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Version 2 - Audit/Inspection Report for the Mitigation Stand-Along Bat House at Mill Cottage

**MILL COTTAGE
MARCHWIEL HALL
WREXHAM
LL13 0SS**

ON BEHALF OF: MR MARK CREIGHTON

DATE: OCTOBER 2021

REPORT BY: PAUL ROBERTS
REVIEWED BY: MATTHEW WHITEHEAD

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Section 1

Introduction

- 1.1 P J Ecological Solutions were commissioned by Mr Mark Creighton to produce an Inspection/Audit Report of the stand-alone bat house situated at Mill Cottage, Marchwiel Hall, Wrexham, LL13 0SS (hereafter referred to as 'the site'). The site is centred on approximate Ordnance Survey Grid Reference SJ 34060 48269.
- 1.2 Planning permission was granted by Wrexham Borough Council on the 15th of October 2020, for the change of use of a building from business use to a single dwelling, internal and external refurbishment works, a two-storey extension, a basement extension, and the erection of a replacement outbuilding (planning reference number MAR P/2020/0106).
- 1.3 Included in the plans is a purpose-built bat loft, positioned 2-3 metres from the bank of the Gefeilliau Brook, which will provide mitigation for the potential loss of a roost for a maternity colony of brown long-eared bats (*Plecotus auritus*).
- 1.4 During the application process, the County Ecologist has recommended the following is attached as a planning condition:

7. Prior to commencement of any work on the dwelling house, the stand-alone bat house shall be fully constructed, completed and usable as an alternative roosting space. An Inspection/Audit Report shall be carried out by a licensed ecologist and which shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.

- 1.5 To fulfil and discharge this planning condition, an inspection/audit of the stand-alone bat house has been undertaken by Paul Roberts (UCert; NRW bat licence number S088763/1), to confirm that it has been completed according to the specifications detailed in the submitted plans and method statement, prior to the commencement of works on the dwelling house. This report details the findings of that inspection/audit.
- 1.6 The framework of this compliance/audit scheme has been adapted from the European Protected Species licence compliance audit template, developed by Natural Resources Wales.
- 1.7 This Audit is informed by the Bat Mitigation Strategy Rev B as carried out by Lawray Architects and dated October 2020 approved as part of this application.

Section 2

Appointed Ecologist for the Bat Mitigation Scheme

- 2.1 Paul Roberts (NRW bat licence number S088763/1), of PJ Ecological Solutions, has been appointed to act as the ecological clerk of works, to implement the bat mitigation strategy, and to act as the internal auditor, for the project at Mill Cottage.

- 2.2 Paul Roberts has been carrying out bat work as a professional consultant since 2011. He has held a roost visitor and survey licence in England since 2011, after receiving comprehensive training from the Shropshire Bat Group. He also has a UCert in Biological Recording, and has attended many short courses relevant to bats, including courses on various types of bat surveys, bat ecology and mitigation techniques. He is competent to provide consultancy for projects which may affect bats, according to the criteria of the BCT Professional Training Standards (Level 2).
- 2.3 The species applied for here are common pipistrelle bat, soprano pipistrelle bat, whiskered/Brandt's bat, brown long-eared bat, and lesser horseshoe bat. Paul has previously acted as the named ecologist on development licenses including all of these species. He has also handled all these species, apart from Lesser horseshoe bat, during bat-box checks both with the Shropshire Bat Group, on previous development licenses and on training courses, during which he has identified, weighed, measured, and sexed the bats.
- 2.4 Paul has written county council-approved mitigation plans for other residential developments in Wales and England (which have included the above-named species, among others), and he has worked on EPS licensed projects for his own and other ecological consultancies, dealing with a wide range of other bat species in England and Wales. He has been involved with hibernacula surveys at underground sites with the Shropshire and Montgomeryshire Bat Group.

Section 3

Using this report

- 3.1 Maintaining adequate records via an audit forms an important part of ensuring that all relevant planning-related, legal and other ecological requirements are achieved. Natural Resources Wales have developed a protected species licence compliance audit template, the framework of which has been adapted to produce this report.
- 3.2 The title of the audit report is "Audit/Inspection Report for the Mitigation Standalone Bat House at Mill Cottage".
- 3.3 The auditor (an NRW bat licenced Ecologist) has inspected and recorded the implementation of the mitigation.
- 3.4 The specifications and roosting features detailed in the Bat Mitigation Strategy Rev B, as produced by Lawray Architects (October 2020), were used as performance indicators.
- 3.5 The photographs act as adherence and are detailed in a separate table and listed/numbered on the audit.

Section 4

Audit/Inspection

Report Name	Audit/Inspection Report for the Mitigation Stand-alone Bat House at Mill Cottage	Site name:	Mill Cottage, Marchwiell Hall, Wrexham, LL13 0SS
NRW Licensed Ecologist	Paul Roberts NRW bat licence number S088763/1	Site grid reference:	SJ 34060 48269.
Specifications/roosting features	Record of adherence to the specifications	Photographic evidence and number	
The purpose-built bat house is to be situated 2-3m distance from the bank of the Gefelliau Brook (as the bank is too steep to support construction), where it will receive solar gain to support a maternity colony.	The structure is situated approximately 2-3m from the bank of the brook.	1	
The partitioned loft space is to measure 4.2m x 4.2m and 2m in height from floor to ridge.	The structure is approximately 5.4m in length, 4.5m in width and approximately 2.3m from the floor of the loft to ridge.	1	
It will be built using reclaimed timber frame, with blackened cladding to match the extension and outbuilding,	The structure is constructed of timber and contains blackened cladding.	1.	
The roof will be slate tile to match the existing roofs, with Bitumen 1F felt underlay.	The roof is constructed of Welsh slate roof tiles and angled ridge tiles. Bitumen 1F felt provides the underlay.	2, 6 and 7.	
Crevice opportunities are to be created, with gaps between the cladding.	Three raised ridge tiles have been created. Two of these provide access into the structure, and the other provides crevice-roosting opportunities.	2	
A 500 x 500mm hatch on the rear underside of the loft will provide access for monitoring.	An access hatch has been created with bolts	5	
Access to the structure	Three raised ridge tiles have been created. Two of these provide access into the structure, and the other provides crevice-roosting opportunities	2 and 4	

A smaller compartment created in the loft will provide a warmer area (a hotbox).	The smaller compartment has been constructed within the quarter of the structure.	3 and 7
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Photographs

Number	Photograph
1	
2	
3	

4



5



6



7



Section 5

Further contingencies required

- 5.1 Once a derogation licence from NRW is obtained, bat droppings will be collected by the ecologist to 'seed' the roost compartment of the standalone bat house along with materials and stained timbers taken from the existing roost.
- 5.2 Prior to the works to secure the building, the ECoW will oversee the fitting of exclusion doors/flaps to any known points of egress/ingress, to reduce the likelihood of any bats being present. The ECoW will inspect the existing loft space immediately prior to the works to secure the cottage, to determine whether any bats are present (this is considered unlikely).
- 5.3 Works to secure the cottage will be undertaken between November 2021 and 1st of April 2022 (in accordance with table 8.1 of Bat Mitigation Guidelines). This is the period when that only small numbers of bats are likely to be present (if any).
- 5.4 The existing loft space within the cottage is to be secured and remain in situ until at least July 2022. This is to coincide with the period to which a temperature and humidity data logger is deployed and monitor the existing maternity brown long eared bat roost (April 2022 until July 2022).
- 5.5 These conditions are to be mimicked within the new bat loft by deploying by the Temperature, Humidity & Dew Point Data Logger within this space to obtain the required temperature conditions from the existing roost in Mill Cottage.
- 5.6 When the existing loft is to be removed, post-July 2022, the ECoW will inspect the space immediately prior to the commencement of works, to determine if any bats are present, and to undertake exclusion (this is considered unlikely).
- 5.7 These conditions can be obtained by either providing insulation, installing double panelling within the interior and/or providing further hot boxes to obtain the required condition.
- 5.8 The post mitigation monitoring will be undertaken until successful mitigation is obtained.

Section 6

Conclusions

- 6.0 The standalone bat house is fully constructed, compliant and created to the specifications detailed in the Bat Mitigation Strategy Rev B, as produced by Lawray Architects (October 2020).
- 6.1 This report will form the basis of an internal compliance audit which is required during the licensing process.
- 6.2 The monitoring will be undertaken for a period of years to ensure the mitigation is successful and if bats are found not to be roosting within the structure, then corrective modifications will be undertaken.
- 6.3 Once completed a copy of the compliance audit will be provided to Natural Resources Wales and Wrexham Borough Council.