



9 SHERBOURNE AVENUE; BAT AND NESTING BIRD SURVEYS

DATE	ECOLOGIST	APPROVED	VERSION	COMMENTS
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Executive Summary

Site	9 Sherbourne Avenue, Bradley, Wrexham, LL11 4AZ Approx. OS Grid Ref: SJ3245653648
Surveyors	Keymar Wake and Ashley Payne
Proposed work	The conversion of an existing dwelling to a larger, passive-house property via alterations and extensions.
Area/structures affected	A single- storey bungalow
Type of survey	Bats - Preliminary Roost Assessment (PRA) and Emergence Survey (19/07/2022) Birds – Nesting Bird Survey
Main results of survey	• The building had several Potential Roosting Features (PRF's) for bats, primarily underneath the wavy concrete tiles, though they were generally considered quite shallow and exposed. • No droppings or other evidence of bats was found around or within the building. • No bats emerged from the building during the emergence survey. There was a small amount of activity around the site by commuting noctules and a passing soprano pipistrelle. • There were possible house martin nest remnants on the south eastern gable.
Survey conclusions	• The site is considered to have low potential for bats. Bats were not found to be roosting within the building so no licence is required for the works. • There is bat activity within the area so Reasonable Avoidance Measures (RAMs) must be followed at all times to reduce risk and disturbance to bats and other species. • To comply with the Environment (Wales) Act 2016 Section 6, the site will be enhanced for bats and nesting birds.
RAMs and Mitigation	• Destructive works should ideally be constrained by the nesting bird season, but can be carried out at any time with regards to bats; lighting advice has been provided to prevent disturbance to bats in the area • A nesting bird check will be required if the destructive works (e.g. roof strip) are carried out within the nesting bird season. • The roof should be stripped by hand and with caution. • The existing hedgerow should be retained. • Bat and bird boxes will be integrated within the converted building. • Reasonable Avoidance Measures will be implemented at all times.

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1.0 Introduction

- 1.1 Enfys Ecology Limited were commissioned by homeowner Jenni Pratt, to carry out a Preliminary Roost Assessment (PRA) and dusk emergence survey for bats of 9 Sherbourne Avenue, Bradley, Wrexham. The proposed works involve the conversion of an existing bungalow into a two-storey passive-house through internal alterations and external extensions of the current building footprint.
- 1.2 The surveys were commissioned to determine whether the proposed works would affect protected species, specifically bats and nesting birds. The survey work to inform this report was carried out in July 2022. This report is valid for a period of 18 months from this date in accordance with best practice.
- 1.3 All British bats (and roost sites) are protected under the Wildlife and Countryside Act 1981 (as amended). In addition, all bats are classified as European Protected species by The Conservation of Habitats and Species Regulations 2017 (as amended). Under this legislation, it is an offence to kill, injure or disturb a bat, or to destroy any place used as a shelter by bats.
- 1.4 All birds (and their nests) are legally protected under the Wildlife and Countryside Act 1981 (as amended) and it is an offence to intentionally take, damage or destroy the nest of any wild bird while it is in use or being built (as well as kill or injure wild birds of their eggs).
- 1.5 Should evidence of bats be found and it is deemed likely that the proposed works will disturb them, a licence from Natural Resources Wales (NRW) must be obtained before any work may proceed.

2.0 Site Description

2.1 Survey Area

- 2.1.1 The site was located to the south of the village of Bradley, within Wrexham County Borough. The site comprised a single-storey bungalow surrounded by a garden of hard-standing, gravel and rubble, with ephemeral vegetation establishing. The garden was bordered by a hedgerow to the east and fencing to the west. The site was immediately surrounded by other residential buildings and gardens to the north, west and south, and pasture fields to the east. There was a block of woodland less than 100m to the south of the site, connected by the boundary hedgerow, and a pond 100m south east in the neighbouring pasture field. There were scattered trees and hedgerows within the surrounding gardens and along road sides which joined the block of woodland to the south, and further woodland to the north west of the site. The survey area is shown in Figure 2.1.



FIGURE 2.1: THE SITE AND SURVEYED GARAGES (RED)

BASE IMAGE © GOOGLE MAPS 2022

2.1.2 The wider landscape was a combination of rural pasture fields and residential and commercial estates. There were several large blocks of woodland within 1km of the site, to the north, east and south, that were connected through scattered tree lines and hedgerows. There were several villages and towns surrounding the site, including Gwersyllt, Llay and Gresford all within 3km that contributed to the Wrexham County Boroughs. The Afon Alyn flowed approx. 500m east of the site, connecting blocks of woodlands to the north and south. The wider area around the survey boundary is shown in Figure 2.2.



FIGURE 2.2: THE WIDER LANDSCAPE - THE SURVEY SITE IS SHOWN BY RED STAR
BASE IMAGE © GOOGLE MAPS 2022

2.2 *Designated and Notable Sites*

- 2.2.1 There were no statutory designated sites within a 1km radius of the survey area. There were three Wildlife Sites (WS) and a Local Nature Reserve (LNR) within 1km; the closest being the Woodlands and Fishpond Wood WS, less than 150m to the south and west of the survey area, designated for its wetland habitats. There were no sites designated for bats within 2km of the survey area.

3.0 Methodology

3.1 *Preliminary Roost Assessment*

- 3.1.1 The building was assessed for any signs of bats; these include droppings, feeding remains, and other indicative marks, plus features of potential use to bats such as crevices, cracks and other holes, and any potential access points into the building. High powered torches were used to inspect any identified features, and an endoscope was used to investigate any gaps or crevices, where appropriate. Both the exterior and interior of the building were examined.

3.2 *Survey Details*

- 3.2.1 The external and internal building inspections were carried out on the 19th July 2022 by Keymar Wake (Bat Licence S091201/1) and Ashley Payne. Potential roost assessments were carried out following the guidelines set by the Bat Conservation Trust, 'Bat Surveys – Good Practice Guidelines' (Collins, 2016). Photographic evidence was taken where necessary.

3.3 *Dusk Emergence Survey*

- 3.3.1 The building was monitored by two surveyors, positioned to be able to observe all sides of the buildings, using Anabat scout detectors. Records were taken of any bats observed emerging from the buildings, and of any other bat activity taking place in the area during the survey. The survey began approximately half an hour before sunset and continued for 90 minutes after sunset.

3.4 *Limitations*

- 3.4.1 Internal works had already commenced on the building, and the majority of the upper floors and ceilings had been removed prior to the surveys, leaving the roof void exposed. Therefore, it is not possible to comment on the suitability, or the use of, the building by bats prior to these works commencing. This report assesses the suitability of the building as at the time of survey, however, mitigation has been designed on the assumption that the building could have been suitable for bats before the works began.
- 3.4.2 Bats are highly mobile animals and it is possible that they may move into a building after the survey has occurred. Therefore, absence of bats cannot be absolutely guaranteed. The surveys were carried out in July 2022, which is within the appropriate survey window for building survey as per the 2016 bat survey guidelines (Collins, 2016).

4.0 **Survey Results: Preliminary Roost Assessment and Emergence Survey**

4.1 *Building Descriptions*

- 4.1.1 The building proposed for conversion was a single-storey bungalow with a conservatory off the north eastern elevation. The internal conversion works had already commenced at the bungalow prior to the survey being carried out. The basic layout of the buildings is shown in Figure 4.1 and the details of the external and internal areas (where applicable) are described in Table 4.1.

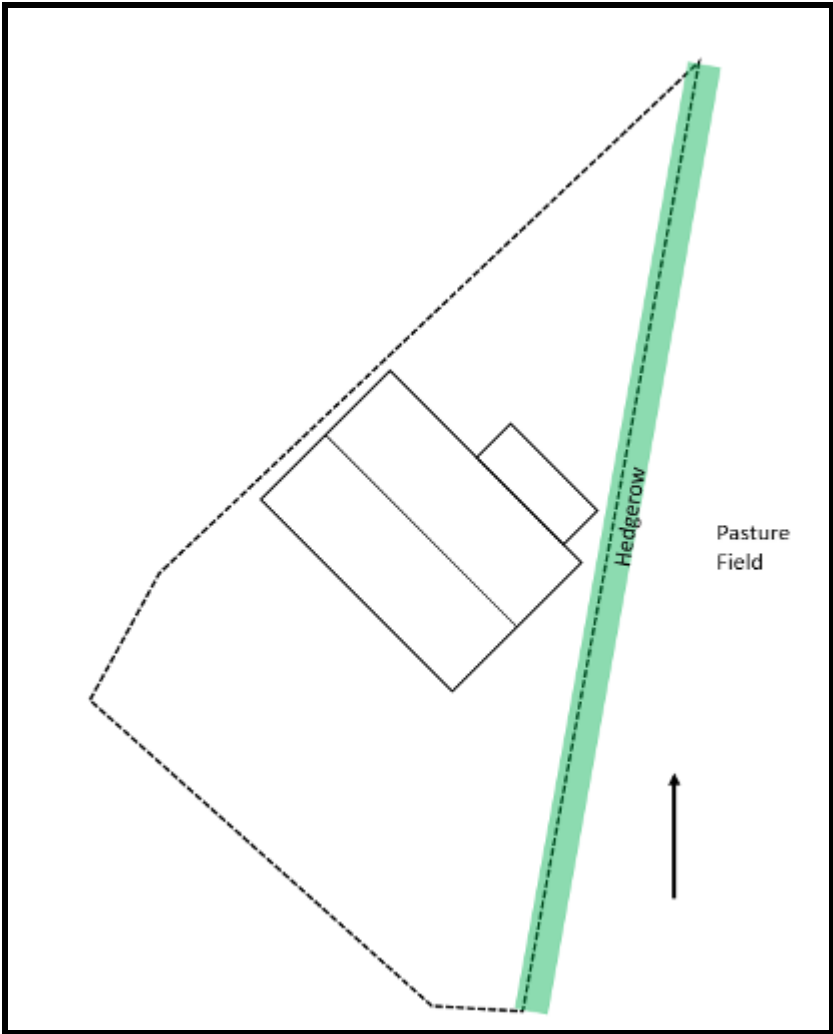


FIGURE 4.1: BASIC PLAN OF SITE (NOT TO SCALE)

TABLE 4.1: BUILDING DESCRIPTIONS

Bungalow – Approx. 12m x 8m x 5m high			
External Description	External Photo	Internal Description	Internal Photo
The walls were breezeblock, brick and render, with natural stone cladding over the south western elevation. The roof was pitched with wavy concrete tiles and one chimney towards the eastern end of the roof and a skylight on the western corner. There was a plastic framed, glass conservatory on the north eastern elevation, with a single pitch, plastic roof. The fascias, soffits, doors and windows were all plastic and well-sealed.	SOUTH WESTERN AND EASTERN ELEVATIONS 	Internal conversion works had commenced and the building had been stripped internally. The ceiling had been removed in most areas so the roof void was exposed. The walls were plastered and well-sealed. The roof had a wooden frame and was lined with felt. There was one small area of the loft floor left intact, which was boarded but open to the ground floor at the edges. The internal gables of the roof were exposed breezeblock and there were high light levels throughout via windows and the skylight.	GROUND FLOOR - ROOF EXPOSED 
	NORTH WESTERN ELEVATION 		BOARDED LOFT AREA 

4.2 PRA Results

4.2.1 There were several potential access points and Potential Roosting Features (PRF's) for crevice dwelling bats into the building, primarily via gaps at the eaves due to the tile's wavy design; though these gaps were quite shallow and exposed and appeared to only be the depth of the bottom tile. There were limited PRF's in broken tiles and gaps in the mortar, but otherwise the building and remaining tiles was largely well sealed. There was no available access for horseshoe bats. Internally the building was light and draughty as a result of being stripped and exposed to the windows and sky lights. There were limited roosting opportunities for crevice dwelling bats within the building, aside from against the felt underneath the tiles. The majority of the ceiling/loft floor had been removed, with just a small boarded area being retained that was open to the ground floor around the edges. No evidence of bats was found anywhere inside or outside the buildings, or around the potential features. The locations of potential features for bats are shown in Figure 4.2 and are described in Table 4.2.

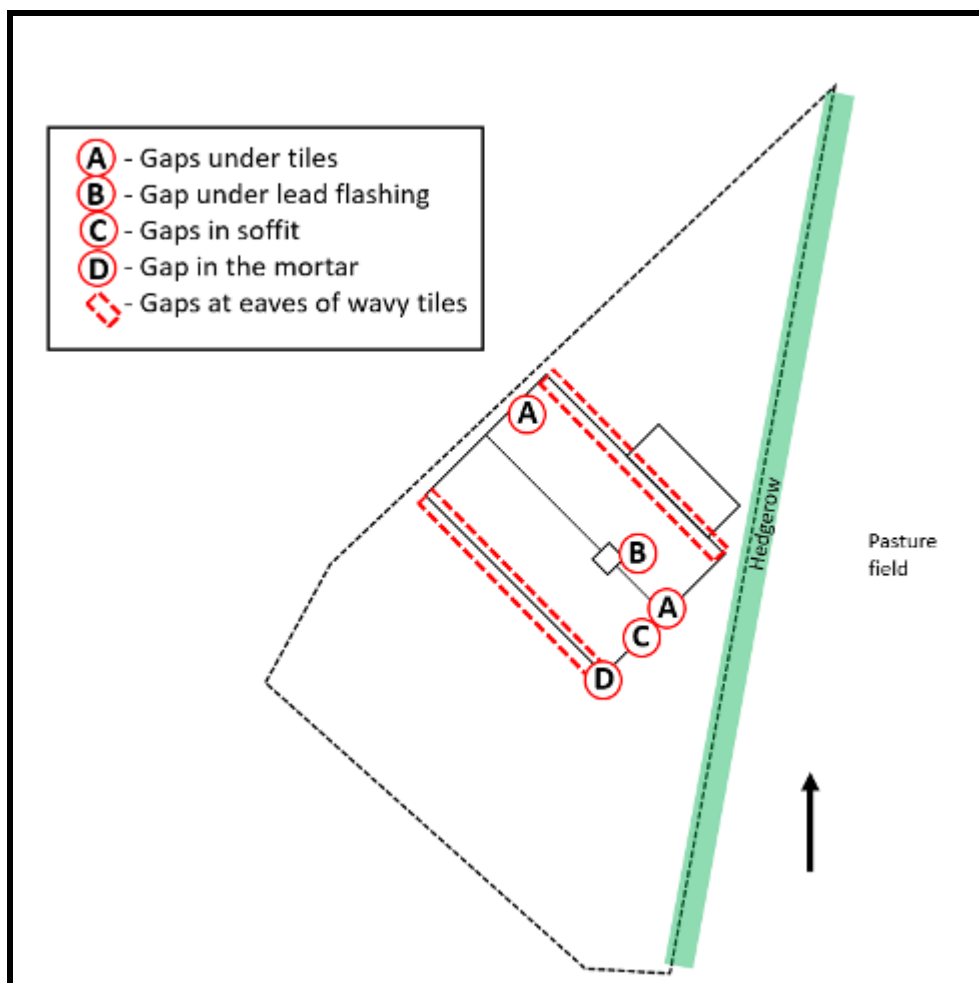


FIGURE 4.2: PLAN OF BUILDINGS (NOT TO SCALE) AND LOCATIONS OF POTENTIAL BAT FEATURES (LETTERS RELATE TO FEATURES IN TABLE 4.2 BELOW)

TABLE 4.2: POTENTIAL FEATURES FOR BATS AND BIRDS (FEATURE LETTERS REFER TO FIGURE 4.2)

Feature	Description	Example Photos
A	Gaps underneath tiles - There was a missing tile on the northern-most corner of the roof and a gap under the ridge tile on the south eastern apex.	
B	Gap under the lead flashing on the chimney	

Feature	Description	Example Photos
C	There were two narrow gaps in the soffit box on the south eastern gable. The gaps were cobwebbed over at the time of survey.	
D	Gap in the mortar on the south eastern gable – space underneath appeared to be shallow.	
E	Gaps at the eaves underneath the wavy tiles. The gaps stretched the length of the building on both elevations but appeared to be shallow (~15cm) and quite exposed as they did not appear to go further than the bottom tile of the roof pitch in the ones that could be inspected.	

4.3 Emergence Survey Results

4.3.1 As there were PRF's found in the PRA survey, and there was suitable surrounding habitat and connectivity for bats to the area, an emergence survey was carried out to determine if, what species, and how, bats were using the site. Table 4.3 provides details of the emergence surveys with timings and weather conditions.

TABLE 4.3: SUMMARY OF SURVEY DETAILS

Survey Type	Date	Start time	Sunset / sunrise time	End time	Temp. at start	Weather
Dusk Emergence	19/07/2022	20:56	21:26	22:56	26°C	<5% cloud cover, dry, no wind, warm and balmy

4.3.2 Emergence Survey

The results of the dusk emergence survey are detailed in Table 4.4.

TABLE 4.4: SUMMARY OF EMERGENCE SURVEY ACTIVITY

Time	Species	Activity	Emerge ?	Location
21:47 – First bat 22:05; 22:11; 22:35; 22:38; 22:43; 22:44	Noctule (<i>Nyctalus noctula</i>)	High flying passes	No	Over the site and the field to the east
22:25	Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	Recorded not seen	No	Recorded on detector to the south of the site
General Activity There were regular passes by noctule over the site between 21:47 and 22:44. The bats were observed commuting over the site and the adjacent field to the east. A single soprano pipistrelle pass was recorded at 22:25 on the detector to the south of the building. No bats emerged from the building and no other species of bat were heard or seen throughout the survey.				

4.4 *Nesting Birds*

There was access into the bungalow for smaller birds through the missing tile on the roof, and suitable nesting habitat within the building. No active nests or evidence of birds having entered the building was observed during the surveys. There was, what appeared to be remnants of a nest on the north eastern gable, characteristic of a house martin nest that had detached from the wall (Photo 4.1). The hedgerow along the eastern boundary provided highly suitable nesting habitat for birds.



PHOTO 4.1: POSSIBLE REMNANTS OF A HOUSE MARTIN NEST

5.0 Discussion and Evaluation

5.1 *Proposed Works*

- 5.1.1 The proposed works comprise the complete conversion and replacement of the existing bungalow and creating a larger two-storey dormer bungalow, that will act as a passive-house. The footprint of the converted building will extend further than the existing, onto the hard standing and gravel within the garden. The roof will be stripped and replaced with breathable membrane and marley modern interlocking tiles, and the walls will be extended, rendered and have ecoscape slatted cladding in areas. No vegetation is proposed to be cleared as part of the works and the existing hedgerow to the east will be retained. The proposed plans are shown in Figure 5.1.

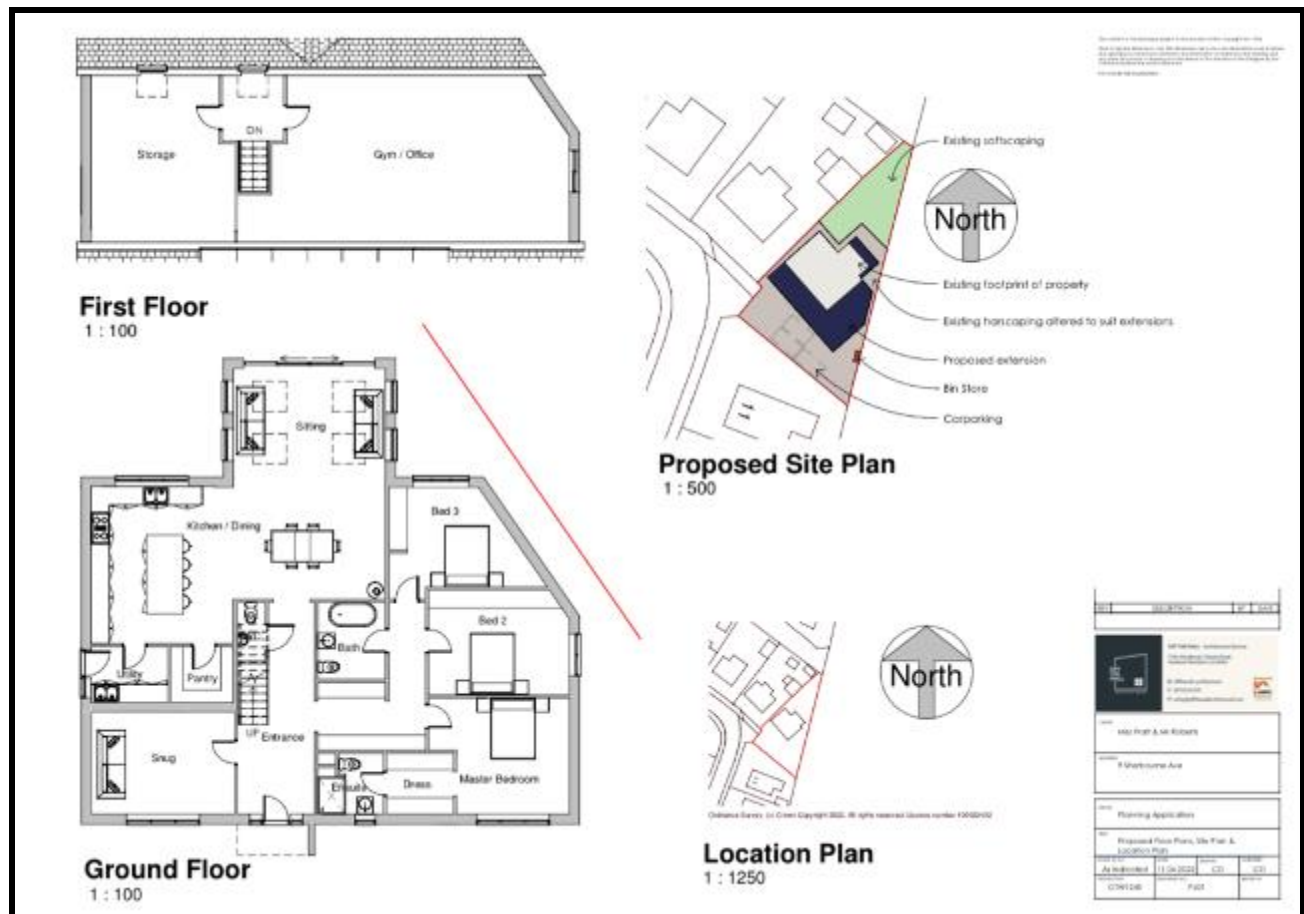


FIGURE 5.1: PROPOSED CONVERSION AND EXTENSIONS.
 BASE IMAGE ©OFF THE WALL ARCHITECTURE LTD

5.2 Designated Sites

- 5.2.1 There are no statutory designated sites within 1km and the proposed development will not have any impact on any of the surrounding wildlife sites. The conversion will involve extending the footprint of the building but this will still be within the confines of the garden boundaries. The extensions will be constructed on the existing hard standing and gravel and no important vegetation or habitats will be removed as part of the works.

5.3 Bats

- 5.3.1 The building had several PRF's for crevice dwelling bats, primarily under the wavy tiles at the eaves of the roof. Access into the building was provided by a missing tile. The available PRF's were considered to be limited as the spaces available underneath the tiles, lead flashing and in the missing mortar appeared to be shallow and exposed. There were few roosting opportunities available to crevice dwelling bats within the interior of the building as it had been completely stripped as part of the conversion. The windows and skylights resulted in high light levels within the building and thereby rendering it unsuitable for bats such as brown long eared bats that could roost on the timber roof frame. There was no

evidence of bats within the building at the time of survey but the internal strip and removal of the loft floor could have removed any evidence if bats were using the building prior to the works starting.

- 5.3.2 The surrounding habitat was suitable for bats with the surrounding buildings and trees within the village offering roosting opportunities, as well as scattered trees and hedgerows providing connectivity within the area, and the surrounding blocks of woodland. The pond and the neighbouring pasture field to the east, as well as the boundary hedgerow, provided foraging opportunities immediately adjacent to the site.
- 5.3.3 Under the Good Practice Guidelines (Collins, 2016), the site is regarded as having a **low** suitability for roosting bats. This is defined as “*A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats*” (Collins, 2016). The limited roosting opportunities for crevice dwelling bats, the lack of access for lesser horseshoe (LHS) bats, and the exposed and illuminated interior of the buildings suggest they would only be suitable for an individual/small number of bats on a temporary/occasional basis. There were no suitable roosting features for a maternity roost of any species and the shallow nature of the available PRF’s suggests they would not be suitable for hibernation. Prior to the internal works, the building may have provided more suitability for bats by having a loft space, although the sky light would still have created high light levels internally and the external roosting features would be as they are currently.
- 5.3.4 No bats were observed emerging from the building during the survey. There was very little activity around the site with only a few commuting noctule passes and one soprano pipistrelle recorded to the south.
- 5.3.5 The proposed works will not have a negative impact on bat populations within the area. Bats are not using the building for roosting and the intended conversion will not affect any roosts in the neighbouring buildings or the neighbouring foraging areas for the bats. While there will be limited potential bat features lost in the works process, these will be compensated for in the form of in-built bat boxes as part of the development.
- 5.3.6 The process of works, and any additional lighting used to carry out the works, will have the potential to cause some disturbance to bats using the site, and immediately adjacent areas, without mitigation. The Reasonable Avoidance Measures (RAMs) detailed in Chapter 6 will be put in place to reduce any risk or disturbance to bats within the site.

5.4 Nesting Birds

- 5.4.1 The building proposed for conversion provided suitable bird nesting habitat and there did appear to be remnants of a house martin nest on the north eastern gable. Therefore, any

destructive works should be constrained by the breeding bird season. RAMs to reduce risk to nesting birds and compensatory nesting recommendations and enhancements are provided in Chapter 6.

6.0 Mitigation, Reasonable Avoidance Measures (RAMs) and Enhancements

6.1 *Bats*

6.1.1 As bats were not found to be using the building then **a licence will not be required** for the works. The works can be carried out at any time of year (subject to nesting bird restrictions, see Section 6.2), but there is bat activity within and immediately adjacent to the site and lighting and noise levels could potentially disturb neighbouring bats. To avoid disturbance to bats during the works RAMs should be followed at all times during **all** works.

6.1.2 While bats were not observed using the building, there was bat activity within and around the site and bats can move into buildings at any time. The existing roof should be stripped by hand and with caution, to reduce the risk to bats (or any other animals) that may have moved in underneath the tiles.

6.1.3 If, in the unlikely event, bats are encountered at **any point** during any works, all works **must immediately stop** and a licenced ecologist must be called. A licence will then be required from Natural Resources Wales before works can continue.

6.1.4 *Lighting*

The habitats surrounding the site are suitable for bats; the hedgerow on the eastern boundary and adjacent pasture field provided commuting and foraging habitats for bats. Therefore, any lighting associated with the site during and after the works has the potential to impact bats and nocturnal birds. To reduce the potential impact of any light spillage on commuting bats during the demolition and post demolition, lighting design for the site should seek to minimise the levels of light along any areas used by bats. The following recommendations should be used when forming the lighting plan for the proposed development (Bat Conservation Trust, 2009; Stone, 2013):

General Lighting Guidance

- There must be no lights focused on the hedgerow to the east or any neighbouring hedge and trees to the north, during or after the works. There will be a dark 'buffer zone' along the eastern boundary of the site, so the neighbouring pasture field will not be subject to light spillage (see Figure 6.1). There will be no illumination of the recommended bat mitigation and bird boxes (see below) once the works are complete.

- Construction should start at least one hour after dawn and finish at least one hour before dusk during the summer months (May – August) to prevent light and noise levels disturbing the bats using the site.
- As the conversion proposes additional windows and skylights, internal luminaires in all new rooms should be designed to minimise light spill and glare via the windows and sky lights; either through being recessed, using dimmer switches, lamp shades, directed away from the windows and/or through the use of blinds and curtains during the summer months.
- Any external or security lighting should be limited to provide some dark periods during the night. Ideally the lighting should be motion activated, and not stay on longer than one minute, in order to provide maximum darkness when not needed as well as providing safe lighting conditions of residents when required.

The following luminaire specifications are provided by Bat Conservation Trust and Institute of Lighting Professionals (2018) and must be incorporated into the lighting plan for any future proposed development.

- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component.
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats.
- Column heights should be carefully considered to minimise light spill.
- Only luminaires with an upward light ratio of 0% and with good optical control should be used.
- Luminaires should always be mounted on the horizontal, ie no upward tilt.
- Any external security lighting should be set on motion-sensors and short (1min) timers.
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.



FIGURE 6.1: SITE PLAN SHOWING DARK BUFFER ZONE (BLUE) IN RELATION TO THE CONVERTED BUILDING (ORANGE) (NOT TO SCALE)

- 6.1.5 In line with Planning Policy Wales, and following the Environment (Wales) Act 2016, Section 6 and guidance provided in the recent letter by the Chief Planner in Wales, there is a requirement to ensure that **a net benefit for biodiversity** is provided in all applications for planning in Wales; and applications are to be refused if they cannot show an overall increase in the provision for biodiversity.
- 6.1.6 To enhance the site for bats, and compensate for the potential loss of roosting features by the internal stripping works, at least four bat boxes will be integrated into the converted building, on the north western elevation, and the south eastern elevation alongside the existing hedgerow (see Figure 6.4 for locations). The boxes will be as high as possible towards the apex (at least 3m high) or just under the eaves, away from any windows to prevent light spillage into the entrance hole. Inbuilt bat boxes are preferred as they are more permanent and do not require any maintenance, inbuilt boxes such as the habibat bat box or the Vivara Pro Build-in Woodstone Bat Tube (available online) come in a variety styles to match the exterior wall décor (see Figure 6.2). If it is necessary to use externally erected boxes, these should be woodstone/wood crete to increase their longevity and a combination of both crevice and cavity boxes should be used such as the Beaumaris bat box and multi-cavity bat box.



FIGURE 6.2: EXAMPLES OF IN-BUILT BAT BOXES

6.2 Nesting Birds

- 6.2.1 The building provided suitable habitat for nesting birds and there were possible remnants of a house martin nest on the south eastern gable. The destructive works should therefore be undertaken outside of the bird nesting season (which is March - September inclusive) to reduce the risk of disturbance to nesting birds. Should it be necessary to carry out works within the nesting bird season, a nesting bird check should be carried out by an ecologist immediately prior to (no more than 48hrs before) works commencing to ensure that no active nests will be affected. If active nests are found then all work in the vicinity of the nest **must be delayed** until all chicks have fledged.
- 6.2.2 To compensate for the loss of bird nesting habitat in the conversion works, and enhance the site for birds, bird nesting opportunities will be provided by including bird boxes around the site. A minimum of two artificial double house martin nests should be erected on the north western and south eastern elevations, as high as possible and away from the bat boxes (see Figure 6.3 for an example and Figure 6.4 for locations). Boxes suitable for small birds should also be erected within the site, either on the building or in the garden – at least one suitable for house sparrows (*Passer domesticus*) with a 32 mm entrance and one for smaller birds (28 mm). Examples of suitable bird boxes are: vivara pro woodstone house sparrow nest-box and vivara pro seville 28mm woodstone nest-box. Woodstone nest boxes are more durable and require less maintenance than wooden boxes.



FIGURE 6.3: EXAMPLE OF AN ARTIFICIAL HOUSE MARTIN NEST

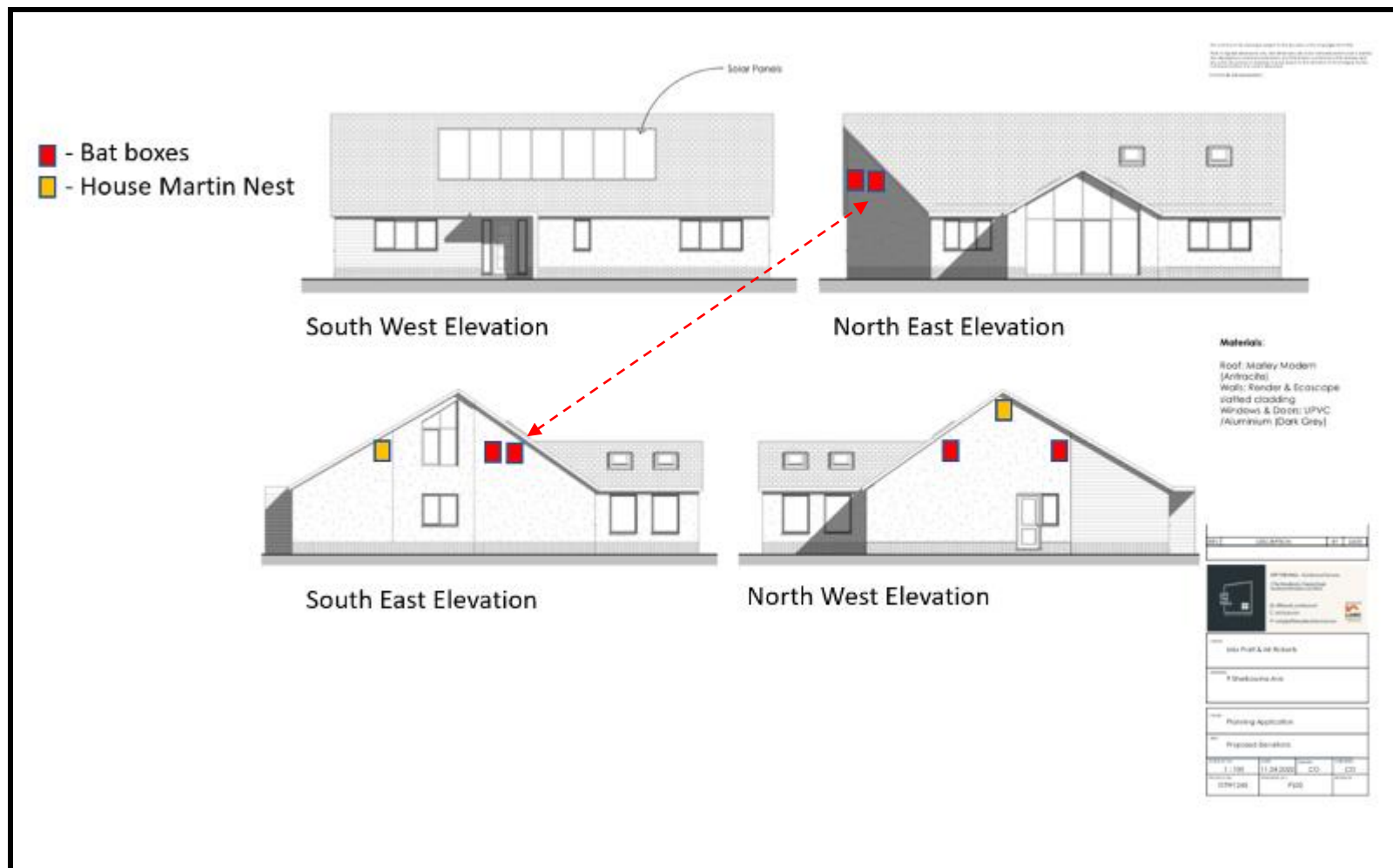


FIGURE 6.4: PROPOSED ELEVATIONS SHOWING LOCATIONS OF BAT AND BIRD MITIGATION

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6.4 *General Reasonable Avoidance Measures*

6.3.1 Suitable Reasonable Avoidance Measures (RAMS) will be implemented to reduce the potential to impact to bats, nesting birds and other species that may be found on site.

The following measures should be implemented at all times during the works:

- Working areas should be kept to the minimum required.
- Works should be avoided within 1 hour of dawn and dusk where possible to avoid disturbance to nocturnal animals. If works outside this time are needed, all lighting should be directional and be directed away from the surrounding hedgerows, scrub and trees i.e. onto the site from the perimeter.
- Storage of fuel must follow best practice. Refuelling of machines must be undertaken on the road/hard standing at the north of the site using drip trays/plant nappies as appropriate. Potential pollutants should be restricted to hardstanding areas.
- The hedgerow along the eastern boundary should be retained as part of the works. If it is necessary to remove any of the hedgerow as part of the works, the initial pruning works should be constrained by the nesting bird season or following nesting bird checks. The removal of the roots should be constrained by the great crested newt (and other species) hibernation season. The removal of the vegetation will also need to be compensated for via additional planting elsewhere in the site.
- If at any point in the works a reptile or amphibian is found all works in the vicinity of the sighting must immediately cease; if a common species is found it can be picked up (with gloves) and moved to a safe area off the site. If a great crested newt is found all works must stop (see Great Crested Newt Method Statement, Enfys Ecology, 2022). If a hibernating amphibian is found, particularly during the removal of the wall on the western elevation; all works must stop and be postponed until hibernation season is over, works can then continue between March – October.
- Any terrestrial mammals, for example badgers, seen must be allowed to leave the area on their own. If this is not possible e.g. the animal is injured or trapped then an ecologist must be called.

7.0 Legislation

7.1 *Bats*

The Wildlife and Countryside Act (WCA) 1981 (as amended) forms the key legislation protecting habitats and species in the UK. All UK bat species are fully protected under the WCA 1981 through inclusion on Schedule 5. All bats are also listed under Schedule 2 of the Conservation of Habitats and Species Regulations (2017) which transcribes the EC Habitats Directive into UK law. In combination, this legislation makes it an offence to:

- Deliberately or recklessly take, injure or kill a bat;
- Deliberately or recklessly damage or destroy a place or structure used by bats for shelter or protection;
- Deliberately or recklessly obstruct access to a bat roost; or
- Deliberately or recklessly disturb bats while occupying a roost.

Bat roosts are protected under these laws whether the animals are present at the time of survey or not. Under both laws the Welsh Government and D.E.F.R.A. are empowered to issue licences to carry out work to bat roosts for reasons of overriding public interest. It is not illegal to tend to a disabled bat pending recovery.

7.2 *Birds*

Under the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000, all wild birds, their nests and eggs are protected during the breeding season (typically March to August inclusive). This makes it an offence to:

- Intentionally kill, injury or take any wild bird.
- Take, damage or destroy the nest of a wild bird included in Schedule ZA1.
- Take, damage or destroy the nest of any wild bird while that nest is in use or being built.
- Take or destroy an egg of any wild bird.

7.3 *Biodiversity Net Gain – Relevant sections of legislation*

- Section 6 of the Environment (Wales) Act 2016:

Biodiversity and resilience of ecosystems duty

(1) A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions.

(2) In complying with subsection (1), a public authority must take account of the resilience of ecosystems, in particular the following aspects—

- (a) diversity between and within ecosystems;
- (b) the connections between and within ecosystems;
- (c) the scale of ecosystems;
- (d) the condition of ecosystems (including their structure and functioning);
- (e) the adaptability of ecosystems.

.... (5) In complying with subsection (1), a public authority other than a Minister of the Crown or government department must have regard to—

- (a) the list published under section 7;.....

- Section 7 of the Environment (Wales) Act 2016:

Biodiversity lists and duty to take steps to maintain and enhance biodiversity

(1) The Welsh Ministers must prepare and publish a list of the living organisms and types of habitat which in their opinion are of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.

(2) Before publishing a list under this section the Welsh Ministers must consult the Natural Resources Body for Wales (“NRW”) as to the living organisms or types of habitat to be included in the list.

(3) Without prejudice to section 6, the Welsh Ministers must—

- (a) take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and
- (b) encourage others to take such steps

8.0 References and Information Sources

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