of what will be undertaken in terms of site maintenance required to ensure long-term security of the affected population (e.g. maintain, repair or reinstate access points; maintain and repair heaters and /or data loggers; maintain, repair or restore bat feature / bat loft in good condition; repair or replace inspection hatches; management and maintenance of lighting regime, or bat boxes etc).

- Details of what will be undertaken in terms of habitat management (e.g. planting cover around roost structure, hedgerow management regime, checking establishment of habitat creation; reduction of shade around roosts, woodland management to maintain species and structural diversity etc). Ensure this relates to the relevant map.

Note – for phased or multi-plot developments a separate habitat management and maintenance plan is required, which must be submitted with the master plan: see guidance on phased developments.

Important Advice:
Please include **Figure E4** as a separate figure to show which structures and habitats will be managed, maintained and monitored post development as part of your proposal – also *see section I "Map checklist" at the end of this document)*.

E4.2 Population monitoring, roost usage etc: This should be in line with the monitoring requirements detailed in the Bat Mitigation Guidelines section 8.7 and Figure 4, and, where required, should include details of:

- Timing – state the years and months post development monitoring or other will be undertaken. Ensure that is consistent with the post development works detailed in section **E5b** of the **Work Schedule document WML-A13-a-E5a&b**.

N/A

- The type of monitoring which will be undertaken – include survey methods and equipment to be used. If it is expected any bats are to be taken or disturbed during this period please state anticipated numbers per species against each licensable activity.

- Specify which compensation/mitigation measures will be subject to monitoring (as referenced on Figure E4).

Please include a commitment to undertake remedial action in your Method Statement should monitoring identify that further management/maintenance is required of any compensation/mitigation provided, to ensure that mitigation/compensation measures are working effectively and are fit for purpose.

Important advice: Please always consider whether any *post development* monitoring effort should be staggered over alternate years in cases where use of the compensation measures may not occur in the same year of provision.

E4.3 Mechanism for ensuring safeguard of mitigation/compensation and post-development management, maintenance and monitoring works:
Please explain what mechanism is in place to ensure safeguard of mitigation/compensation provisions (e.g. Restrictive Covenant, clause to relinquish future development rights in S106 agreement, NERC Act agreement, explicit recognition of site in local planning documents, designation as County Wildlife Site or similar.) The need for this, and the type of mechanism, will vary with the scheme and impact. For substantial impact schemes (e.g. destruction of a significant maternity roost, or important hibernation site), some mechanism is always required. If you offer no specific mechanism, explain how you believe the population will be free of threats as far as can be reasonably determined (the expectation of the granting of a licence should not be used for this purpose).

The applicant will be given a leaflet reminding them of legal obligations in regards to the roosting bats and any future maintenance that will be required, as well as information on who to contact should further reassurance or a volunteer bat worker be required.

Explain how all post-development works (management, maintenance (including remedial action) and monitoring, as appropriate) will be ensured? Include a commitment that the monitoring, habitat management and maintenance work will be undertaken. Mechanism/s for ensuring delivery must be in place before applying for a licence (also see Section F).

Full information will be given to the applicant should any future repairs or work be required which may affect the bat roosts. They will be informed about the free advice of Natural England through local volunteer bat workers. This will ensure that any advice on any maintenance required, or queries regarding the bats will be easily obtainable and not deterred by cost.

E5 Timetable of works: Please complete the **work schedule document WML-A13-a-E5a&b found on the 'bat' application form web page and append to your application pack.**

Important Advice: *Please note that from end of March 2014 a separate work schedule is a mandatory requirement to support a new bat licence application when using this template.*

F Declarations

If the mitigation/compensation area/s is/are not owned by the applicant, you must have consent from the relevant land owner(s). You must have also secured details of how any measures to maintain the population in the long term will be achieved (e.g. a legal agreement).

F1 Declaration Statement(s) – You must include the following declarations within your Method Statement and include the appropriate answer (Yes/No/Not applicable):

F1.1 Re: section E1 - I confirm that relevant landowner consent/s has/have been granted to accept bats into roosts or access into roosts on land outside the applicant's ownership:

N/A

F2.2 Re: section E2 - I confirm that landownership consent/s has/have been granted to allow the creation of the proposed compensation on land outside the applicant's ownership

N/A

F2.3 Re: section E3 - I confirm that consent/s has/have been granted by the relevant landowner/s for monitoring, management and maintenance purposes on land outside the applicant's ownership

N/A

Comments if applicable:

Important Advice:

Unsecured consents statement:

If you have been unable to secure consents for any of the three declarations please explain why and detail any plans you have in place to obtain the consent(s) or provide details of any right(s) or agreement(s) that will enable the lawful implementation of the proposed mitigation, compensation and monitoring. Failure to provide the appropriate landowner consents means that the Method Statement is unlikely to meet the requirements for the FCS test to be met. It is therefore in your interest to ensure that the appropriate consents have been secured *before* applying for a licence.

G References: List any references cited, and include credits for source information.

H Annexes (supporting documents please append to your application pack)

H1 Pre-existing survey reports;

H2 Raw survey data.

I Check list of figures to be submitted with each Bat Method Statement

With your Method Statement and supporting documents please submit the following maps/figures – see table below. Note that some can be included within the Method Statement itself (if preferred) and others must be submitted individually (i.e. separate documents)**.** Maps/Figures must include the title, site name as referenced on your application form, date and figure reference. If a grid reference is more applicable (e.g. a bat house is being provided please included this). Include a scale bar (appropriate to the situation e.g. 100m on site maps, 1km on location maps) and direction of North etc.

Additional maps, photographs or diagrams should be included where necessary to adequately explain the scheme.

Figure reference	Mandatory as will be included	Mandatory for assessment	What it must show (also see details above on site reference, dating and naming).

	in the annexed licence, if applicable	purpose only, but will not be included in the annexed licence	
Figure B2.1	-	Yes, if the application is part of a phased or multi-plot development	**Master plan overview-** note – this is not the same as a master plan document, for which you should follow the guidance as stated in section B2.1.
Figure B2.2	-	Yes, if applicable	**Locations of other nearby bat licensed sites, or sites which will be impacted on by future development.**
Figure C5a	-	Yes	**Location map** at an appropriate scale for the application (often 1:50,000 or 1:25,000)
Figure C5b	-	Yes	**Survey area** showing all buildings, structures and habitats that are within the survey area and distinguishing those that were surveyed and those that were not. Indicate where surveyors were located. Aerial photographs should be provided where possible (ensure you have permission to use copy righted maps). If automated detectors were used or transect routes, ensure that these are indicated as appropriate.
Figure C6	-	Yes	**Survey results -** provide clear, annotated and cross-referenced maps/plans/photographs to show the survey results (access points, location of roosts, flight lines, results of activity surveys where DNA samples were taken etc).Ensure Figure is at a suitable scale to show the results.
Figure D	**Yes**	**-**	**Impacts plan –** map/figure to show impacts and where licensable works will take place: clearly indicate areas of structures and habitats to be impacted by the works (damage, destruction (to include habitat types if applicable), and temporary impacts, disturbance.
Figure E2a	**Yes**	**-**	**Locations and structures where all capture and exclusion activities will be undertaken** (ensure this is clearly labelled and consistent with other mandatory maps/figures).
Figure E2b	**Yes** – but only if applicable to the application	**-**	**Non-standard capture and exclusion apparatus.** If these are proposed please include diagrams/photographs.
Figure E3	**Yes**	**-**	**Specifications for mitigation / compensation** (including all dimensions for bat lofts/houses/stand-alone structures and materials to be used etc and 8-figure grid reference). Mitigation / compensation (must show all habitat creation, restoration, boxes). It may be necessary to submit more than 1 figure if the proposal is large or complicated. Any temporary features to be used to relocate bats into during capture/exclusion must also be shown and annotated accordingly.
Figure E4	**Yes** – when monitoring and maintenance will be included in the licence	**-**	**Monitoring, management and maintenance map.** Please indicate the specific structures and habitat that are to be managed, maintained and monitored as part of this licence proposal. Ensure that they are correctly referenced and are consistent with other parts of the Method Statement and figures.

Definitions of roost types to be included in the application (further detail can also be found in the Bat Mitigation Guidelines and the BCT's "Bat Surveys Good Practice Guidelines"):

a. **Day roost**: 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.

b. **Night roost**: a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.

c. **Feeding roost**: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.

d. **Transitional** / **occasional roost**: used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.

e. **Swarming site**: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites

f. **Mating sites**: sites where mating takes place from later summer and can continue through winter.

g. **Maternity roost**: where female bats give birth and raise their young to independence.

h. **Hibernation roost**: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.

i. **Satellite roost**: an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

j. Other – please explain what the roost type is if not one of the above (we recognise that roost types are interchangable and not always easy to classify according to the nuances of certain species).