

Greenscape Environmental Ltd

GRIFFITHS

**REASONABLE AVOIDANCE MEASURES
METHOD STATEMENT
BATS AND BIRDS**

**REDUNDANT BARN
OLD HALL FARM
ERBISTOCK
WREXHAM
LL13 0DD**

JULY 2015

777 003MS

**Long Acres
Lyth Bank
Shrewsbury
SY3 0BW**

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1 Background Information

1.1 Purpose of the report

Greenscape Environmental Ltd was commissioned by Mr Griffiths, to update the survey on the redundant Barns at Old Hall, Erbistock and to provide a plan of the bat and bird boxes to be erected on site. Planning permission has been granted for this work 2011/05/0091.

This document provides a method statement for the works involved the roof of the redundant barn based on the findings of the bat surveys conducted by Greenscape Environmental Ltd 2015. It also provides information about the installation of roosting opportunities for bats and nesting birds as required for the discharge of condition 13 of the planning permission.

The original survey in 2010 identified a small maternity roost of soprano pipistrelles using the building. It was concluded that work would need to be conducted under licence from Welsh assembly Government (now National Resources Wales). This is referred to in condition 11 where it states that the development will be carried out in accordance with the recommendations of the ecological report dated June 2010. It is now concluded that the building is no longer a roost and work can be conducted under strict method statement.

1.2 Methodology

Three activity surveys were conducted in order to apply for the licence to clear condition 11.

Phase 2 bat activity surveys were conducted at the site (OS grid reference SJ 348 437) on the 19th May, 8th 17th June by P. J. Roberts, an experienced and licensed surveyor, with the assistance of B. Jones and J. Molesworth. During these surveys, Brown Long-Eared bats (*Plecotus auritus*) were observed to the north end of the building (that covered by tiles), but no maternity roost was identified. \the condition of the building was seen to have deteriorated since 2010 and it is thought that this could be a contribution to the loss of the roost.

All bat species are protected under the Conservation of Habitats and Species (Amendment) Regulations 2012 which implements the EC Directive 92/43/EEC in the United Kingdom. It is an offence, with certain exceptions, to:

- deliberately capture or kill any wild animal of a EPS;
- deliberately disturb any such animal;
- damage or destroy a breeding site or resting place of such a wild animal;

It is concluded that an offence will not be committed so a licence is no longer required and work can be conducted following a rigid method statement.

Enhancements for the bats will still be made

1.3 Outcome

In order to conduct works on this barn, and in particular on the roof, this report outlines:

- How works will be conducted
- Suitable times of year for work to take place
- Specific conditions for work on the roof
- Recommendations for reasonable avoidance measures.

2 Site Description

2.1 Site Location

Old Hall Farm is located at the end of a driveway approximately 0.5km long, accessed via the A528, equidistant between Erbistock to the south and Eyton to the north.

2.2 Site Description

The site consists of a number of buildings belonging to the farm, and the occupied farmhouse dwelling itself. It is surrounded by a rural environment, predominantly arable and grazed pastures. To the east of the barn is a section of rough unmanaged grassland, scattered mature trees and mature species rich hedgerows. These all provide excellent foraging opportunities for bat species.

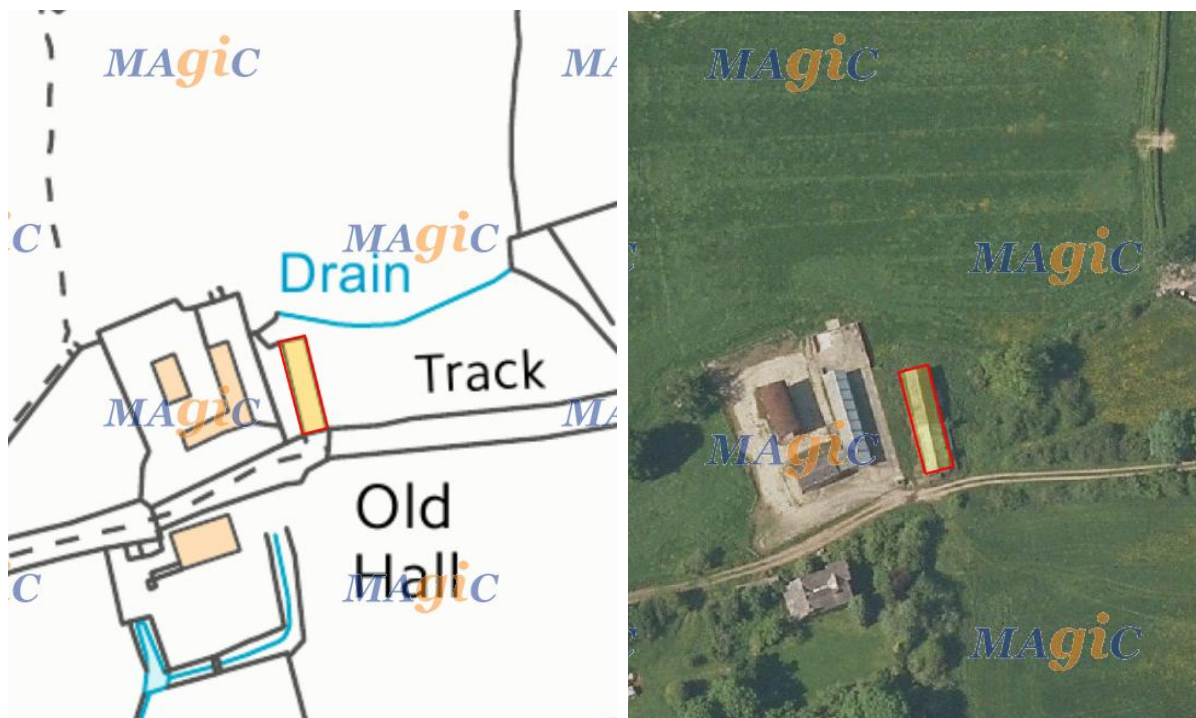


Figure 1. Showing the location of the barn (highlighted red) in both an OS map, and satellite overlay

The barn has been disused except for occasional plant storage and so is in a state of disrepair.

The building is split into a north and south section. The north section is full-height and has an unlined slate roof, with many slipped tiles and mortar gaps that would provide excellent opportunities for bats. The southern section is split into a ground and first floor. It has an unlined corrugated metal roof, considered to offer little to no opportunities for bats.

2.3 Recorded Species

Local records of bat species within 1km of this site include common pipistrelle bats (*Pipistrellus pipistrellus*). Other species recorded between 1km and 10km from this site include soprano pipistrelle bats (*Pipistrellus pygmaeus*), brown long-eared bats (*Plecotus auritus*), noctule bat (*Nyctalus noctula*) and whiskered bats (*Myotis mystacinus*). Previous surveys revealed a small maternity roost of soprano pipistrelles using the building to roost. This was identified on the dividing wall between the two sections of the building.

Other protected species have been recorded within 1km of the site, these include European badgers (*Meles meles*) and great crested newts (*Triturus cristatus*). Neither of these were recorded in the immediate vicinity on previous surveys.

3 Results

Brown Long-Eared bats (*Plecotus auritus*) were observed to the north end of the building (that covered by tiles), but no maternity roost was identified. No maternity roost of soprano pipistrelles was found and no fresh evidence observed.

4 Mitigation Strategy

No maternity roost has been identified, but it is considered that there is a remaining risk that the barn could be utilised by either pipistrelle species or brown long eared bats as there monitored during the activity surveys.

4.1 Working Method Statement-Bats

In order to comply with the legislation and avoid damaging bats or their roosts, the following rigid method statement must be followed during works on the building. This document should be printed and left on site for reference throughout the entire period of works.

4.1.1 Responsibilities of the Ecologist

A licensed ecologist will be employed on site as an Ecological Clerk of Works (ECW) to oversee the work in areas sensitive to bats.

4.1.2 Prior to the roof being removed

1. The ECW will provide a toolbox talk for all workers to inform them of the potential to find bats and outline safe working practises and emergency procedure should a bat be located
2. The developer will erect two external bat boxes, these will include at least two Schwegler 1FF boxes. They require placement on south-facing aspects of buildings or trees and must be in place for a minimum of three months before commencement of work and will be placed at a height of 3-4m.

4.1.3 During work in areas sensitive to bat activity (roof removal in particular)

3. The ECW will oversee the provision of alternative roosting opportunities for any bats in the area
4. The ECW will conduct a thorough check of the roof prior to any work commencement

5. Be present for the removal of the existing roof (which will be done by hand)
6. Periodically audit the work on site, ensuring the method statement is adhered to
7. Be contactable at all times to provide advice and support for workers who may locate a bat whilst the ECW is absent from site

4.1.4 Responsibilities of the Contractor and Developer

The contractor and the developer must also adhere to a rigid method statement, in order to minimise negative impacts on local bat species.

8. Work on removing the main tiles section of roof will take place between October and March inclusive (with exceptions – see section 4.1.5). This is when there is least opportunity to disturb a roost of bats. In this time, the contractor and developer must ensure that the roofing work is done, and the mitigation measures (such as a bat loft) are in place
9. The roof will be removed by hand, with extra care and caution around the ridges, wall plates and hips
10. The developer must liaise with the ECW to ensure the ECW can be present for this process
11. The roof can only be removed if the air temperature has been above 5°C for 3 consecutive nights
12. If timber requires treatment, a bat friendly timber treatment approved by Natural England will be used, such as Permethrin based Cuprinol 5*
13. If a bat is located, all work will stop immediately and the ECW contacted for advice
14. Workers will not handle the bat, unless serious injury will be sustained without intervention. If handling is absolutely required, thick gloves will be worn (multiple layers of gloves if necessary)

4.1.5 Schedule of Works

The southern section of the building has a metal roof. Given the low likelihood of the presence of bats, this can be removed before the October-March limitation outlined previously.

15. Work will still be conducted by hand and with due care and attention
16. Works will be conducted in the daylight hours, when bat activity will be at a minimum

4.2 Enhancements for Bats

4.2.1 Bat Boxes

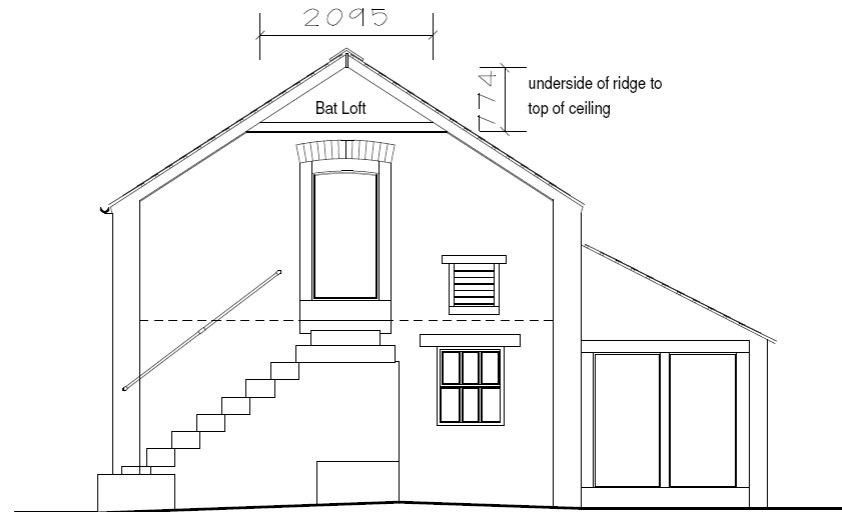
1. It is recommended that provision will be made for roosting opportunities for bats with the erection of two Schwegler 1FF bat boxes on the building and a bat loft as indicated in the approved plans. The bat boxes will be erected at a height of 3-4m and in a southerly, westerly or easterly facing direction on trees in the grounds of the building.



Figure 2. Schwegler 1FF bat box

4.2.2 Bat Loft

2. A bat loft will be created when the building is converted. This will occupy the peak of the roof on the southern aspect of the building.



PROPOSED SOUTH ELEVATION 1:100

Figure 3. Location of the bat loft

3. The total volume of the void will be 3.24m³.
4. Skylights will not be placed in the roof section designated as a bat loft
5. The loft space will have a small access hatch so it can be checked for bat activity, but not used for storage
6. Bitumen hessian roof lining will be used in this area
7. Access to the bat loft will be made by leaving two ridge tiles slightly raised leaving 15mm gaps. Under these areas slits will be made in the breathable membrane
8. A lead replacement tile and/or a purpose-built ridge access tile will be installed on the western aspect of the loft just below gable height to allow bat access
9. Roost opportunities in the bat loft will be made by using 1m strips of Bitumen Hessian lining at the ridge tile. Gaps and slits will be made in these to allow bat access
10. Wooden bat boxes will be created and erected on the gable ends of the bat loft to create further roost opportunity. These will have an entrance gap of 15mm
11. The roof space set aside for bats will be insulated between the floor and ceiling and not under the tiles. This is the best method to keep the area the right temperature for bats in summer
12. Should a bat be found at any time, the ecologist will be contacted immediately and advice from NRW sought.

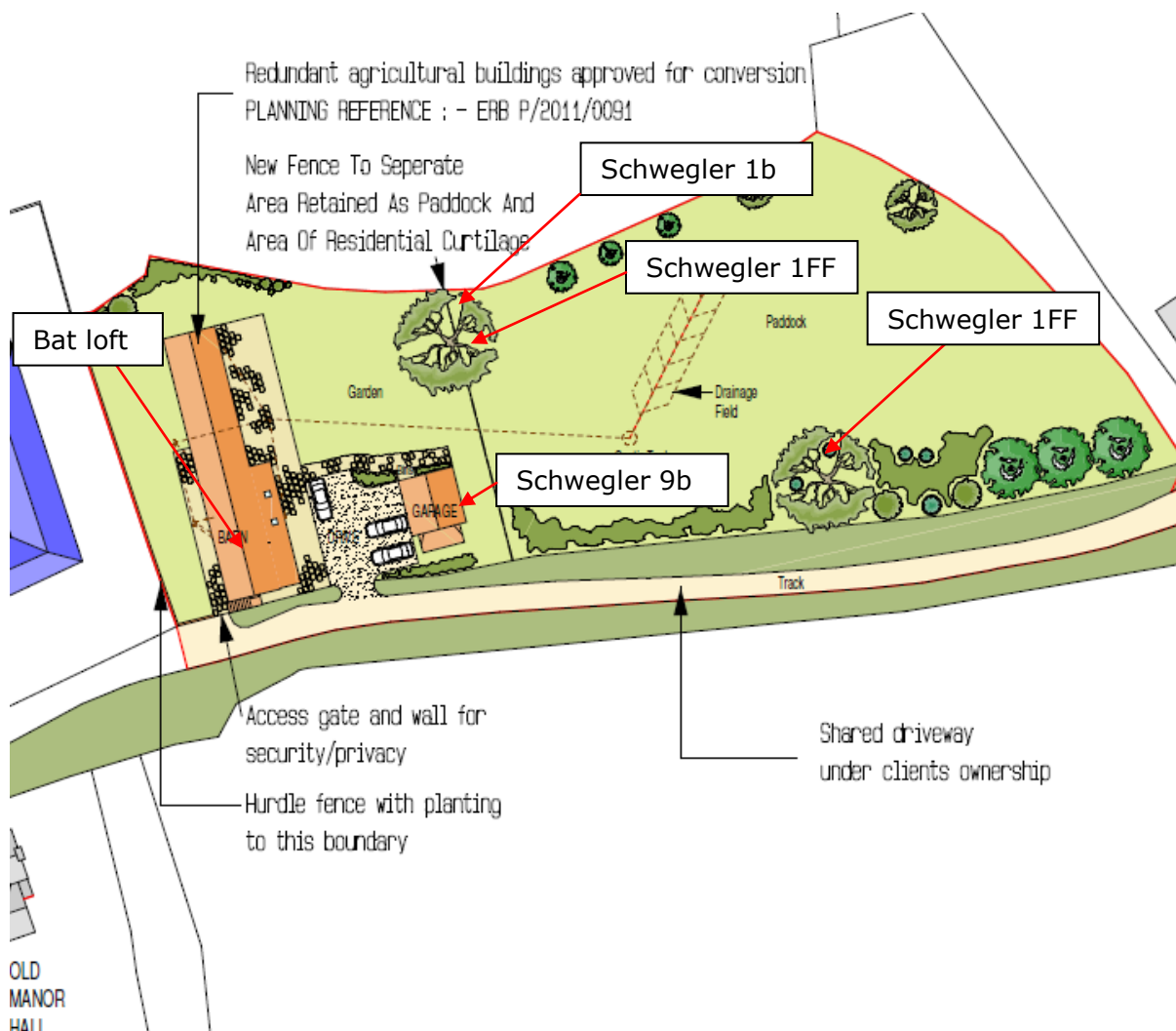
4.3 Birds

4.3.1 Positioning of bird boxes

13. Condition 13 requires a plan showing proposed mitigation for bats and or birds.

14. Nesting boxes will be placed in the following positions post construction to avoid disturbance.

15.2 Schwegler bird boxes will be erected on the site, a Schwegler 1b suitable for tits and other birds, and a house martin nest (Schwegler 9b) on the eastern eaves of the new garage.



	
Schwegler 1b	Schwegler 9b

5 Other

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- Questions arising from the survey report should be directed to the author of this report, who will be pleased to clarify any technical issues raised.
- Whilst the surveyors make every reasonable effort, Greenscape Environmental Ltd cannot guarantee that all protected species have been identified and survey results are definitive.