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PROTECTED SPECIES SURVEY

BRADLEY MILL

PARK ROAD, TOP BRADLEY

WREXHAM, LL11 4DF

FOR

The Planning Consultancy

11th January 2012

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1. INTRODUCTION

A preliminary bat and bird survey was undertaken on the 10th January 2012. The survey was carried out by David Bennett, a licensed and experienced bat surveyor and ecologist (CCW & Natural England licenses) following a request by The Planning Consultancy. The survey was requested to satisfy planning requirements in respect of any protected species issues for an agricultural building located at Bradley Mill, Park Road, Top Bradley, Wrexham, LL11 4DF. A planning consent is being sought to permit the conversion of the building.

2. BAT BIOLOGY

There are now 17 species of bat 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 recently been superseded by The Conservation of Habitats and Species Regulations 2010 which came into force on the 1st April 2010

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 have a tendency 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. Section 74 (2) of the CroW Act 2000 (now updated by Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006 requires the publication of lists of habitats and species that are of principal importance for the purpose of conserving biological diversity. The list is regularly changed and updated and many bat species appear on it. NERC consolidates the requirements of the CroW Act in placing duties upon government agencies, including local authorities, to ensure the conservation of Biodiversity.

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 converting the building.
3. To suggest mitigation measures as appropriate.

5. STUDY AREA

The site consists of the large brick barn, two adjacent timber/metal sheds and the remains of the original stone mill building. The surrounding habitat includes areas of improved and semi-improved grassland, hedgerows, scrub, and the River Alyn runs adjacent to the property.

The focus of this report is the red brick barn and the two small sheds, the former mill building is not part of the application. The barn is constructed with a double skin brick wall supporting a metal frame roof covered with curved sheets of metal. The building is completely open at one end and partially open at the other, there is not a loft or roof void. The building is currently used for storage of hay, a car and general agricultural equipment.

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

6. METHODOLOGY

The buildings were subjected to an internal and external survey on the 10th January 2012; the weather conditions were dry and clear. As much of the buildings as possible was searched (health and safety and access permitting) using a Cluson rechargeable lamp, a Seesnake endoscope (paying particular attention to the roof sections, ledges and any gaps in the brickwork). 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

Brick barn

No evidence of bats was found anywhere inside or outside of this building. No droppings were apparent on the floor, roof and wall areas and there were no signs of feeding perches. There are no crevices in the wall apart from some half removed bricks just below the wall plate which may have once supported timbers for an alternative style of roof. The tin roof is supported by a metal frame and there are no opportunities for bats in this area.

The open frontage and partially open rear allows a level of natural light which would be detrimental towards roosting bats. Airflow will be changeable throughout the building and the temperature will fluctuate, these factors will also be detrimental towards roosting bats. In its current condition the building has a very low potential to support roosting bats.

Timber/metal sheds

No evidence of bats was found in these buildings and they are considered unsuitable for use by bats.

8. CONCLUSIONS, IMPACTS AND MITIGATION FOR BATS

No evidence suggesting a bat roost 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 conversion 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 conversion phase.

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

- In the event that bats were found during the conversion then all work should cease and CCW (Mold office) and/or a licensed bat worker should be contacted for further advice.

The conversion of the building offers the opportunity to create and retain 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

To secure biodiversity enhancement in accordance with Welsh Assembly Government guidance TAN 5 it is suggested that the following features be included in the conversion to try and encourage bats to use the converted building.

Pictures of the examples are shown in Appendix 3.

- Use traditional bitumen roofing felt rather than plastic membrane which bats have difficulty clinging onto.
- Create/retain access to the space at the top of the walls above the wall plate (gaps are good for swifts and house sparrows as well).
- Create access under a few of the ridge tiles as per example.
- Install a few bat bricks in the south or west facing wall – Ibstock or similar.
- If boxed soffits are proposed then slits can be cut as shown in the drawings below.
- Ensure all timber treatment is undertaken using chemicals shown to be safe for bats.
- Ensure any external lighting is low level and directional towards the ground.

9. BARN OWLS & NESTING BIRDS

Barn owls *Tyto alba* are protected under Schedules 1 & 9 of the Wildlife and Countryside Act (amended by the CROW Act 2000); they are a species of conservation concern.

No evidence of barn owls (or any other species of owl) was found anywhere within the buildings at the time of the survey. However they are a mobile species which have been recorded in the area so the situation could change during the period of any extant planning permission.

There was no obvious evidence of nesting birds although there are some opportunities on top of the walls in the main barn and on ledges/timbers in the sheds.

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).

Swifts are another declining species and it is certainly possible that they nest in the area. It would be worth ensuring that suitable provision is made post conversion. The diagram below explains the requirements, this space may then also be used by certain species of bat.

Care should be taken if undertaking any works during the bird nesting season to avoid any disturbance. If a nest was found (or in the course of being made) then all work should cease until the young have fledged. Particular care should be taken with swallows because they will often be present until well into September.

10. REFERENCES

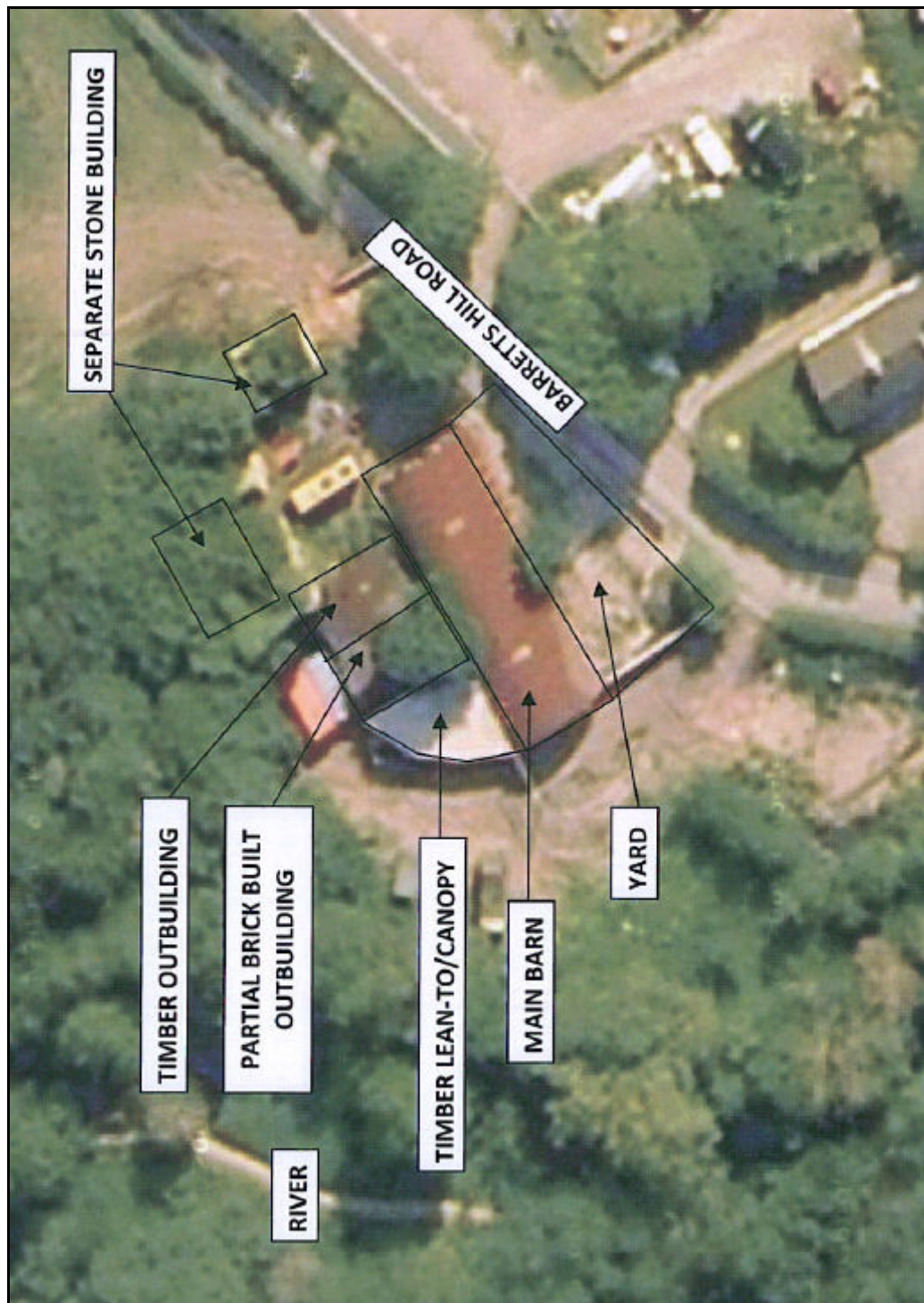
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Appendix 1 – Site plan



Appendix 2 – Site Photos

1. Side view from the road



2. Interior view of the main barn



3. Rear elevation with adjoining sheds



4. Open plan sheds at the rear



5. Sheds at the rear



Appendix 3 – Bat mitigation

