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Bat and Nesting Bird Assessment Report

**Dwelling and Detached Outbuilding,
Dolwar,
Park Road,
Coedpoeth,
Wrexham,
LL11 3TD**

Produced by P J Ecological Solutions on behalf of Ms K Jarvis

Date: May 2022

Version 1

**Report by Paul Roberts
Reviewed by Matthew Whitehead**

Executive Summary

P J Ecological Solutions have been commissioned by Mr Jarvis to undertake a protected species survey of the dwelling at Dolwar, Coedpoeth, and of the nearby detached outbuilding, to ascertain whether the proposed works thereto have the potential to affect protected species, specifically bats and nesting birds, and to make recommendations as appropriate. The proposed works are for the raising of the roof of the dwelling to incorporate an additional storey, the construction of a single-storey extension to the dwelling's rear (west-facing) aspect, and the removal of the outbuilding.

A review of the information retrieved during the desk study identified no designated sites within a 1km radius of the site, and identified records of common pipistrelle bat (*Pipistrellus pipistrellus*), although these were >0.6km from the site. Due to the nature of the proposals and the size of the project however, no impacts are expected upon the favourable local status of any local habitats or any species of importance, so long as all bat roosts and bird nests present upon or within the buildings to be affected have been identified, and compensatory roosting/nesting opportunities have been provided as necessary.

A preliminary roost assessment of the buildings has been undertaken, which determined the dwelling to be affected to have low potential to support roosting bats, and the outbuilding to be removed to have negligible potential to support roosting bats. Accordingly, one bat activity survey of the dwelling has been undertaken, during which no bats were recorded or observed emerging from either of the buildings.

No nesting birds or evidence thereof was found within or upon either building during the preliminary assessment or the activity survey undertaken.

Based upon the results of the preliminary roost assessment and bat activity survey, it is considered unlikely that either the dwelling or the associated outbuilding are being utilised by roosting bats or by nesting wild birds. As such, no adverse impacts to bats or nesting birds are expected from the proposed development.

No specific mitigation measures for bats or nesting birds are recommended, and no further surveys are recommended. However, if works are delayed into the active season for bats (April to October, inclusive) 2024, then further bat surveys should be carried out prior to the removal of the roof. In the highly unlikely event that a bat or nesting bird is found during the works, the procedure detailed in Appendix 1 should be followed.

To comply with Section 6 of the Environment (Wales) Act 2016, local planning authorities are required to look for biodiversity gain within the planning system. Accordingly, as an enhancement prescription, it is recommended that a Beaumaris WoodStone Bat Box (Midi) is erected upon the south-facing aspect of the modified dwelling.

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1 Introduction

P J Ecological Solutions were commissioned by Ms K Jarvis to undertake a protected species survey of the dwelling, and of the nearby detached outbuilding, at Dolwar, Park Road, Coedpoeth, Wrexham, LL11 3TD (Grid Reference: SJ28355095; hereafter referred to as 'the site').

The survey was commissioned to ascertain whether the proposed works thereto have the potential to affect protected species, specifically bats and nesting birds, and to make recommendations as appropriate. The proposals are for the raising of the roof of the dwelling to incorporate an additional storey, the construction of a single-storey extension to the dwelling's rear (west-facing) aspect, and the removal of the outbuilding.

The buildings to be affected are situated upon hardstanding, within a residential area on the periphery of the village of Coedpoeth (see Figure 1.1). The village extends to the north, east and south of the site, and agricultural land, featuring a good network of intact native-species hedgerows with trees, extends to the west. These hedgerows will provide good habitat connectivity between the village and local waterways and broadleaved woodlands, including the Afon Clywedog, a tributary to the River Severn, ~280m west of the site, and Nant Mill Wood, ~680m south of the site.

A detailed desk study of the surrounding area and a preliminary roost assessment of the buildings has been undertaken, in addition to one bat activity survey.

The aim of these efforts/this appraisal is to:

- Identify both habitat and species constraints pertinent to the development proposals.
- Detail EPS licensing requirements, reasonable avoidance measures, mitigation, and compensation measures where necessary.
- Identify opportunities for the proposed development to provide enhancements and add to the biodiversity resource within the site.



Figure 1.1: An aerial view of the site. The dwelling to be affected is shown in red; the outbuilding to be removed is shown in blue.

2 Method

2.1 Desk Study

2.1.1 Statutory and Non-Statutory Designated Sites

A desk-based study was undertaken to identify nearby habitats of importance and features providing local habitat connectivity, and to identify the presence of statutory designations within the vicinity of the site. These include:

- ***International recognised statutory designations:*** Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar Sites.
- ***National recognised statutory designations:*** Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)
- ***Local level statutory designations:*** Local Nature Reserves (LNRs)

The search (1km radius) was carried out using the Multi-Agency Geographic Information for the Countryside (MAGIC) website's interactive mapping application, and the Natural Resources Wales (NRW) website's Designated Site Search function.

2.1.2 Species Records Pertinent to the Assessment

At this stage of the project, due to the scale of the proposed development, it is considered that a full records search from COFNOD is not required, however a records search (1km radius) was undertaken using the interactive mapping applications available on the MAGIC and National Biodiversity Network (NBN) websites. This approach is consistent with the Guidelines for Accessing and Using Biodiversity Data in the UK (CIEEM, 2020).

2.2 Preliminary Roost Assessment

A preliminary roost assessment of the buildings was undertaken on the 09th of March 2022 by Paul Roberts UCert (license number: S088763/1) and Matthew Whitehead BSc (Hons) AMRSB, both of whom are experienced bat surveyors. Potential roosting features were accessed using a suitably tall ladder and inspected using a Clulite CB2-L2 high-powered torch and a Bosch GIC 120 fiberscope. A detailed inspection of the buildings' exterior and interior was carried out in accordance with the methodology prescribed within the Bat Conservation Trust's (BCT) Good Practice Guidelines (2016). Each building was then categorised in accordance with Table 4.1 of that document.

During the inspection, note was made of the number and nature of any potential roosting features, and/or of any points of entry/exit, such as:

- Cracks or crevices within walls; lifted paintwork, render, plaster, felt, or lead flashing; loose or lifted roof tiles or ridge tiles; loose windowsills and window frames, gaps behind fascias, soffits, bargeboards, weatherboard or hanging tiles; exposed eaves or wall plates; aged or badly fitted wooden roof supports; or thick vegetation cover.
- Holes within the walls or roof; broken/missing doors or windows; gaps between the walls and fascias, soffits or bargeboards; exposed eaves or wall plates; basement grills; broken ventilation outlets; or points of vegetation penetration.

A search for bats or evidence thereof (such as droppings, claw marks, or oil or urine staining) was undertaken, paying especial attention to:

- Gaps behind furnishings, such as curtains, pictures, and posters; accessible cupboards; peeling paintwork; chimneys accessible from fireplaces; loose wooden panelling; lintels above doors; roof timbers and beams (especially within mortise and tenon joints and where ridge and hip beams meet); at the top of gable end walls, connecting walls, and chimney breasts; and behind roofing felt.

During the inspection of the buildings, notes were made of any evidence of current or historic use by nesting birds.

The inspection was undertaken in accordance with the advice provided in the document *Guidance on Ecological Survey and Assessment in the UK During the COVID-19 Outbreak (Version 4)*, produced by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2021).

2.3 Bat Activity Surveys

One bat activity survey was carried out in accordance with the methodology prescribed within the BCT's Good Practice Guidelines (2016). Surveyors were situated in positions that allowed unrestricted views of the identified roost potential (see Figure 2.1). The survey was carried out by Paul Roberts UCert (license number: S088763/1) and Matthew Whitehead BSc (Hons) AMRSB, both of whom are experienced bat surveyors, who were respectively equipped with an Anabat SD2 (zero crossing) bat detector and an EchoMeter Touch 2 Pro (full spectrum) bat detector, and who were respectively supported by a Sony FDR-AX53 (infra-red) camera, and a Panasonic HC-VX980EB-K (infra-red) camera connected to a PeerSonic RPA3 (full spectrum) bat detector. The surveys were undertaken on the dates and under the conditions detailed in Table 2.1.

The emergence survey commenced at least 30 minutes before sunset and continued until at least 90 minutes after sunset. The activity survey was undertaken in May, which is within the optimal survey period stated within the BCT's Good Practice Guidelines (2016). The survey was undertaken in dry and calm conditions, when sunset temperatures were 10°C or above, which is the recommended survey temperature stated within the BCT's Good Practice Guidelines (2016). As such there are no limitations associated with the timing and weather conditions of the survey.

Table 2.1: The details of the activity survey undertaken.

Type of Survey	Date and Time	Weather Conditions at Sunset/Sunrise
Emergence Survey	09 th May 2022 20.20 – 22.24	Sunset Time: 20.54; 11°C, Dry, 12kph (S), 100% Cloud Cover

N.B: Any bat emergence/re-entry surveys can only give a snapshot of bat behaviour at the time of the survey. As the potential of the site for roosting bats may change over time, it is recommended that bat surveys are updated after two years if development has not yet commenced.



Figure 2.1: The positions of the surveyors/equipment during the activity surveys. The dwelling to be affected is shown in red; the outbuilding to be removed is shown in blue.

3 Results

3.1 Desk Study

3.1.1 Statutory and Non-Statutory Designated Sites

A review of the information retrieved during the desk study identified no designated statutory or non-statutory sites within 1km of the application site (see Figure 3.1). As such, and due to the nature of the proposals and the size of the project, no impacts are expected upon local habitats of importance because of the proposed development.

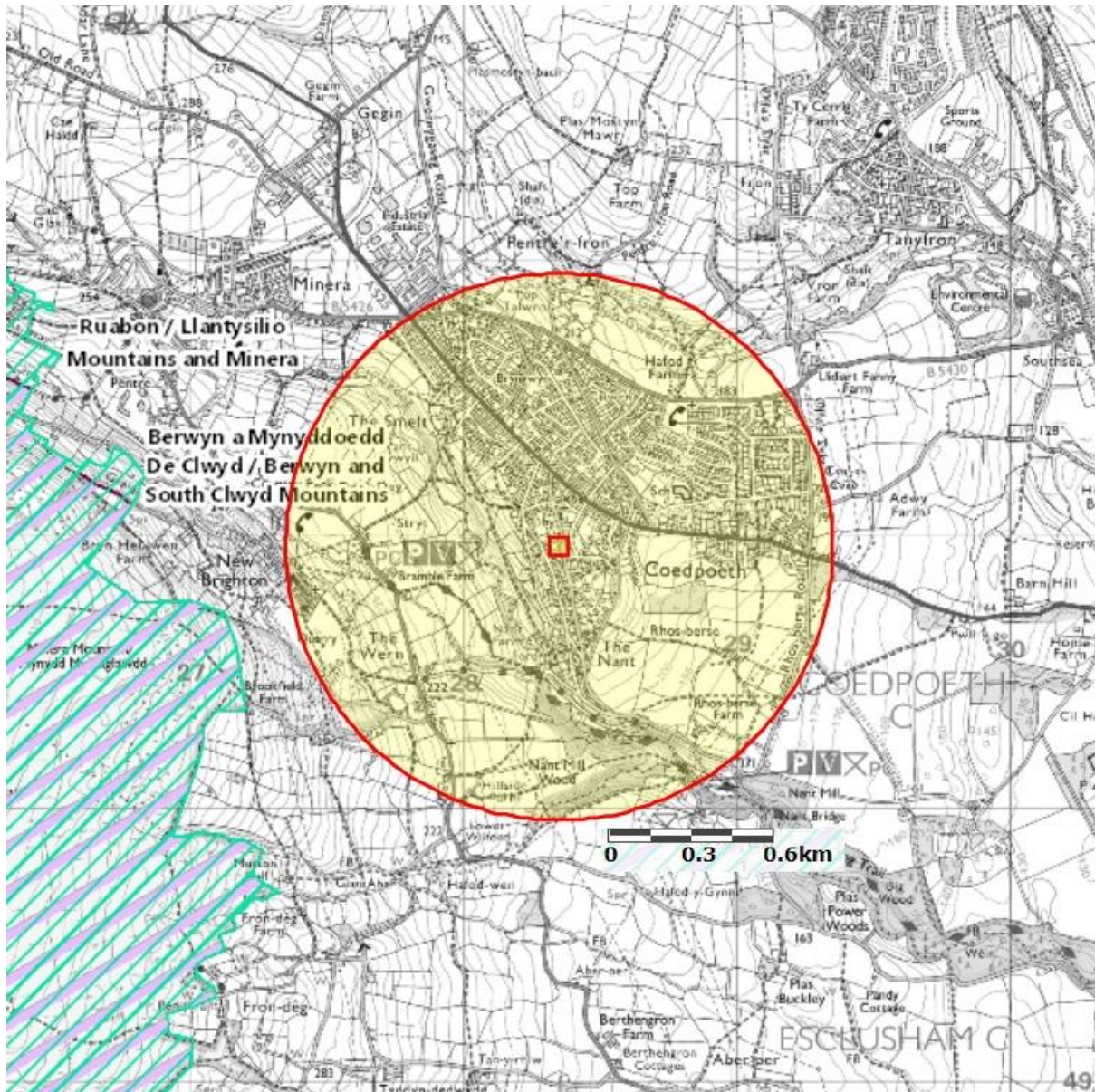


Figure 3.1: A 1:25,000 map view of the site relative to local designated sites.

3.1.2 Species Records Pertinent to the Assessment

A review of the information retrieved during the desk study identified records of common pipistrelle bat (*Pipistrellus pipistrellus*) ~630m east of the site. Due to the nature of the proposals and the size of the project however, no impacts are expected upon the favourable

local status of the above species, or any other species of importance, so long as all bat roosts and bird nests present upon or within the buildings to be affected have been identified, and compensatory roosting/nesting opportunities have been provided as necessary.

3.2 Preliminary Roost Assessment

3.2.1 The dwelling

A description of the dwelling to be affected by the proposed works is provided in Table 3.1, below.

Table 3.1: The dwelling to be affected.

Structure	- The building is a detached single-storey rectangular structure with a converted loft area. - It has a symmetrically pitched hip roof, the apex of which runs north to south.
Walls	- The exterior walls are constructed of brick and are partially covered with pebbledash render, with no gaps or crevices present within the mortar which could be utilised by roosting bats. - The interior walls are covered in a smooth coat of plaster, with no gaps or crevices which could be utilised by roosting bats. - The building's wall plates are not accessible from its interior or from its exterior.
Roof	- The roof is constructed of flat Marley tiles, only a few of which have visibly slipped, and features curved ridge tiles, only a few of which have visibly lifted. - There is a dormer window situated on the southern section of the building, which features hanging ceramic tiles fitted above the window, the gaps between which could potentially be utilised by roosting bats. - The building features no roof void.
Soffits, fascias and bargeboards	- The building features uPVC facias and soffits, all of which are tightly fitted and provide no opportunities suitable for roosting bats^{*1}. - There are uPVC bargeboards upon the dormer window, which are also tightly fitted. ^{*1}There was a single small gap present between the soffit and west-facing wall of the building which could potentially provide bats access to the interior of the soffits.
Windows, doors, and other points of access	The windows and doors are all tightly fitted and provide no opportunities for bats to access the interior of the building.
External lighting	There some artificial light spill onto the front aspect of the building from a sodium streetlight fixed upon a nearby telephone pole.
Vegetation upon or immediate to the building	No vegetation is growing upon or immediate to the building.
Evidence of bats or bat roosts	No bats or evidence thereof was found during the external or internal inspection of the building.
Evidence of nesting birds	No nesting birds or evidence thereof was found during the external or internal inspection of the building.

Summary: Of importance, it was noted that there are a small number of slipped roof tiles, a small number of lifted curved ridge tiles, and there are some gaps present beneath the hanging ceramic tiles which are fitted above the dormer window. There is also a single gap present between the otherwise-tightly fitted soffits and the walls on the west-facing aspect of the building.

Given the limited number and poor-quality of the potential roosting features identified upon the dwelling's exterior and the absolute lack of access to the building's interior, the building is categorised as having only low potential to support roosting bats.

The features accessible using ladders were inspected with a high-powered torch and fiberscope. No bats or evidence thereof was found.

Photographs showing the above features and findings are included below (see Figures 3.2 to 3.8).



Figure 3.2: The front (east-facing) aspect of the dwelling.



Figure 3.3: The rear (west-facing) aspect of the dwelling.



Figure 3.4: The east-facing roof of the dwelling.



Figure 3.5: The tightly fitted soffits of the dwelling.



Figure 3.6: The gaps present on the hanging ceramic tiles fitted onto the dormer window.



Figure 3.7: The single gap present between the soffits and the wall of the dwelling.



Figure 3.8: The interior of the dwelling. The building's loft space has been converted. The building does not feature a roof void.

3.2.2 The detached outbuilding

A description of the detached outbuilding to be removed is provided in Table 3.2, below.

Table 3.2: The detached outbuilding to be removed.

Structure	• The building is a detached single-storey rectangular structure, with a single-pitched roof, the apex of which runs west to east.
Walls	• The walls are constructed of brick and are unrendered, with no gaps or crevices present within the mortar which could be utilised by roosting bats. • The building's walls are mortared to its roof, thereby preventing access to its wall plates from its interior or exterior
Roof	• The roof is constructed of metal sheeting, which appears in a good state of repair and features no gaps or crevices which could be utilised by roosting bats. • The roof is supported by several timber supports and is unlined.
Soffits, fascias and bargeboards	• The building features no fascias, soffits or bargeboards. The building's roof is mortared to its walls.
Windows, doors, and other points of access	• The windows and doors are all tightly fitted and provide no opportunities for bats to access the interior of the building.
External lighting	• There is no artificial light spill onto any section of the building or its immediate surrounds.
Vegetation upon or immediate to the building	• No vegetation is growing upon or immediate to the building.
Evidence of bats or bat roosts	• No bats or evidence thereof was found during the external or internal inspection of the building.
Evidence of nesting birds	• No nesting birds or evidence thereof was found during the external or internal inspection of the building.

Summary: Given the absolute lack of potential roosting features present upon the exterior of the outbuilding, and the absolute lack of access to its interior, the outbuilding was categorised as having negligible potential to support roosting bats.

Photographs showing the above features and findings are included below (see Figures 3.9 to 3.12).



Figure 3.9: The front (south-facing) aspect of the outbuilding to be removed.



Figure 3.10: The single-pitched roof and the western section of the outbuilding to be removed.



Figure 3.11: The interior of the outbuilding to be removed.



Figure 3.12: The wooden supports and roof-wall join of the interior of the outbuilding to be removed.

3.1 Bat Activity Surveys

09th of May 2022: During the emergence survey, no bats were recorded or observed emerging from any part of the buildings. A common noctule bat (*Nyctalus noctula*) was recorded and observed to the south of the site at 21.15, flying southeast to northwest (see Figure 3.13). A second common noctule bat was recorded at 21.25. A common pipistrelle bat was observed foraging within the garden area of a neighbouring dwelling south of the site from 21.23 onwards, before flying north through the site at 21.26 (see Figure 3.13). No other bats were recorded or observed during the survey.

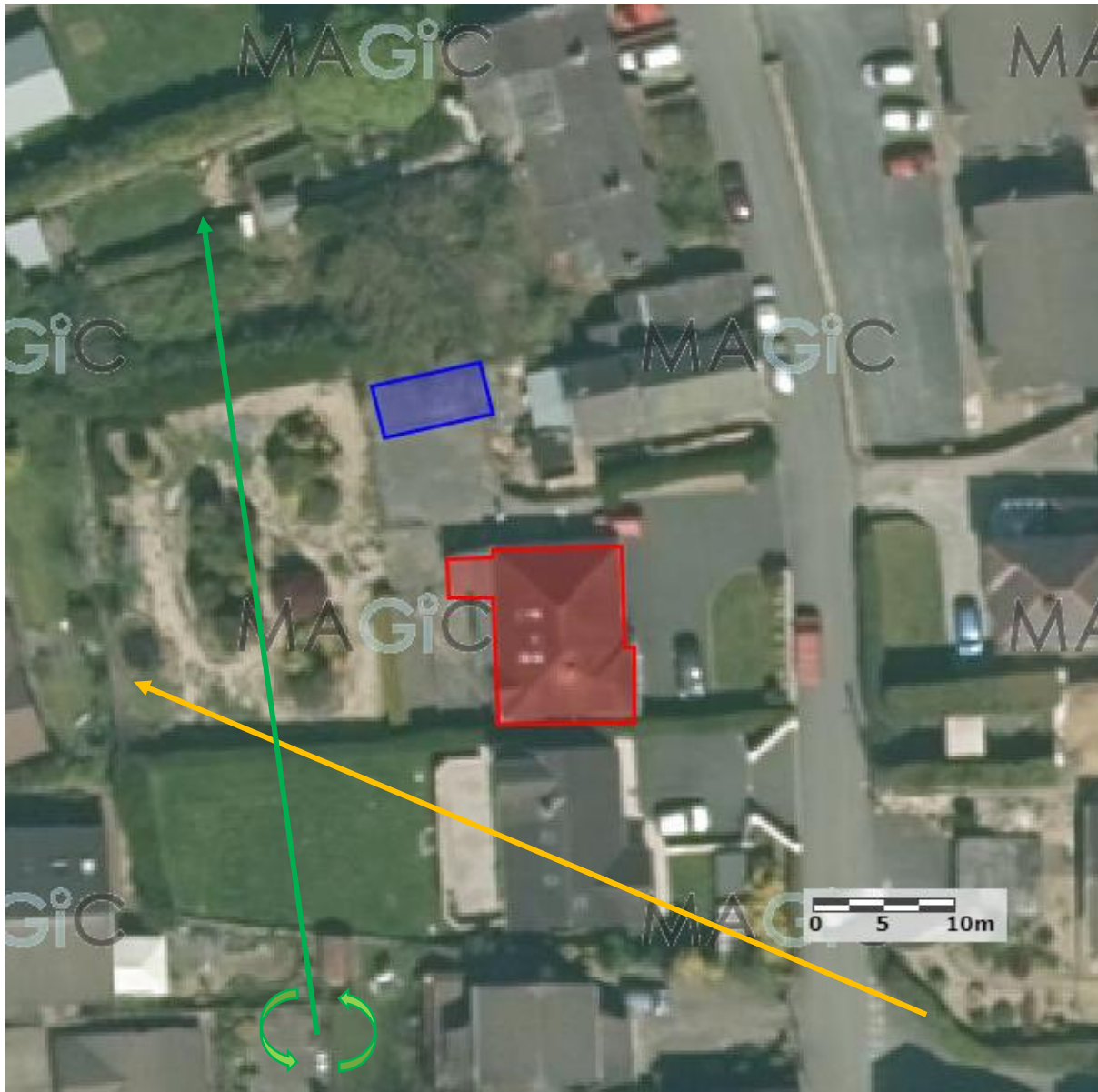


Figure 3.13: A plan of the site showing the flight routes identified. The flight path of the common noctule bat observed is shown in yellow. The foraging area and flight path of the common pipistrelle bat observed is shown in green.

4 Evaluation and Recommendations

All species of British bat are afforded full protection under Schedule 5, Section 9 of the Wildlife and Countryside Act 1981 (as amended), and under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended). Under these acts, it is an offence to deliberately or recklessly disturb, capture, injure or kill bats; impair their ability to survive, breed, reproduce, hibernate or migrate; affect significantly the local distribution or abundance of the species to which they belong; or damage or destroy a breeding site or resting place of that species.

All wild birds, their nests and eggs are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended), this makes it an offence to intentionally kill, injure or take any wild bird; take, damage or destroy the nest of any wild bird while it is in use or being built; take, damage or destroy the egg of any wild bird; or to have in one's possession, or control, any wild bird (dead or alive) or egg or any part of a wild bird or egg.

The survey results indicate that neither the dwelling nor the associated outbuilding are being utilised by roosting bats or by nesting wild birds. As such, no adverse impacts to bats or nesting birds are expected from the proposed development.

No specific mitigation measures for bats or nesting birds are recommended, and no further surveys are recommended. However, if works are delayed into the active season for bats (April to October, inclusive) 2024, then further bat surveys should be carried out prior to the removal of the roof. In the highly unlikely event that a bat or nesting bird is found during the works, the procedure detailed in Appendix 1 should be followed.

To comply with Section 6 of the Environment (Wales) Act 2016, local planning authorities are required to look for biodiversity gain within the planning system. Accordingly, as an enhancement prescription, it is recommended that a Beaumaris WoodStone Bat Box (Midi) is erected upon the south-facing aspect of the modified dwelling. This should be installed >4m from the ground, away from any immediate clutter or artificial light-spill, and out of reach of domestic cats or other terrestrial predators.

Appendix 1: Bats and Nesting Birds

Procedure to follow if bats or nesting birds are discovered during works

- In the highly unlikely event that a bat is discovered during the works, then contractors must stop work immediately and telephone Paul Roberts on 07545 681586.
- P J Ecological Solutions will either provide an appropriately licensed bat worker to the site or provide a member of staff who will liaise directly with Natural Resources Wales. Actions will then be taken following advice given. This may include removal of bats, but only where direct written or verbal permission is gained from Natural Resources Wales. Bats are a protected species and under no circumstances should contractors attempt to handle a bat.
- If a bat is found under roofing material or within any other niche to the building fabric, and does not voluntarily fly out, then the aperture should be carefully covered over by the last object removed (so long as there is no risk of crushing) to protect the bat from the elements, leaving a small gap for the bat to escape voluntarily. If it should be necessary to improvise a replacement covering, this should be free from grease or other contaminants and should not be a fibreglass-based material. If a bat is found outside of the buildings, it should be covered with a light material (cloth) and the appropriately licensed bat worker awaited to carry out the rescue.
- Only when Natural Resources Wales is satisfied that the risk to bats is ceased will works recommence. Should it emerge that the works being undertaken are of more risk to bats than was originally thought, then works will be stopped until they can be supervised by an appropriately licensed bat worker.
- If a nesting bird/active nest is discovered during the works, all works within 5m of the nest must cease and a 5m exclusion zone should be established. This exclusion zone must be respected until it has been determined that all of the chicks have fledged.