

**Preliminary Ecological Appraisal
Former Poultry House
Lilac Cottage, The Gutter,
Belbroughton**



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SUMMARY

Purpose

The phase 1 preliminary ecological appraisal is undertaken in order to identify key ecological constraints to the proposed development; inform planning to allow significant ecological effects to be avoided or minimized; identify any further ecological surveys needed to inform an ecological impact assessment and to support the development of mitigation of compensation measures.

Methodology

The survey was conducted by carrying out a systematic walkover of the site by Dr. Stefan Bodnar to record habitats, species, and any notable features of interest with regard to flora & Fauna. This is in accordance with standard Phase 1 survey techniques and is a methodology recommended by the Institute of Environmental Assessment (1995) and guidance from CIEEM (2013, 2018).

Key Issues

In relation to the National Planning Framework (2021) there is not likely to be a requirement for Mitigation/ Compensation measures for loss of bird nesting or bat roosting opportunity.

Conclusions

This Phase 1 Ecology Report illustrates that the entire site, the building/hard standing with improved grassland, is of 'negligible ecological value'. The building is of negligible potential for bat roost formation and there is no evidence of bats or breeding birds. There are no Statutory or Non-Statutory Designated Nature Conservation Sites within the site or that will be impacted by this development.

From the Biological Data Search no protected species were recorded within the site.

In relation to the National Planning Framework (2021) there will be no requirement for Mitigation/ Compensation measures for bats, no further surveys required, or particular cautions within the works specified. As a basic biodiversity enhancement the provision of a single bat box and a single bird box on the building is recommended. In addition, external lighting should be restricted and should conform with BCT guidelines (Appendix 3 has a summary) though more recent guidance 'Bats and External lighting, BCT, 2018', should be followed.

1. INTRODUCTION

1.1. Background

At Phase 1 Preliminary Ecological Appraisal was carried out a former poultry house to the rear of Lilac Cottage The Gutter, Belbroughton, DY9 9XB to evaluate the habitats, describe any further surveys required and indicate the level of required mitigation/ compensation/ enhancement in relation to the proposed development of the site.

1.2. Site Location

The building is a former poultry house to the rear of Lilac Cottage The Gutter, Belbroughton, DY9 9XB. An Aerial photograph, Appendix 1a, shows the areas concerned. The site location is described below. All parts of the site were available for access. The site is shown below (red line boundary)



1.3. Site Description

The building was previously a chicken-shed and has been adapted to provide a concrete floor and plinth. There is a timber frame. The building is currently used for agricultural purposes, for storage and also with livestock occasionally housed in there. The buildings are constructed of wood with asbestos concrete corrugated roof. The roofing is corrugated asbestos, with a wood frame. There are no roof voids or wall cavities present, the interior of the building has been insulated in places and some of the roof is lined internally with fibreboard.

The site lies in the rural area of Belbroughton. Immediate surrounding land use is agricultural, both pasture and arable. There are hedgerows and field trees which are likely to be the key foraging and commuting areas for bats within the surrounding area with larger native woods lies some distance to the North and East. See below:



1.4. Brief Description of Project

The area is subject to a planning application for class Q conversion of the existing shed to residential accommodation. (refer to planning application and see below):

1.5. Purpose of the Preliminary Ecological Appraisal

The phase 1 preliminary ecological appraisal report identifies key ecological constraints to the proposed development; informs planning to allow significant ecological effects to be avoided or minimized; identifies any further ecological surveys needed to inform an ecological impact assessment and supports the development of mitigation of compensation measures. It is composed of two parts: A site visit, during which a preliminary ecological appraisal of the site is carried out to identify the major habitat types, plant, bird, reptile, mammal and other species using the site. Also a desk study, which gathers ecological data on the site and its surrounding area, to identify protected species and statutory protected sites in the vicinity of the proposed development site, in order to produce recommendations on the key ecological constraints to the proposed development.

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2. METHODOLOGY

2.1 Desk Study Methodology

Information was gathered from a number of web-based data sources, published ecological reports and where appropriate, the authors own records. The ecological data search covers the following areas:

- Species of particular note
- Local Nature Reserves
- Protected species (badger, grass snake, great crested newts, otter, water vole and bats)

2.2. Survey Methodology

The survey was conducted by carrying out a systematic walkover of the site by Dr. Stefan Bodnar to record habitats, species, and any notable features of interest with regard to flora & Fauna. This is in accordance with standard Phase 1 survey techniques and is a methodology recommended by the Institute of Environmental Assessment (1995) and guidance from CIEEM (2013, 2018).

During the survey, emphasis was placed on searching for evidence of and potential of habitats and features supporting protected or notable species, especially those listed under the Conservation of Habitats and Species Regulations 2017, the Wildlife & Countryside Act 1981 (as amended).

The range of methods used were as follows:

Bats

The trees within the site were appraised for their potential suitability to support breeding, resting and hibernating bats in accordance with survey methods documented in the Bat Surveys: Good Practice Guidelines (Bat Conservation Trust 2016). Features of medium and high potential for bats were searched for signs of use by bats, such as droppings, urine staining and scratches around entrance holes etc.

A visual inspection of the trees from ground level with the aid of binoculars was undertaken to search for evidence of actual bats as well as signs of bats (droppings, feeding remains, urine staining, scratch marks, noise and the remains of dead bats etc.). In addition, the trees were assessed for the presence of features likely to be attractive to roosting bats, such as cavities or rot holes in the trunk or branches, splits in the timber, delaminating bark, deep bark crevices, dead branches and dense ivy cover etc.

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In accordance with the methodology outlined in the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (2016) trees were assigned to the following categories:

- **Known or Confirmed Roost** - signs of bats (droppings, etc) or actual bats recorded; or previous records of bats in tree
- **High (Category 1*)** – trees with multiple, highly suitable features capable of supporting large roosts
- **Medium (Category 1)** – a tree with definite bat potential; fewer features than category 1* or potential for single bats
- **Low (Category 2)** – No obvious potential, although tree of size and age that elevated surveys may result in cracks/crevices being found; or tree has some features which have limited potential to support bats
- **Nil (Category 3)** – no potential to support bats

The site was also assessed for potential bat foraging areas and commuting routes.

Features of medium and high potential for bats were searched for signs of use by bats, such as droppings, urine staining and scratches around entrance holes etc. The site was also assessed for actual and potential bat foraging areas and commuting routes.

The buildings were assessed for suitability for bat roosts using BCT Good Practice Survey Guidelines (2016).

Reptiles

The site was assessed for its suitability to support reptiles based upon the abundance of suitable habitats such as structurally diverse habitats, hedgerows, scrub, rough grassland, wood piles, rubble, banks and compost heaps etc. The site was assessed with respect to its potential for use for hibernation and spring/summer use based on guidance provided in the Herpetofauna Workers' Manual (Joint Nature Conservation Committee, 2003) and the Reptile Management Handbook (Edgar, Foster & Baker 2011).

Badgers

The whole site was searched systematically, with particular attention being paid to features likely to support badger setts (e.g. earth embankments, wooded copses etc.). The location of all badger signs such as runs, dung pits, prints, hair, foraging snuffle holes found during the survey were mapped and all setts characterised as either main, annex, subsidiary or outliers in accordance with guidance given in Surveying Badgers (Harris, Cresswell & Jefferies, 1988).

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Birds

All birds observed during the field survey were recorded, in addition to features capable of supporting nesting birds (e.g. trees, hedgerows, buildings, bramble beds, ruderal vegetation and rough grassland etc). The sites was also assessed for its actual and potential suitability to support Schedule 1 and Biodiversity Action Plan priority species.

Other Species

The site was also assessed for its actual and potential suitability to support other protected or notable fauna in accordance with the Guidelines for Preliminary Ecological Appraisal (Chartered Institute of Ecology and Environmental Management, 2013, 2018).

2.3. Site Location and Access

Former poultry house to the rear of Lilac Cottage The Gutter, Belbroughton, DY9 9XB All areas of the site were available for access.

2.4. Date and Time of Survey

The initial site assessment was conducted on 8th March 2023.

2.5. Weather Conditions

The weather conditions during the survey were cold and overcast. Light snow flurries.

2.6. Survey Constraints

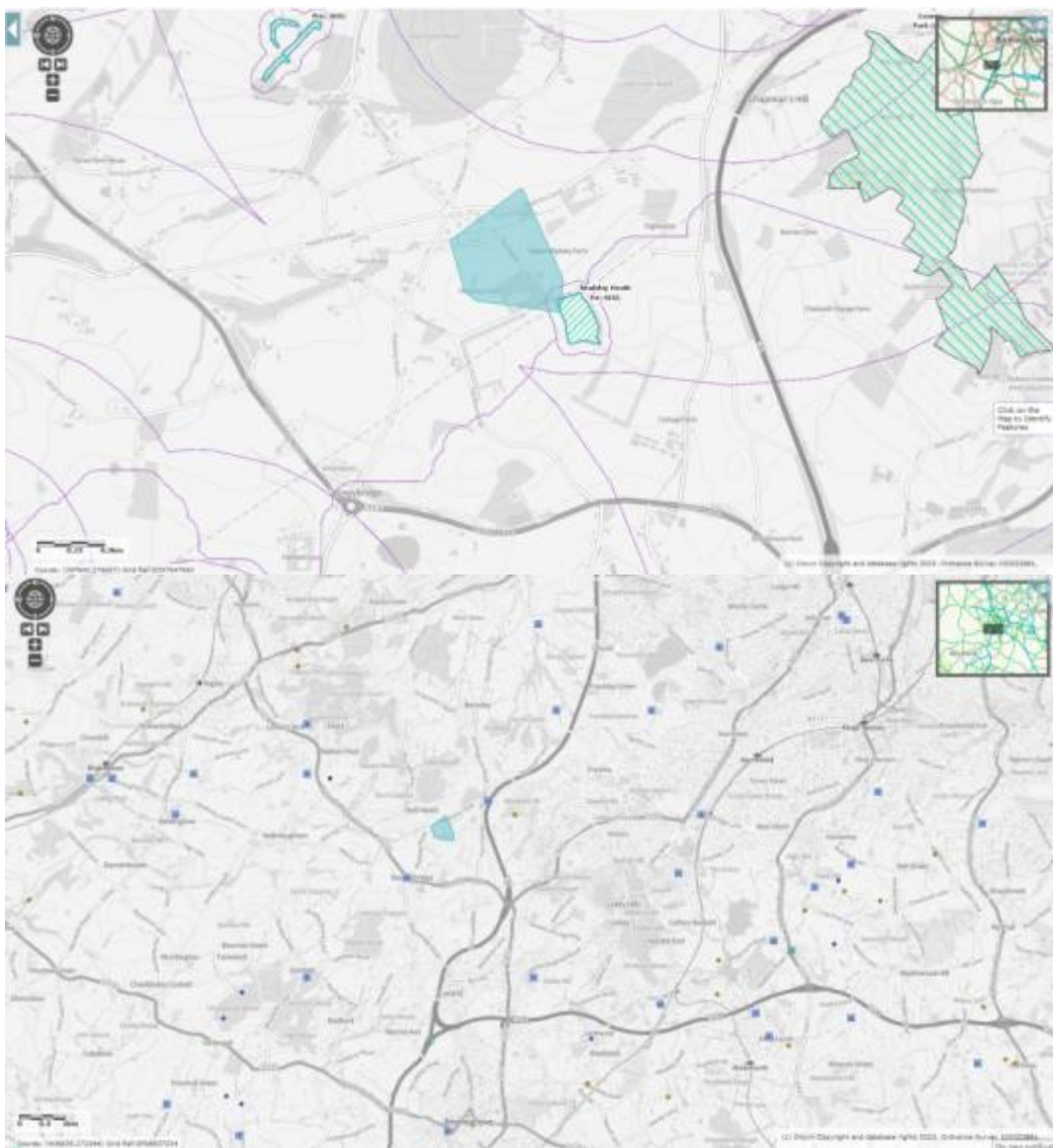
Owing to the time of year the initial survey took place it can be considered to provide a reasonable, though not exhaustive plant list. This survey noted the habitat types on the site, and the dominant vegetation at the time of the survey, which is likely to be constant and a fair reflection of the habitat quality present.

3. RESULTS

3.1. Desk Study Results

3.1a Statutory Nature Conservation Sites

The map below shows all Statutory Nature Conservation Sites (this includes Sites of Special Scientific Interest, Local Nature Reserves, Special Areas of Concern) within 2km of the proposed development. A Natural England 'Magic' data search (shown below) reveals that the site lies within a Nitrate Vulnerable Zone for ground water and surface water and in addition the site lies within a SSSI Impact Risk Zone. These factors must be considered in relation to any demolition and construction operations. The EPSM data is shown below (bat licenses denoted by blue squares; source MAGIC).



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Protected Sites in Vicinity

The nearest Statutory Protected site is Madeley Heath Pit SSSI, which lies 150-200m SE.

(SSSI Site of Special Scientific Interest, LNR = Local Nature Reserve, NNR = National Nature Reserve)

3.1b. Protected Species Records

In relation to protected species, the following were recorded within 5km and are presented here with the approximate distances of the nearest record. In relation to bat species the following were recorded from a variety of online web based resources, (and in places, the authors own records), presented here with the approximate distances of the nearest record. In addition, a number of Ecological survey reports within the area have been interrogated for protected species records. All records are post-2000 unless otherwise stated. In this case all records derive from the Natural England 'MAGIC' website.

Species (Latin Name)	Common Name	Approximate distance of nearest record from the survey site (km)
<i>Pipistrellus pipistrellus</i>	Common pipistrelle	Within 2 km
<i>Plecotus auritus</i>	Brown long-eared bat	Within 2km

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Other Statutory Protected Species

Species (Latin Name)	Common Name	Approximate distance of nearest record from the survey site (km)
<i>Meles meles</i>	Badger	Within 2 km
<i>Triturus cristatus</i>	Great Crested Newt	Within 5 km
<i>Tyto alba</i>	Barn owl	Within 5 km

3.1 c Interpretation of Biological Data from Desk Study

The data search reveals that there are two bat species recorded recently within 2 km radius of the survey site. There are a number of other species area recorded at further distances. Badgers and Great Crested Newt are also recorded within 5 km of the site.

3.2 Survey Results

3.2.1. Habitat Types Present & Baseline Ecological Conditions

The building was previously a chicken-shed and has been adapted to provide a concrete floor and plinth. There is a timber frame. The building is currently used for agricultural purposes, for storage and also with livestock occasionally housed in there. The buildings are constructed of wood with asbestos concrete corrugated roof. The roofing is corrugated asbestos, with a wood frame. There are no roof voids or wall cavities present, the interior of the building has been insulated in places and some of the roof is lined internally with fibreboard.

The existing building is intact with no gaps, cracks or other features where bats might gain access. Internally the main part of the building is well lit and used, and the storage area and barn are cobwebbed in the upper parts.

There were no signs of bats or breeding birds. Evidence of mice and rats was determined.

To the SE is a conjoined more modern kennel building, constructed on solid brick with a concrete floor and corrugated metal roof, no cavity or roofspace, lit by windows and open doorway.

The building was categorised as negligible in respect of access and roost potential. The bird boxes were unused at the time of survey and it is understood these are to be shortly relocated to another building, so that breeding birds are not an obstacle to development of the structure (if within the bird breeding season).

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Other than the building, the surrounding land in the curtilage of development includes an area of:

- Hardstanding: A gravel driveway and concrete plinth

3.2.2. Protected and Notable Species on Site

Bats:

There are 18 species of bat found in the UK, 17 of which are known to breed in the UK. All are small, nocturnal, flying, insectivorous mammals that are under considerable conservation threat and many having undergone massive population declines over the last century. Some species, such as pipistrelle bats (*Pipistrellus* sp) still remain relatively common and widespread in the UK, while others, such as greater horseshoe bats (*Rhinolophus ferrumequinum*), have an extremely restricted distribution. All species of bats and their roosting sites are afforded full protection under both UK and European legislation and are designated as 'European protected species'.

The site has virtually no potential for bat foraging. There were no on-site trees with potential to support roosting bats.

Badgers

Badgers (*Meles meles*) are protected in England and Wales under the Protection of Badgers Act 1992. Protection applies both to the animal itself and to its nesting burrows (setts), and current interpretation of the Act also confers some protection to key foraging areas. Badgers remain comparatively widespread and common throughout the UK. There is no evidence of foraging badger on the site and it can be confirmed that there are no badger setts within the site or within 30m of the site edges.

Other mammals

The presence of other specially protected mammals, such as otter, dormouse or water vole, was assessed as extremely unlikely due to the lack of suitable habitat for such species.

Birds

The Wildlife and Countryside Act 1981 (as amended) makes it an offence (with certain limited exceptions) to intentionally kill, injure or take any wild bird, or to damage, take or destroy the nest of any wild bird whilst that nest is being built or in use, or to take or destroy its eggs. Furthermore, the Act affords additional protection to specific species of birds listed in Schedule 1 of the Act. In respect of these species, it is unlawful to intentionally or recklessly disturb such a bird whilst it is nest-building or is in, on or near a nest containing eggs or young; or to disturb their dependent young. Following recent revisions, fifty-nine species are listed on the UKBAP. There are no breeding birds associated with the existing structure.

Great Crested Newt

The great crested newt (*Triturus cristatus*) is one of the two rarest amphibian species in Britain. It is primarily a terrestrial animal, spending much of its life on land, but returning to the water to breed. Great crested newts will often return to breed in the same water-body where they were spawned. In addition, they are highly opportunistic and will also colonise suitable new waterbodies rapidly. Great Crested Newt is a 'European protected species' afforded full protection under both UK and European legislation. This protection extends to the habitats which support it. The habitats within 500m of a breeding pond are generally considered to be protected by the legislation. The great crested newt is a priority species and subject to its own Biodiversity Action Plan.

There are no features on site that could form breeding habitat, and there are no areas potential refugia, such as tipped and stacked materials on the site. The chances that great crested newts will be present or impacted is negligible. The risk is not sufficient to require further surveys.

Reptiles

There are four widespread species of British reptile comprising grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*), adder (*Vipera berus*) and common lizard (*Zootoca vivipara*). These animals are protected under the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000. They are given so called 'partial protection', which prohibits the deliberate killing or injury of individuals. The habitats of common reptiles are not specifically protected.

The potential reptiles present such as grass snake and slow worm will use similar features to those used by great crested newts.. Due to the general lack of suitable habitats, it is considered unlikely that these species would be present and the residual risk is low enough to indicate no need for further surveys in respect of this species. The risk is not sufficient to require further surveys.

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4.0. DISCUSSION

It is important that this proposed development should demonstrate no net loss of biodiversity from the site. This is a duty placed on Local Authorities in the Natural Environment and Rural Communities Act 2006, Section 40. There are requirements noted for this under The National Planning Policy Framework (2021) which refers to compensation/ mitigation. It is confirmed that the enhancement, mitigation and compensation within this section will comply with all the relevant UK and EU legislation relating to protection and enhancement of ecology.

4.1. Ecological Constraints

The value of the buildings and hard-standing on the site, in terms of ecological value to wildlife, is negligible.

4.2. Additional Ecological Surveys Recommended

No further surveys are recommended.

4.3. Minimising Ecological Impact

This section states how the negative impacts of development can be addressed.

4.3a. Protecting the Ecological Value of the Site

No precautions identified or required.

Following the built development there will be opportunities for enhancement of the site's ecological value by landscaping measures designed to encourage wildlife into the site. In relation to the National Planning Framework (2021) there will be no requirement for Mitigation/ Compensation measures for bats, no further surveys required, or particular cautions within the works specified. As a basic biodiversity enhancement the provision of a single bat box and a single bird box on the building is recommended. In addition, external lighting should be restricted and should conform with BCT guidelines (Appendix 3 has a summary) though more recent guidance 'Bats and External lighting, BCT, 2018', should be followed.

4.3b. Precautionary Measures during Development

None required.

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5. CONCLUSION

Key Issues

In relation to the National Planning Framework (2021) there is not likely to be a requirement for Mitigation/ Compensation measures for loss of bird nesting or bat roosting opportunity.

Conclusions

This Phase 1 Ecology Report illustrates that the entire site, the building/hard standing with improved grassland, is of 'negligible ecological value'. The building is of negligible potential for bat roost formation and there is no evidence of bats or breeding birds. There are no Statutory or Non-Statutory Designated Nature Conservation Sites within the site or that will be impacted by this development.

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Date	Prepared by	Checked and Verified by
13 th March 2023	Dr. Louise Sutherland MIALE Ecologist <i>Dr. Louise Sutherland</i>	Stefan Bodnar MCIEEM Principal Ecologist <i>Dr. Stefan Bodnar</i>

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Appendix 1a/1b Area context/Aerial Photograph



Imagery 2023 Google earth



Imagery 2023 Google earth

Preliminary Ecological Appraisal: Appendix 2: Photographs























Appendix 3: External lighting guidance

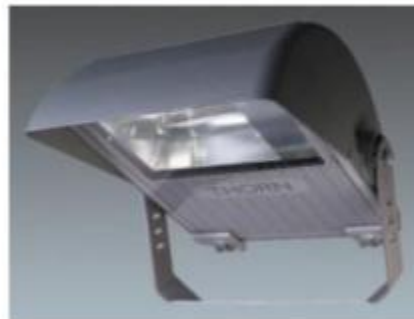
MITIGATION OF LIGHTING IMPACTS ON BATS

- **FORAGING AND COMMUTING** Type of lamp (light source) The impact on bats can be minimised by the use of low pressure sodium lamps or high pressure sodium instead of mercury or metal halide lamps where glass glazing is preferred due to its uv filtration characteristics.
- **Luminaire and light spill accessories** Lighting should be directed to where it is needed and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or manmade features that are required within the build can be positioned so as to form a barrier. **Suitable examples shown below:**

Double Asymmetric Luminaire



Simple Hood



- **Lighting column** The height of lighting columns in general should be as short as is possible as light at a low level reduces the ecological impact. However, there are cases where a taller column will enable light to be directed downwards at a more acute angle and thereby reduce horizontal spill. For pedestrian lighting this can take the form of low level lighting that is as directional as possible and below 3 lux at ground level.
- **Light levels** The light should be as low as guidelines permit. If lighting is not needed, don't light. **Timing of lighting** The times during which the lighting is on should be limited to provide some dark periods. Roads or trackways in areas important for foraging bats should contain stretches left unlit to avoid isolation of bat colonies. These unlit stretches should be 10 metres in length either side of commuting route.
- **SECURITY LIGHTING** **Power** It is rarely necessary to use a lamp of greater than 2000 lumens (150 W) in security lights. The use of a higher power is not as effective for the intended function and will be more disturbing for bats.
- **Movement sensors** Many security lights are fitted with movement sensors which, if well installed and aimed, will reduce the amount of time a light is on each night. This is more easily achieved in a system where the light unit and the movement sensor are able to be separately aimed. **Timers** If the light is fitted with a timer this should be adjusted to the minimum to reduce the amount of 'lit time'.
- **Aim of light** The light should be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. This lit area must avoid being directed at, or close to, any bats' roost access points or flight paths from the roost. A shield or hood can be used to control or restrict the area to be lit. Avoid illuminating at a wider angle as this will be more disturbing to foraging and commuting bats as well as people and other wildlife.
- **Suitable types shown below (note that these are wall mounted and directed downwards)**

Circular Louvre



Cowl & Louvre



Cowl (or Hood)



References: Bats and lighting BCT guidance and Guidance notes for the reduction of obtrusive lighting.