Chapel House, Bronington
Bat Conservation Plan

Prepared for Ke-Design

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Revision 00

TURNSTONE ECOLOGY LIMITED

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Checked and Approved For Issue by:	Clare Knight Principal Consultant	13/08/2024

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SURVEY AND REPORT VALIDITY

It is important that planning decisions are based on up-to-date ecological reports and survey data. However, it is difficult to set a specific timeframe over which reports or survey data should be considered valid, as this will vary in different circumstances. In some cases there will be specific guidance on this (such as for the age of data which may be used to support an EPS licence application) but in circumstances where such advice does not already exist, the Chartered Institute of Ecology and Environmental Management (CIEEM) has provided the general advice set out below.

Age of Data / Survey / Report	*Validity*
Less than 12 months	Likely to be valid in most cases.
12-18 months	Likely to be valid in most cases with the following exceptions: • Where a site may offer existing or new features which could be utilised by a mobile species within a short timeframe; • Where a mobile species is present on site or in the wider area, and can create new features of relevance to the assessment; • Where country-specific or species-specific guidance dictates otherwise.
18 months to 3 years	A professional ecologist will need to undertake a site visit and then review the validity of the report. Some or all of the other ecological surveys updated.
Protected Species Licensing	Licence applications usually only possible using data less than 2 years old

The likelihood of surveys needing to be updated increases with time and is greater for mobile species or in circumstances where the habitat or its management has changed significantly since the surveys were undertaken. Factors to be considered include (but are not limited to):

- Whether the site supports, or may support, a mobile species which could have moved on to site, or changed its distribution within a site;
- Whether there have been significant changes to the habitats present (and/or the ecological conditions/functions/ecosystem functioning upon which they are dependent) since the surveys were undertaken, including through changes to site management;
- Whether the local distribution of a species in the wider area around a site has changed (or knowledge of it increased), increasing the likelihood of its presence.

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1 INTRODUCTION

1.1 General

This Bat Conservation Plan has been produced to comply with a planning condition related to renovation and improvement works at Chapel House, Bronington, Shropshire (OS Grid Location SJ 494 408).

The proposed development site is located adjacent to the main Wrexham to Whitchurch A525 road, approximately 3.5 km west of Whitchurch town centre (*Figure* 1). The site comprises an unoccupied Grade II listed converted Methodist Chapel, known as Chapel House with associated garden and paved areas (*Figure* 2).

The proposed development site is bordered by Leylandii hedgerows to the east and west, fence line overlooking an agricultural field to the south and open to the main road to the north. The wider landscape is dominated by agricultural fields, woodland pockets and scattered residential houses and farms.

The proposals include the renovation of the Chapel including replacement windows and doors, internal alterations, works to repair the existing roof and wall tops, and new patio and paving along the western side of the building. External landscaping works will be carried out, once the works to the Chapel have been completed.

The planning reference number is P/2023/0143 and the approved development proposals are shown in *Figures 3 & 4.*

A Preliminary Roost Assessment was completed on 26th July 2022 and bat activity surveys were completed between July and September 2022. An updated bat activity survey was completed in July 2024.

All surveys were completed by Turnstone Ecology Ltd *(Report Reference: TT3507 -Chapel House, Bronington-R01-Bat Report-Rev01-Final).*

Figure 1. Location of proposed development

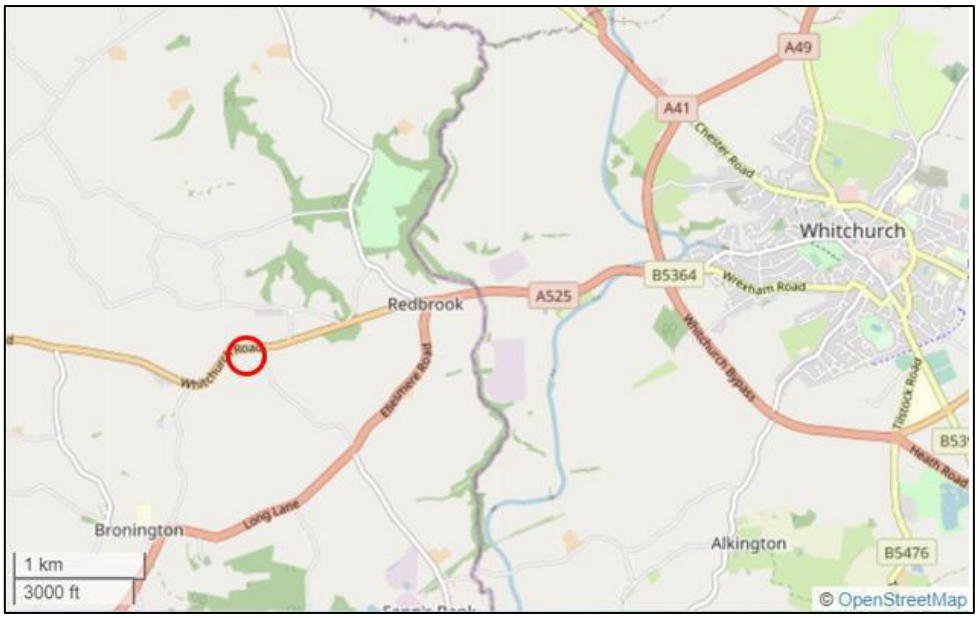


Figure 2. Location of development site and surrounding landscape



Figure 3. Approved development plans for Chapel House, Bronington (northern and eastern elevations)

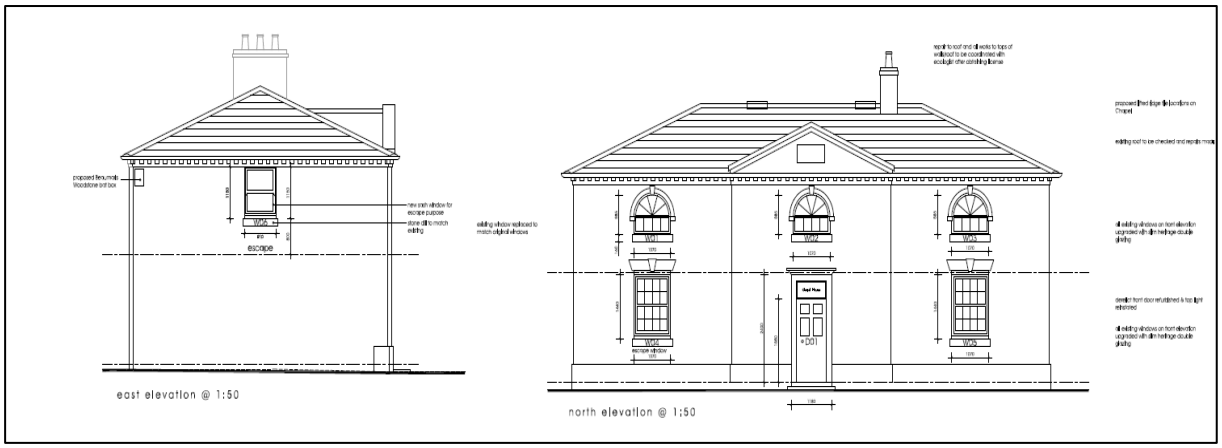
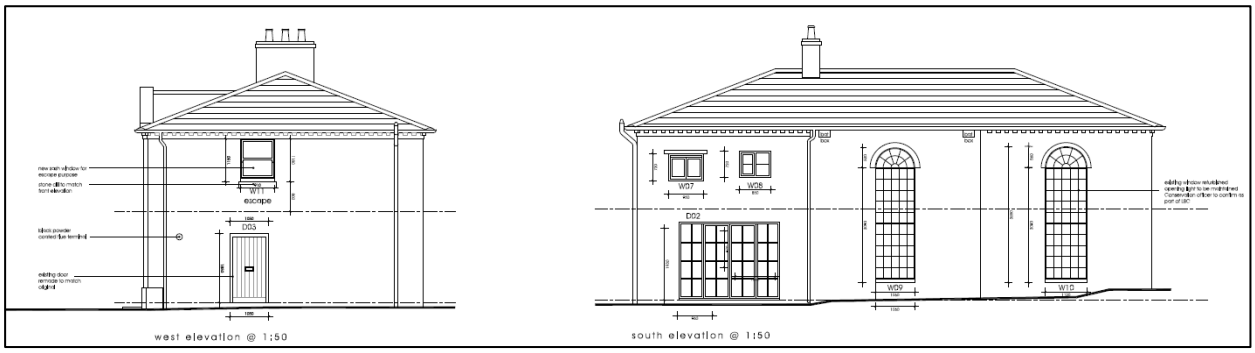


Figure 4. Approved development plans for Chapel House, Bronington (western and southern elevations)



1.2 Purpose of the Report

This document specifically relates to a Bat Conservation Plan requested by Wrexham Borough Council within their condition of discharge notice document (P/2023/0143) issued on 27th September 2023. The ecology related conditions are detailed below:

- *Condition 5: No part of the development shall commence until full details of a Bat Method Statement have been submitted to and approved in writing by the Local Planning Authority. The report shall include an Ecological Method Statement demonstrating and identifying any measures of protection, compensation and mitigation, timescales, licensing requirements for undertaking work, management and maintenance prescriptions for the short and long term, persons responsible for undertaking maintenance and management actions and details of an Ecological Compliance Audit. The recommendations as approved shall be implemented in strict accordance with timescales to be submitted and agreed in writing before any part of the development commences on site.*

- *Condition 6: No development shall commence until a detailed lighting scheme, including plans, that considers existing and proposed external lighting as well as any spillage originating from internal locations has been submitted to and approved in writing by the Local Planning Authority.*

The scheme shall include:

- *Details of existing lighting and lighting to be used during and post-construction;*
- *Plans illustrating the location and type of existing and proposed external lighting;*
- *Plans illustrating projected or retained bat emergence points from existing and proposed roots, along with retained or proposed features planned for bats' functional use in foraging/dispersal purposes;*
- *Ecological compliance audit external lighting key performance indicators;*
- *Post-construction light monitoring.*
- *Provisions of the lighting scheme shall accord with the provisions of the Institution of Lighting Professionals and Bat Conservation Trust: Guidance Note 08/18: Bats and Artificial Lighting in the UK.*

The lighting shall be installed and retained as approved during construction and for the lifetime of the development in accordance with the approved Lighting Plan.

The reasons for the conditions listed above are given below:

- *To protect the favourable conservation status of protected bat species.*
- *To ensure the favourable conservation status of protected bat species.*
- *In the interest of preserving ecological interests.*

The Bat Conservation Plan will include information on the following:

- Submission of further details including plans for proposed bat roost retention, enhancement or compensation measures;
- Details of timing, phasing and duration of construction activities and conservation measures;
- Management plan for bats that considers, aims and objectives; maintenance and management requirements; tenure and any proposed changes to tenure, and surveillance/monitoring;
- Timetable for implementation of the Bat Mitigation measures to demonstrate that works are aligned with the proposed phasing of the development;
- Ecological Compliance Audit, including key performance indicators;
- Persons responsible for implementing the works;
- Post-construction monitoring timetable and record dissemination to Local Records Centre; and
- Further details concerning external lighting scheme. We advise that proposals accord with the Bats and artificial lighting in the UK Guidance Note 08/18 published in partnership with the Institute of Lighting Professionals (ILP) and the Bat Conservation Trust (BCT), 2023.

This Bat Conservation Plan therefore contains information to satisfy the above further ecological information request and Conditions 5 & 6 listed within the decision notice. The plan uses a variety of information provided in the planning application, including the Turnstone Ecology Bat Report issued in October 2022 *(Report Reference: TT3507 -Chapel House, Bronington-R01-Bat Report-Rev01-Final).*

2 SURVEY RESULTS AND IMPACTS

2.1 Summary of Survey Results

Suitable roosting features around the Chapel building include gaps around the wall tops where the roof tiles have lifted from the brick, holes in the brickwork at the rear of the property where an old extension has been demolished, a gap above the front door frame on the northern aspect of the building and a broken window on the first-floor of the Chapel overlooking the staircase which was large enough to allow access into the property for bats. There are also several lifted and missing roof tiles, gaps where the lead flashing around the chimney has lifted and gaps within the brick work of the chimney where the chimney has moved over time.

There were no bat droppings recorded within the loft space of the Chapel with cobwebs observed along the wall top inside the loft, however due to the limited access available into the loft space and the gaps noted around the chimney, gaps where tiles have slipped and gaps along the wall tops Chapel House offers roosting areas for bat species with access easily possible for bats into the loft space and wall tops.

Based on the observed roosting features in and around the Chapel and surrounding habitats, the Chapel was considered to have a *Moderate- High* potential for roosting bats .

A total of two dawn re-entry surveys and a single dusk emergence survey were completed on site in suitable weather conditions between July and September 2022. An updated dusk emergence survey was carried out in July 2024. A summary of the results of these surveys and locations of roosting and/or emerging bats are shown in Plates 1 & 2.

Dawn return survey – 29th July, sunrise at 05:24

- No bats re-entered the Chapel or outhouse building.

Dawn return survey – 19th August, sunrise at 05:58

- One Myotis spp. appeared to re-enter at the wall top between the brick and tiles on the north-western corner of the Chapel at 04:57 *(Plate 1)*

Dusk emergence survey – 7th September, sunset at 19:45

- One Myotis spp. emerged from under a loose tile on the northern elevation of the Chapel at 20:25 *(Plate 1)*

Foraging and commuting Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared Bat, Brandt's Bat *(Myotis brandtii),* likely Daubenton's Bat *(Myotis daubentonii)* and high passes of Noctule *(Nyctalus noctula)* were recorded over site during the surveys with highest foraging activity recorded along the eastern and western boundary hedgerow lines.

Plate 1. Location of emerging Myotis sp. during September dusk survey (red circle) and re-entry location of Myotis sp. during August dawn survey (yellow arrow)



Dusk emergence survey – 8th July 2024, sunset at 21:35

- **One *Whiskered Bat (Myotis mystacinus)***emerged from the barge board above the drainpipe on the southern elevation of the Chapel at 22:09 (*Plate 2*)

Foraging and commuting Common Pipistrelle, Soprano Pipistrelle, Myotis sp. and high passes of Noctule were recorded over site during the surveys.

Plate 2. Location of emerging Whiskered Bat. during July dusk survey (yellow circle)



2.2 Impacts

Based on the results of the Preliminary Roost Assessment and Bat Activity Surveys, the dwelling was found to support two day roosts of individual Myotis spp. and one day roost of an individual Whiskered Bat. The proposed roof repairs, renovations and remodelling works would therefore cause the loss or disturbance of three day roosts and/or injuring/killing of up to three Myotis spp. bats.

The Bat Activity Surveys were undertaken during the maternity period and when maternity roosts would be evident if present. No large accumulations of fresh droppings were found within the loft space and the activity across site was of small numbers (<5 individuals) which does not suggest maternity colonies of bats are present in areas affected by the proposals.

Based on call recordings and the most likely species of Myotis species to occur on site and roost within a wall top or under loose tiles at the wall top are Whiskered Bat *(Myotis mystacinus),* Brandt's Bat *(Myotis brandtii)* or Daubenton's Bat *(Myotis daubentonii).* Myotis species such as Brandt's and Whiskered Bats are uncommon bats in Wales with approximately 7000 and 8000 individuals estimated to be present respectively, although they are thought to be under-recorded. The British pre-breeding population of Daubenton's Bat was estimated at 150,000 in 1995 (15,000 in Wales)11. For the purpose of this project these species are considered to be rarer on a regional scale and in accordance with the Bat Mitigation Guidelines the requirement for mitigation for individual numbers of the Myotis bat species includes;

- Provision of new roost facilities where possible. Need not be exactly like-for-like, but should be suitable, based on species' requirements; and
- Minimal timing constraints.

3 MITIGATION AND ENHANCEMENT

3.1.1 Aims and Objectives

The aims and objectives are to ensure that bats are not negatively impacted by the proposals and maintain the long-term functionality of the existing roosts at Chapel House, Bronington by replacing lost roosts and retaining any roosts that are unaffected by the development works; as well as enhance the Chapel building post-works for roosting bats. The proposed mitigation and compensation measures detailed within this plan should ensure these aims and objectives are met.

3.1.2 Timings of Works

Licensed works including the exclusion of bat access features will be undertaken following receipt of the Bat Mitigation Licence (BML) from Natural Resources Wales (NRW) between September 2024 and September 2025. The works to the roof and wall top regions are estimated to take eight to twelve months. No constraints are required for avoiding the maternity period, as such if the licence is delayed works will still commence upon receipt of the licence.

3.1.3 Mitigation and Compensation Measures

Destruction and/or disturbance of bat roosts can only occur under the Bat Mitigation Licence obtained from NRW, which will include an agreed safe working methods and mitigation plan. The methods will include;

- Works to commence following receipt of a Bat Mitigation Licence from Natural Resources Wales (NRW).
- Works affecting roosting locations to be undertaken when overnight temperatures consistently above 9°C.
- Prior to the start of works a suitably qualified ecologist will deliver a toolbox talk to contractors and staff on site, informing them of the likelihood of encountering bats, what to do if they find bats and give a brief overview of the licence documents.
- Provision of roosting locations for the duration of works with three Schwegler 2F (or equivalent) bat boxes erected on retained boundary trees along the southern/western boundaries of the property, within the ownership boundary *(Figure 5)*. The bat boxes will be retained and maintained for the lifetime of the development.
- A wooden bird box will be placed adjacent to each of the bat boxes to help ensure the bat boxes remain open for use by bats.
- Checking by a licenced ecologist of all known and potential roosting locations. If the entirety of a feature can be searched and found to be empty, it will be blocked using newspaper or expanding foam. If the feature cannot be fully searched, or is found to be supporting a roosting bat, it will be excluded using folded acetate or similar to allow bats to leave the feature but not re-enter. If exclusions are used, they will be left in place for a minimum of five nights of suitable weather conditions (above 8°c). Following this they will be permanently filled using the same methods as above.
- Roof stripping and repair works, any removal or alteration of lead flashing or tiles will be completed under the watching brief of a licenced ecologist, with the roof tiles being

removed/replaced or repaired carefully by hand. As the wall tops are key roosting features any works around the wall tops will also be completed under the watching brief of the licenced ecologist. The location of the scaffolding will need to be confirmed in advance, by the licenced ecologist to ensure access points are not blocked by scaffolding.

- If a bat is found during works, they will be caught by a licensed ecologist who will be wearing suitable gloves. The bat will be placed into a cloth bag and carefully placed into the previously erected bat box.
- No scaffolding to be erected over suitable access points for roosting bats until features have been checked, filled or excluded – the licenced ecologist will confirm suitable locations for scaffolding and highlight roosting areas to be avoided.
- Where possible, features used by bats will be retained or recreated with the roost at the wall top on the northern corner of the Chapel and the roost at the drainpipe on the southern aspect of the Chapel being retained post-development, some disturbance will occur during the construction phase and temporary exclusion whilst scaffolding is up may be required.
- If roosting features are to be lost then these must be replaced with similar features during the renovation and remodelling phase of the project.
- Additional simple roosting features will also be created by incorporating at least two bat tiles into the Chapel roof and two Beaumaris Woodstone Bat Boxes (or equivalent) onto the southern aspect of the Chapel (Figures 6 & 7).
- Breathable roofing membranes (BRM) must not be used in the construction of the new extension where roosting features could be created due to issues with bat entanglement and reduced membrane performance if used in areas of bat use. 1F bitumastic felt should be used instead.
- Dry ridge systems must not be used, a traditional mortar ridge will be used instead due to issues with bat entanglement.
- Where bat boxes and/or roost features are positioned above windows a cowl should be incorporated above the window to deflect light spill down and away from the bat box/roosting feature.
- No lighting directed on known, potential or newly created bat roost access points and roosting features and only movement activated timed security lighting used outside of potential and known roosting locations.

Figure 5. Proposed bat and bird box locations on mature trees to the west and south of the site (blue stars =Schwegler 2F, or equivalent, and bird nest boxes).

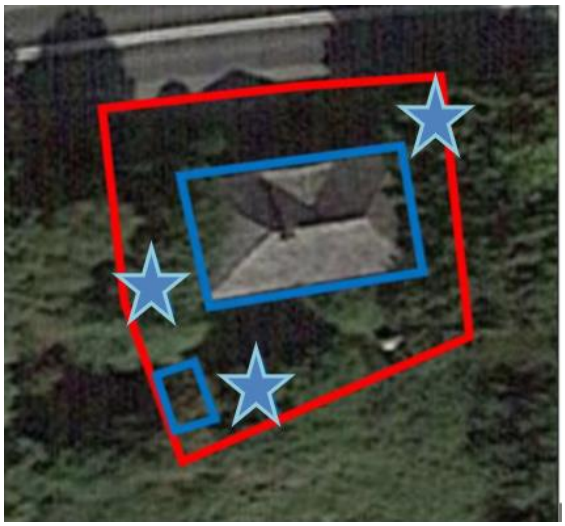


Figure 6. Proposed Beaumaris Woodstone bat box locations on Chapel (red rectangle)

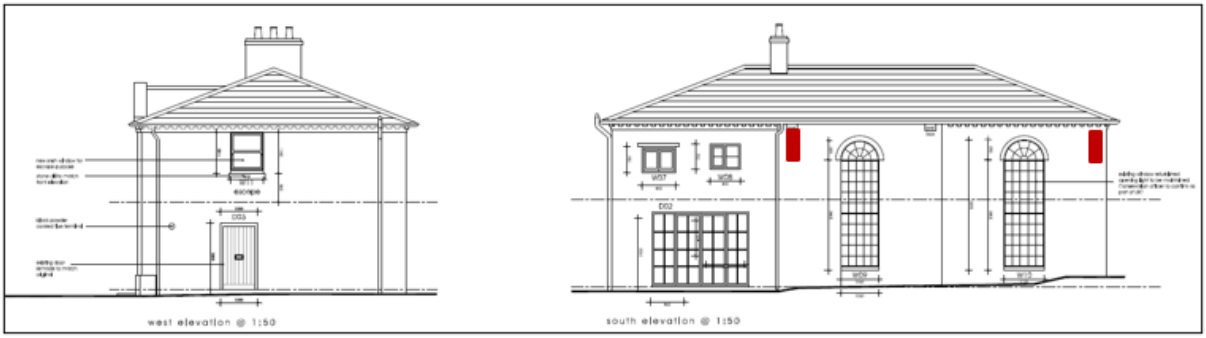


Figure 7. Proposed lifted ridge tile locations on Chapel (green rectangles)

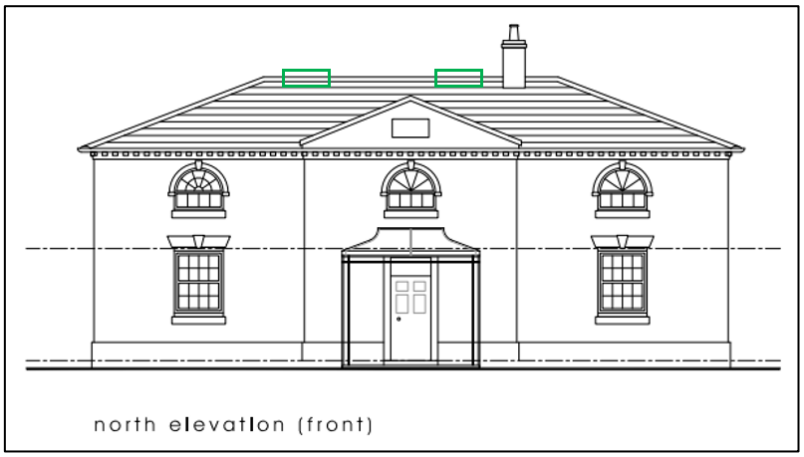
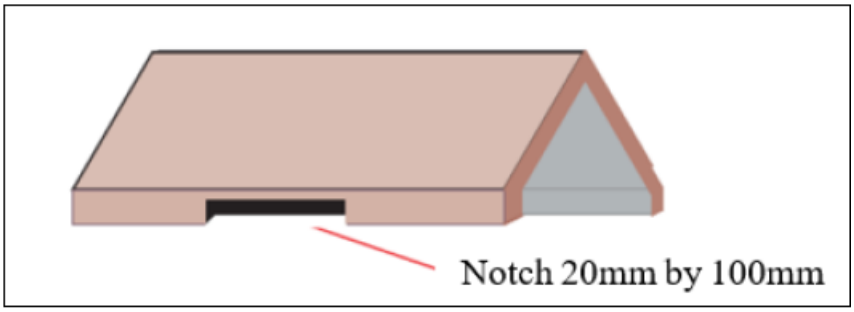


Figure 8. Creation of access and roosting opportunities under lifted ridge tiles in new roof



4 MONITORING

4.1.1 Ecological Compliance Audit

Following completion of the construction works a site visit will be completed by the licensed Ecologist, or agent thereof, to complete an Ecological Compliance Audit which will confirm all mitigation and enhancement features have been correctly incorporated into the property.

Should any mitigation and enhancement measures not have been correctly implemented this will be highlighted to the site owner during the audit and a follow up visit will be required once all mitigation and enhancement measures have been correctly incorporated.

This site visit will take place between April and November 2025 depending on the progress of works.

4.1.2 Post-construction Monitoring

Post-development monitoring is not required for this site given the roosts are of small numbers of common bat species and as per the Bat Mitigation Guidelines no long-term monitoring surveys are required once development works have been completed and the ecological compliance audit has been undertaken by the project Ecologist. The licence return will be completed and returned to NRW once works have finished.

4.1.3 Post development mitigation contingencies and key performance indicators

Access will be retained to allow any appropriate modification to roosting and access features and additional/alternative roosting features can easily be added to external walls of the dwelling or boundary trees under the same site ownership.

All works have been agreed by the owner of the property and maintenance and the site ownership will not change post-development.

4.1.4 Site records

All pre-construction survey records of roosting will be provided to the Local Records Centre (www.cofnod.org.uk).

5 LIGHTING

All external lighting it will be positioned no higher than the top of the ground-floor level / well away from bat access features and comprise of a 20W LED hooded downlighter operated by an internal switch, and activated externally by motion detection, with automatic cut-off.

The retained boundary tree lines to the east and the west of the Chapel will remain unlit during and post-works between the hours of sunset and sunrise as these are key foraging and commuting routes for bats locally. Any construction lighting is to be focused away from these boundary tree lines.

6 TIMETABLE OF WORKS

Works will start on receipt of a Bat Mitigation Licence from Natural Resources Wales, which is anticipated to be September 2024. Roost destruction and disturbance to be completed under licence following a pre-works check and under watching brief by a licensed ecologist and will take place during suitable weather conditions (temperatures above 9ºC).

Proposed Works	**Date**
Bat Mitigation Licence application	July/August 2024
Three Schwegler 2F bat boxes (or equivalent), erected on retained boundary trees	August/September 2024
Pre-works check, exclusion of features and watching brief of removal/repair/replacement of roof tiles, lead flashing around chimneys and works to wall top roosting features during a period of consistent daytime temperatures at or above 9°C but outside the maternity season (mid-May to August, inclusive)	September 2024 to May 2025
Roof repairs to include two lifted ridge tiles in the new roof and crevice roosting features on the southern and western aspects of the Chapel	September 2024 to October 2025
Site visit to check progress of works and ensure mitigation is being incorporated	November 2024 to July 2025
Following completion of construction works, access to be recreated at wall tops on western and southern elevations.	April 2025 to September 2025
Post works monitoring/sign-off visit to involve checks of all mitigation	April to December 2025

7 RESPONSIBLE PERSONS

The site owner and developer, Kerry Grootveld will be legally responsible for the implementation of this bat conservation plan and will do so with the assistance of Turnstone Ecology Ltd, or an alternative suitably experienced and bat licensed ecologist. All ecological mitigation, enhancements and future monitoring and management have been agreed and will be funded and completed in full by the site owner.

Legal Responsibility	**Persons Responsible**	**Contact Details (email address and phone number)**	**Signature**
Compliance with legal consents relating to nature conservation	Kerry Grootveld	k.grootveld@icloud.com	
Compliance with planning conditions relating to nature conservation	Kerry Grootveld	k.grootveld@icloud.com	
Implementation of sensitive working practices during construction	Kerry Grootveld	k.grootveld@icloud.com	
Regular monitoring of working practices during construction	Kerry Grootveld	k.grootveld@icloud.com	
Provision of training and information about the importance of 'Wildlife Protection Zones' to all construction personnel on site and watching brief in relation to bats and the licencing requirements	Turnstone Ecology Ltd, or alternative suitably experienced and bat licensed Ecologist to be appointed by Kerry Grootveld	jbutler@turnstoneecology.co.uk	

8 ECOLOGICAL CONTACTS

In the event of a bat being found on site during any stage of the works where the Ecologist is not already present on site, please contact the lead Ecologist. If the ecologist is not available, please work your way down the following list:

1. Jenny Butler (Lead Ecologist) – 07391 820315
2. Clare Knight – 07825908531
3. Stephen Wilson - 07766 388847
4. Simon Parker – 07766 088846
5. Tristan Evans – 07766 388837

LEGAL PROTECTION

All species of British bat are protected by The Wildlife and Countryside Act 1981 (as amended) extended by the Countryside and Rights of Way Act 2000. This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst is occupies a bat roost.

Bats are also listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats in such a way as to be likely to (a) impair their ability to: (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or b), to affect significantly the local distribution or abundance of the species to which they belong; and
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present.

Where it is necessary to carry out an action that could result in an offence under the regulations protecting bats and their roosts it is possible to apply for Mitigation Licence from Natural England (NE) or Natural Resources Wales (NRW). Three tests must be satisfied before this licence (to permit otherwise prohibited acts) can be issued:

- Regulation 55(1)(a) states that licences may be granted to "preserve public health or public safety or 55(6)(a) other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment."
- Regulation 55(2) and 55(7)(a) states that a licence may not be granted unless "there is no satisfactory alternative".
- Regulation 55(7)(b) states that a licence, in respect of imperative reasons of overring public interest (IROPI), cannot be issued unless the action proposed "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range".