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PROTECTED SPECIES SURVEY

WILLOW STREET, OVERTON

WREXHAM, NORTH WALES

FOR

Jig Architects

2nd August 2013

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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. Invasive species**
- 11. References**

Appendix 1 – Site plan

Appendix 2 – Site photos

1. INTRODUCTION

A preliminary bat and bird survey was undertaken on the 1st August 2013. The survey was carried out by David Bennett, a licensed and experienced bat surveyor and ecologist (CCW & Natural England licenses) following a request by Jig Architects on behalf of their client. The survey was requested to satisfy planning requirements in respect of any protected species issues for a building located at Willow Street, Wrexham, North Wales. A planning consent is being sought to permit the demolition of the building as part of a site redevelopment plan.

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

5. STUDY AREA

The site consists of a single detached building (some form of former commercial unit which has remained unused for sometime), areas of hardstanding, two trees and a variety of young scrub/ruderal grassland. The site is set within a residential area at the centre of the village.

The building is constructed in a traditional manner with brick walls supporting a pitched and timber framed roof covered with slate. There is no underfelt and the tiles have been nailed directly to timber boards which are exposed internally. The ground section of the building is open and the upstairs is fully lit by the large front windows which are partially broken. At the rear of the building there is a small mono-pitch lean-to with a tin roof.

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 1st August 2013, the weather conditions were very warm, dry and clear. As much of the building 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

No evidence of bats was found anywhere inside or outside of the building. No droppings were apparent on the floor, roof and wall areas and there were no signs of feeding perches. The main roof void is open and all areas can be viewed, the floors have not been swept or cleaned. In this situation any droppings from past roosting or feeding bats would normally be clearly visible when there has been little or no disturbance.

The internal timbers within the building appear to be the original but they do not support any features which could be used by bats such as open peg holes or mortise joints. The main first floor area is completely lit from the large front windows.

Externally there are no boxed soffits or other boxed cavities which can sometimes be used by crevice dwelling bats. The timber boards supporting the gutters are fitted tight to the walls with no suitable gaps offering access to the wall plates. There is a gap in the brickwork at the front corner which was inspected with an endoscope but nothing was found. The brick walls are solid without a cavity. The building as it currently stands has a low potential to support roosting bats.

At the rear of the building there are two trees. One is a Lawson cypress and the other is a semi-mature silver birch. Both of these trees were inspected and neither of them offers any opportunities for 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 demolition 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 demolition 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 event that bats were found during the demolition then all work should cease and Natural Resource Wales (Mold office) and/or a licensed bat worker should be contacted for further advice.**

9. NESTING BIRDS

Some evidence of nesting birds was found within the building and also within the areas of scrub in the grounds. Several swallow nests were found in the building along with evidence from other small birds, wrens/sparrows etc.

Some form of mitigation will be required to compensate for the loss of nesting habitat. Two Schwegler 1SP sparrow terrace nest boxes should be installed on the east facing eaves on plots 1 & 2 along with a further two on the east facing eaves (at the rear of plots 3 & 4.

Mitigation will be provided for swallows within the garage roof void. An entrance 300mm x 100mm will be constructed into the south gable end to permit access into the void of the pitched roof. A ceiling will be constructed to prevent bird droppings damaging cars or stored contents.

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).

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. No demolition works should take place between March and September inclusive.

10. INVASIVE SPECIES

Japanese knotweed was noted at the rear of the building with a large patch measuring several square metres. This is a highly invasive species that will require specialist treatment before any site works are undertaken. Further advice should be obtained from a company which specialises in the removal of this species. Treatment may include cutting and repeat spraying, complete excavation. No ground-works or site clearance should be undertaken until this issue has been resolved

11. REFERENCES

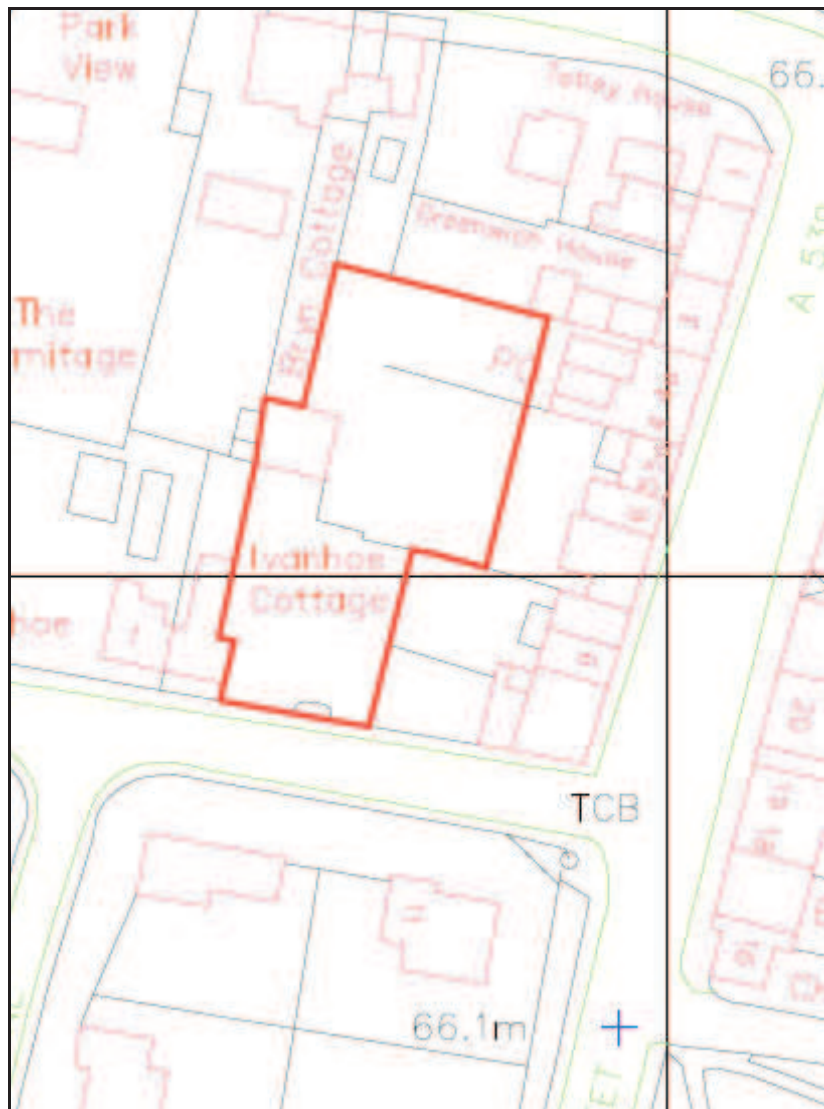
BCT 2007 Bat Survey Guidelines London UK

English Nature 2002 *Bats in roofs: a guide for surveyors* English Nature Peterborough UK

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 plan existing



Proposed site plan

The red arrows denote the position of the Schwegler bird boxes to be fixed under the eaves

The blue arrow denotes the location of the dedicated swallow loft.



Appendix 2 – Site Photos

1. Front south elevation



2. End east elevation



3. Rear north elevation



4. The open undersection



5. First floor open roof area



6. Gap in brickwork



7. Swallow nest on ledge



8. Two more swallow nests on ledge



9. Swallow nests x 2 in the toilet

