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PROTECTED SPECIES SURVEY

WESTFIELD

GAMFORD LANE

ROSSETT, LL12 0EW

FOR

Mr Glyn Roberts

24th November 2021

Contents

- 1. Introduction**
- 2. Bat biology**
- 3. Legislation**
- 4. Aims**
- 5. Study area**
- 6. Methodology**
- 7. Results**
- 8. Conclusions, Recommendations & Mitigation for Bats**
- 9. Nesting birds**
- 10. References**

Appendix 1 – Site plan

Appendix 2 – Site photos

Appendix 3 – Mitigation diagrams

1. INTRODUCTION

A preliminary protected species survey (bats and nesting birds) was undertaken on the 23rd November 2021. The survey was carried out by David Bennett, a licensed and experienced bat surveyor and ecologist (Natural Resource Wales S089663 & Natural England licenses) following a request by the current owner of the property. The survey was requested to satisfy planning requirements in respect of any protected species issues for Westfield, Gamford Lane, Rossett, Wrexham, LL12 0EW. A planning consent is being sought to permit a second storey extension (raised roof level) along with other associated alterations.

2. BAT BIOLOGY

There are now 17 species of bat (breeding) in the UK, many of which can be found within this part of Wales. Each bat gives birth just once a year, early in summer, the females tending to gather together in a communal roost to give birth and bring up their young. This is the time when they are most likely to use buildings. By the end of the summer the roosts are often vacated for other more suitable hibernation sites such as caves, mines or trees. Hibernation sites are usually characterised by stable temperatures with a high level of humidity. When temperatures fall and food becomes scarce they hibernate and live off body fat stored during the autumn. During mild winters bats can still often be seen on an evening flying and looking for food. Bats use a variety of different structures for the purposes of roosting, these can include mature trees, caves, mines, buildings (old and new), bridges and tunnels.

Bats will generally cause no harm to buildings or the people that occupy the buildings. They can be very discreet and are often not noticed because of their preference to occupy tiny spaces, cracks and crevices in roof voids. Some species such as the brown long eared bat will utilise open loft areas for flying and moving around in. They will roost on bare exposed timber beams, typically beneath the ridge beam. The droppings produced are harmless (largely made up of insect fragments) and do not carry any disease although a very large roost can sometimes produce large quantities of droppings.

3. LEGISLATION

All of our species of domestic bat are protected under both UK and European legislation. In the UK they are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation (Natural Habitats &c.) Regulations 1994. The Habitats Directive has been superseded by The Conservation of Habitats and Species Regulations 2017.

To summarise it is illegal not only to intentionally kill, injure or take any bat but also too recklessly or intentionally damage, destroy or obstruct access to any place that a bat uses for shelter or protection, or to disturb a bat while it is occupying such a place. A roost is protected whether or not bats are present at the time. The reason for this is that bats tend to remain loyal to certain roost sites, often over a long period of time.

The presence of a species protected under European or UK legislation is a material consideration when a planning authority is considering a development proposal which, if carried out would be likely to result in disturbance or harm to the species or its habitat. The Environment (Wales) Act 2016 (Section 6) Biodiversity and resilience of ecosystems duty states that “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”.

4. AIMS

The aims of the survey were:

1. To describe any evidence of protected species in the study area.
2. To assess the impact of carrying out the proposed works.
3. To suggest mitigation measures as appropriate.

5. STUDY AREA

The site consists of the detached bungalow/cottage with a parking area at the front and an area of garden at the rear. The property is located along a minor lane near the village with an open grazed field at the rear.

The building has been constructed using brick walls supporting a pitched and timber framed roof covered with interlocking concrete style tiles. The fascias and soffits are all made of UPVC.

The site plan is shown in Appendix 1 and the photos are shown in Appendix 2.

6. METHODOLOGY

The building was subjected to an internal and external survey on the 23rd November 2021, the weather conditions were dry and clear. As much of the building as possible was searched (health and safety and access permitting) using an LED rechargeable lamp, a Seesnake endoscope (paying particular attention to the roof sections, ledges and any gaps or cavities). A search was made for bat droppings, staining, odour, old skeletons and feeding signs (such as wing casings etc). Other evidence such as bird's nests and other signs of nesting birds was also looked for both internally and externally.

7. RESULTS

No visible evidence of bats was found, no droppings were apparent and there were no signs of feeding, staining, marking etc. The attic/roof area was inspected, nothing was found, no droppings on the roll insulation, the roof timbers, floor area or on any of the cobwebs/areas of dust.

The interlocking roof tiles are all intact and secure on all elevations with no gaps, missing tiles or spaces. The ridge tiles are all set securely with no gaps or missing sections of mortar.

The gable areas are all completely sealed with intact mortar below the tile edge and sealed UPVC fascias with no gaps or points of access to the wall tops. The soffits on all elevations are completely sealed with no gaps or cavities and no points of access to the wall-plate/wall top.

The brick walls are all secure with no gaps or cavities within the brickwork and no cracks or missing mortar. The chimney and associated roof area/flashing is all intact with no gaps or cavities.

Overall, there does not appear to be any evidence of use by bats and nothing that would appear to cause any issues with the current proposals. The overall potential for the building to support roosting bats is negligible due to a lack of access to the roof void or any other suitable cavity space/dark area.

8. CONCLUSIONS, IMPACTS AND MITIGATION FOR BATS

No evidence suggesting bat use has been found during this survey and for the reasons suggested is thought unlikely and no further survey work is required. It therefore appears that there are no apparent issues relating to the proposed works in respect of bats at the present time. As outlined above it is often difficult to inspect every crevice or hidden section in a building (due to access or health and safety issues). In addition bats tend to be nomadic, which reduces the chances of finding bats on one or even several visits. This situation arises frequently when carrying out this type of survey. However, the survey has been completed to a good standard and it is not anticipated that any problems will occur. Carrying out the survey also puts in place demonstrable safeguards regarding the avoidance of illegal activities.

As a general note, most buildings offer potential for over-wintering and seasonal occupancy for individual bats. This use can be sporadic during the season and actual presence through emergence surveys cannot be fully confirmed. It is therefore recommended that the following precautionary recommendations should be undertaken as good working practice during the construction phase.

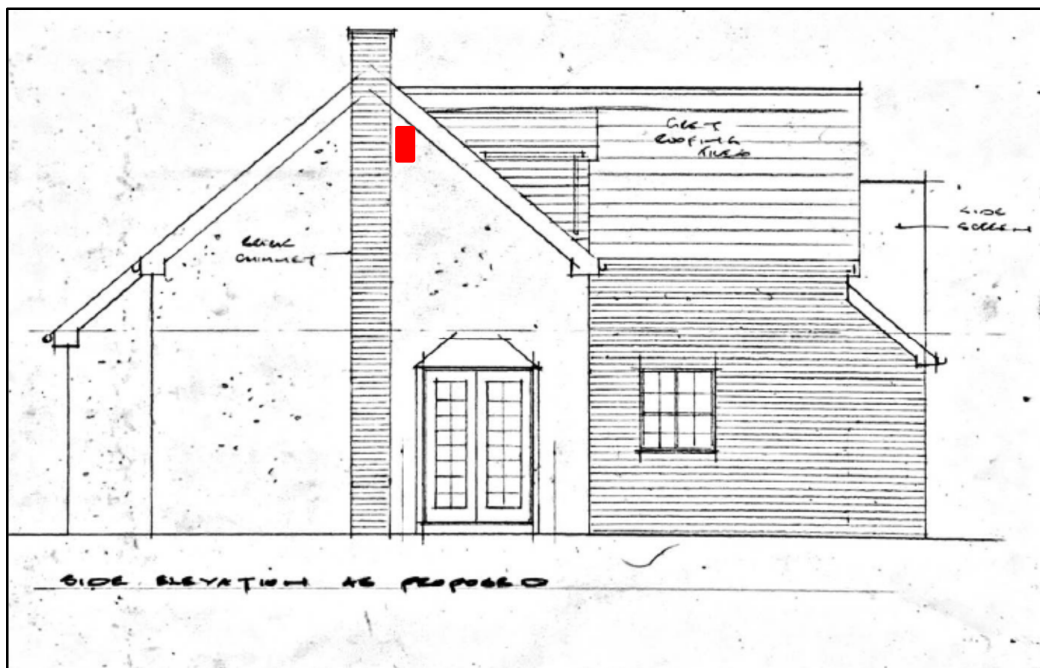
- **All roof tiles should be carefully removed by hand to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.**
- **Door and window frames should be removed with care to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.**

- Structural members, lintel bearings, purlins or wall plates should be removed with care to ensure that no roosting, torpid or hibernating bats are injured during the proposed works.
- In the unlikely event that bats were found during the construction process then all work should cease and Natural Resource Wales Species Officer 0300 065 3000 and/or a licensed bat worker should be contacted for further advice.
- If the works are not completed within the next 18 months a further survey should be carried out in case the situation has changed.

The alterations to the building offer the opportunity to create some bat friendly features. *Pipistrelle sp.* and other crevice dwellers such as *Myotis* bats will readily take to new and/or converted buildings as long as suitable access points and features are retained or created. The following features should be included to improve and try to encourage bats to use any suitable areas of the building post construction.

Pictures of the examples are shown in Appendix 3.

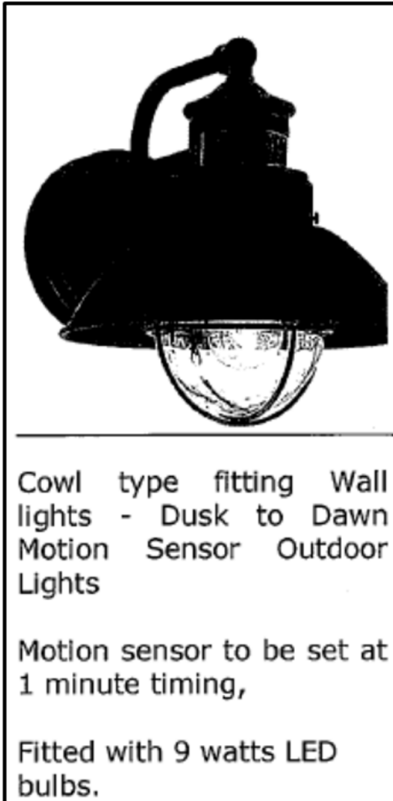
- A single Beaumaris “midi” bat box will be secured to the south facing elevation ridge area as shown below.



- All external lighting will be of a low luminance and directional towards the ground (lighting type example shown below). There will be no high-level illumination or halogen lighting which will discourage bats and there will be no external lighting on the south elevation where the bat box will be

located. All external lighting will include a motion sensor and a one-minute timer to avoid them being left on continually.

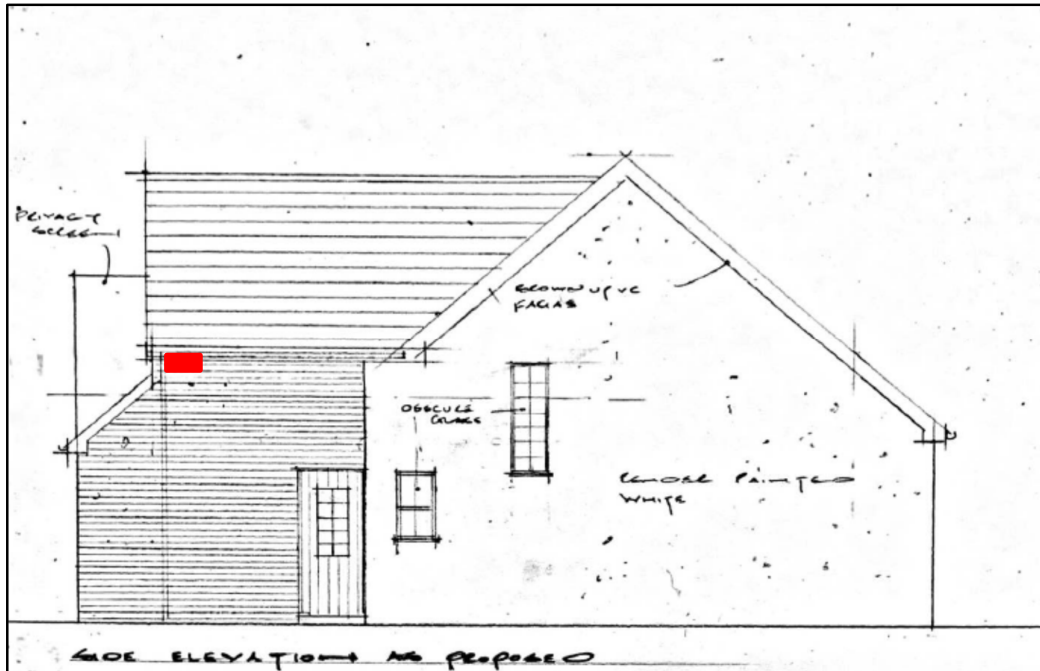
- A warm white spectrum (ideally <2700 Kelvin) should be adopted to reduce blue light component. Lights should feature peak wave lengths higher than 550nm to avoid the component of light most disturbing to bats. This will be achieved by using LED light bulbs.
- Any external lighting should be on a short timer with a cowling to prevent any up-lighting or light spread.



9. NESTING BIRDS

At the time of the survey there was no evidence of nesting birds anywhere in or around the structure of the building.

A single Schwegler 1SP sparrow terrace nest box (or similar multi hole box if this is unavailable) should be fitted to the north elevation as shown below.



All breeding birds are protected under Section 1(1) and 1(2) of the Wildlife and Countryside Act 1981, as amended. This makes it an offence to damage, disturb, or obstruct access to nests during the bird breeding season (generally March to August).

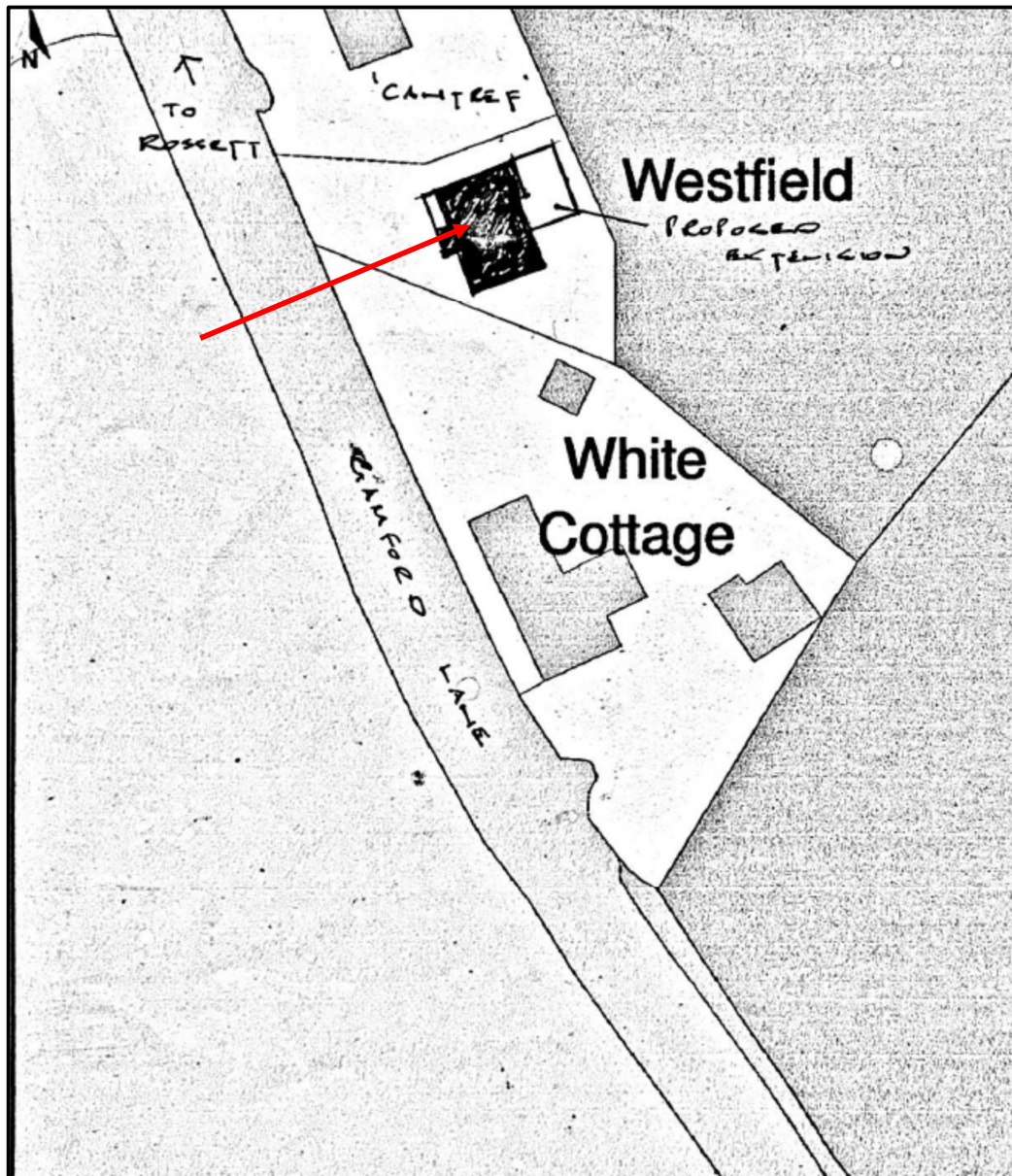
10. REFERENCES

BCT 2016 Good Practice Guidelines 2nd Edition 2016 BCT

Joint Nature Conservation Committee 2004 *Bat Workers Manual* JNCC Peterborough

Mitchell-Jones A J 2004 *Bat Mitigation Guidelines* English Nature Peterborough UK

Appendix 1 – Site location plan



Appendix 2 – Site Photos

Front elevation



Side and rear elevation



Rear elevation



UPVC soffits are well sealed with no gaps



Gables are well sealed with no gaps or access to the wall top



Soffits are well sealed



UPVC soffits are secured tight to the wall



The rear of the gable fascia board is sealed



Sealed UPVC soffits



Gables are well sealed with intact mortar below the edge of the tiles



Sealed gables



Sealed behind the gable fascia boards



Sealed UPVC soffits



Rear gable is well sealed – a crack in the mortar below the tile edge but no cavities



Intact mortar around the ridge areas and ridge tiles



Soffits are all sealed



Sealed behind the gable fascia boards



Interlocking roof tiles are all intact and in position with no holes



Appendix 3 – Mitigation

Beaumaris bat box



Schwegler 1SP sparrow terrace nest box

