Ecological Impact Assessment at

Smelt Farm,

Minera Road

Ffrith

Wrexham

LL11 5LS

GR SJ 2821 5362

On 17th November 2025

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1. Summary

The purpose of the report is to assess the potential ecological impacts of proposed work at Smelt Farm and advise on any mitigation measures to comply with local planning policy and government legislation.

The proposed scheme involves renovation and conversion of a single storey barn to a dwelling, and the demolition of a smaller adjacent barn to be replaced by a small extension.

The site and adjacent land were examined to establish the presence of or evidence of use by protected species of animals. A visual inspection was carried out to assess the potential or actual use by bats and birds. None was found. The site is suitable for foraging and commuting bats.

If any birds should gain access to the building and begin constructing nests during the development, then the work in that area must stop until the young have left the nests.
If any bats are found during the development work in that area must stop and a licensed bat worker contacted for advice.
A lighting plan should be designed in accordance with the Bat Conservation Trust guidelines: https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

Bird and bat boxes are recommended as enhancement to provide net biodiversity benefit in accordance with legislation.

2. Introduction

Susan Worsfold BSc (Hons) ACIEEM is an experienced wildlife surveyor, licensed bat worker and voluntary bat roost visitor. Registration number CLS0895 2015-12555-CLS-CLS (CL15 Bat Roost Visitor Level 1) and registration number CLS 0895 2015-12556-CLS-CLS (CL18 Bat Survey Level 2) (Natural England) and S086005/1 (Natural Resources Wales);
Licensed great crested newt worker, registration number 2016-19947-CLS-CLS (NE)
and S086057/1 (NRW)
This report was commissioned by the owners.
The site comprises two barns surrounded by hard standing and short grass.
The proposed scheme involves renovation and conversion of a single storey barn to a dwelling and the demolition of a smaller adjacent barn to be replaced by a small extension.
.The purpose of the report is to identify and address any significant ecological effects which are likely to occur as a result of the proposed work. This is necessary to comply with local planning policy and government legislation and avoid any offence being committed. Also, to describe any compensation, mitigation and enhancement measures which should be taken.

3. Methodology

3.1. Scope of the Assessment

The report incorporates a bat roost and nesting bird assessment, while also searching for use or potential use by any rare, threatened, endemic and non-native invasive species which might be associated with such a site in accordance with:
The Conservation of Habitats and Species Regulations 2017 and listed in:
Schedule 2. European protected species of animals
Schedule 5. European protected species of plants
The protection of Badgers Act 1992
Protected species which might be associated with such a site include bats and birds.

3.3. Field Survey

The buildings were examined to establish the presence of or evidence of use by protected species of animals. A visual inspection was carried out to assess the potential or actual use by bats and birds, of the exterior and interior of the building. It was searched systematically for any signs of bats, including droppings, rub marks and urine stains at entrances to roosts and insect remains, such as moth or butterfly wings.
Powerful lamps (LED Lenser H14 and P7) were used for examination under eaves. Binoculars were used to examine parts which were not otherwise accessible. Photographs were taken of all areas and those of relevance are shown in the appendices.

The survey was carried out on 17th November 2025 by Susan Worsfold. The building was assessed as having no potential for use by bats in the areas to be affected due to its structure and lack of suitable potential roost features.

4. Baseline Ecological Conditions/Results

4.1 Designated Sites

The nearest designated site is the Brymbo Fossil Forest (SSSI) 1.3 km east.

4.2 Habitats

Site: Village location. The buildings are surrounded by hard standing and short vegetation.
Barns: Both barns were of one storey, walls were of stone and brick with no cavity. Doors and windows were intact. Roofs were a combination of corrugated steel and asbestos or fibre cement, with wood and steel frame. There were no soffits or verge boards, apart from a small fascia across the front of the smaller, lean to barn. There is some damage to the exterior of the wall of this barn.
Adjacent land: The nearest pond is 300 m east. There are significant areas of woodland within 100 m to the east and west, and a good network of hedgerows surrounding the site.

4.3 Species and Species Groups

Birds
No evidence of use by birds was found.

Bats
There was no evidence of use by bats and no gaps were seen which would allow access by them.

5. Description of the Development

The proposed scheme involves renovation and conversion of a single storey barn to a dwelling. This will entail the demolition of a small barn and the construction of a single story extension to the main barn in its place, at the south west gable end. The main barn will also be extended upwards to provide two storeys. This will involve intrusive work to the roof and walls. A raised patio area is also proposed at the north west side.

6. Assessment of Effects and Mitigation Measures

Designated Sites:
It is not considered that the proposal will have any significant impact on any designated sites due to the small scale of the development.
Habitats:
No priority habitat is affected by the proposal. No vegetation is to be lost.

Species:

Birds
If any birds should gain access to the building and begin constructing nests during the work, then work in that area must stop until the young have left the nests.

Bats
The proposed work will not lead to the loss of any roosting sites or access, nor disturbance to individuals.
The site is suitable for foraging and commuting bats.
A lighting plan should be designed in accordance with the Bat Conservation Trust guidelines: https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

6. Compensation

N/A

8. Net Biodiversity Benefit

An integrated crevice dwelling bat box to be incorporated into the first floor extension at the south west gable end, e.g. Ibstock Enclosed Bat Box 'C' available from NHBS. Other types may be suitable. Further information is given in the bat box information pack available at https://www.bats.org.uk/our-work/buildings-planning-and-development/bat-boxes.
One integrated bird box suitable for small birds such as robin, tit species and sparrow e.g. Bird Block available from NHBS to be fitted to the north east gable end. Other types may be suitable. Bat and bird boxes should be placed at least 2 m from the ground.

9. Ecological Constraints

None identified.

10. Monitoring

Not considered necessary.

11. Conclusions

If the recommended mitigation and enhancement measures are taken there will be an increase in biodiversity benefit and no net loss of roosting or nesting sites, nor any danger of harm to any species.

12. Bibliography

Bat Conservation Trust available at: http://www.bats.org.uk

BCT and ILP Guidance Note 8 Bats and Artificial Lighting available at: https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

Collins J. (Ed) (2016) *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)*. The Bat Conservation Trust, London

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora available at: jncc.defra.gov.uk

Google Maps available at: https://maps.google.com/maps

Magic Maps available at: http://magic.defra.gov.uk

Mitchell-Jones, A. J. (2004) *Bat Mitigation Guidelines,* Peterborough: English Nature

Mitchell-Jones, A. J. and McLeish, A. P. (2004) *Bat Worker's Manual,* Peterborough: Joint Nature Conservation Committee

Natural Resources Wales available at: https://naturalresources.wales/?lang=en

UK BAP Priority Habitats available at: jncc.defra.gov.uk

Wildlife and Habitat Conservation available at: https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation

Appendix 13.1: Aerial Photograph



Appendix 13.2: Location map with Designated Sites

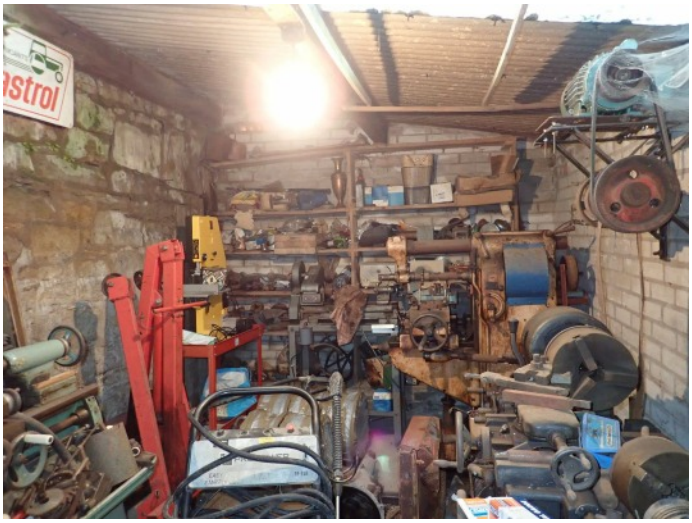


Appendix 13.3: Photographs













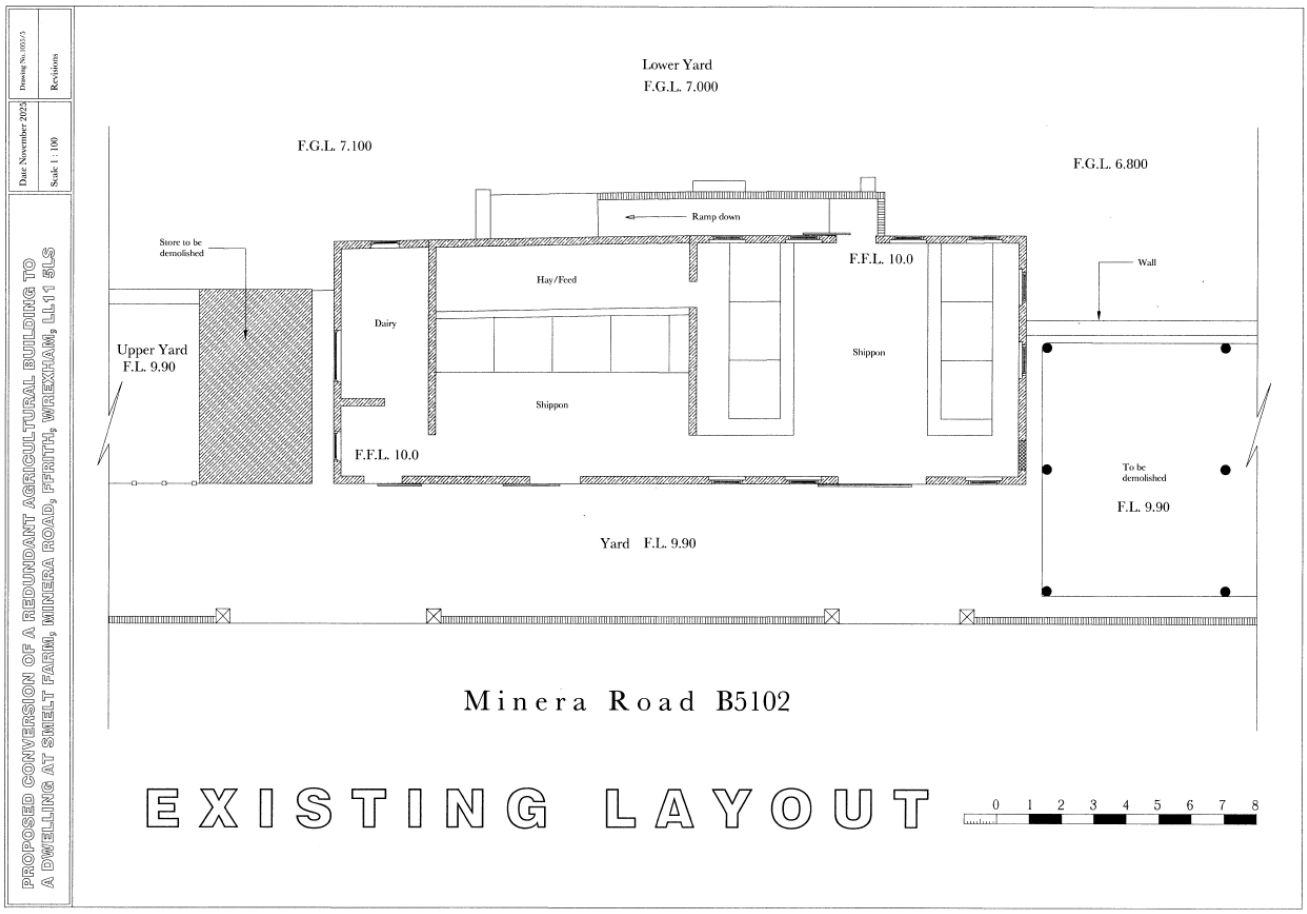


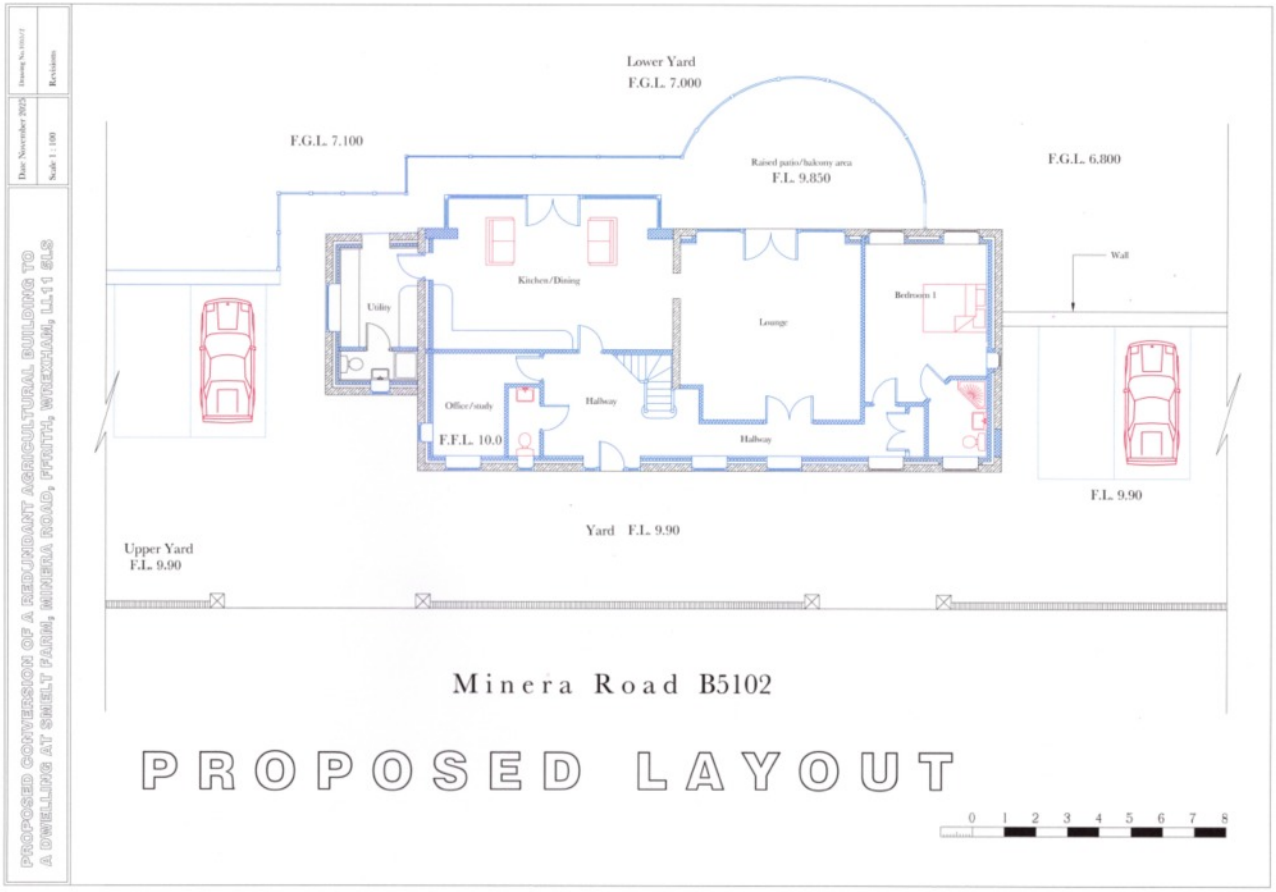


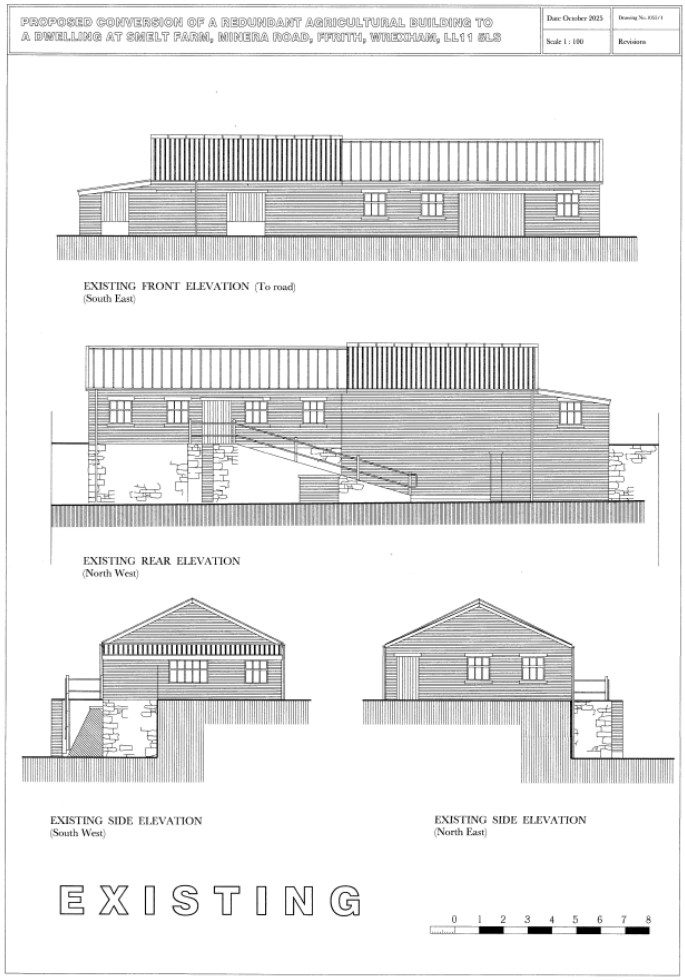


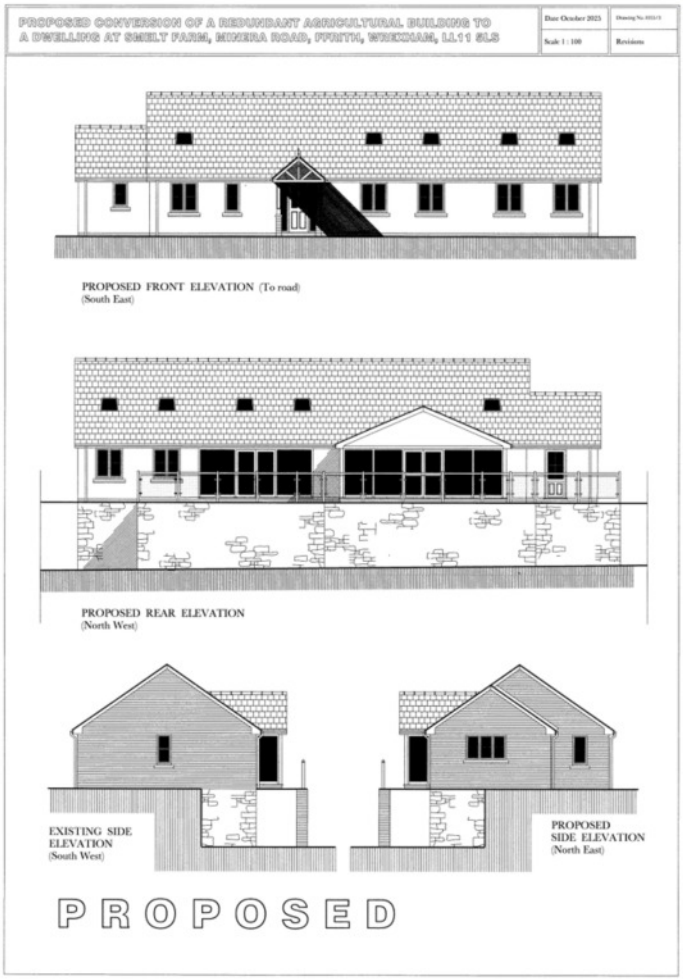


Appendix 13.4: Plans






PROPOSED CONVERSION OF A REDUNDANT AGRICULTURAL BUILDING TO A DWELLING AT SMELT FARM, MINERA ROAD, FFRITH, WREXHAM, LL11 6LS
Date October 2025
Scale 1 : 100
Revisions
EXISTING FRONT ELEVATION (To road)
(South East)
EXISTING REAR ELEVATION
(North West)
EXISTING SIDE ELEVATION
(South West)
EXISTING SIDE ELEVATION
(North East)
EXISTING
0 1 2 3 4 5 6 7 8


PROPOSED CONVERSION OF A REDUNDANT AGRICULTURAL BUILDING TO A DWELLING AT SMELT FARM, MINERA ROAD, FFRITH, WREXHAM, LL11 6LS
Date October 2025
Scale 1 : 100
Revisions
PROPOSED FRONT ELEVATION (To road)
(South East)
PROPOSED REAR ELEVATION
(North West)
EXISTING SIDE ELEVATION
(South West)
PROPOSED SIDE ELEVATION
(North East)
PROPOSED


PROPOSED CONVERSION OF A REDUNDANT AGRICULTURAL BUILDING TO A DWELLING AT SMELT FARM, MINERA ROAD, FFRITH, WREXHAM, LL11 6LS
Date November 2025
Scale 1 : 100
Revisions
Bedroom 2
Landing
Cupd
Cupd
Bedroom 3
Bathroom
Open
PROPOSED FIRST FLOOR PLAN
Raised patio/balcony area
Kitchen/Dining
Utility
Lounge
Bedroom 1
Office/study
Hallway
Hallway
PROPOSED GROUND FLOOR PLAN
0 1 2 3 4 5 6 7 8
PROPOSED

Appendix 13.5: Legislation Relating to Bats

All species of bats in the UK are European Protected Species (EPS). It is against the law to damage or destroy a bat's breeding site or resting place (known as a roost), or deliberately to capture, kill, injure or disturb a bat

Bats are the only mammals which can fly. They are warm blooded, they suckle their babies and are intelligent, social animals. British bats feed only on insects, of which they consume vast numbers to sustain their energetic lifestyles. A pipistrelle bat can eat up to 3000 midges in a single night!

We have 12 species of bat breeding in Wales. Many of these have suffered severe declines, not just in Britain but throughout Europe.

All British bat species are protected under the Conservation of Habitats and Species Regulations 2017, known as the 'Habitats Regulations'. Bats have a unique relationship with humans, sometimes sharing our homes for part of the year. For this reason, Natural Resources Wales (NRW) deals with many hundreds of bat enquiries each year from householders.

Under the Habitats Regulations, it is an offence if you:

deliberately capture, injure or kill any wild animal of an EPS
deliberately disturb wild animals of any such species
damage or destroy a breeding site or resting place of such an animal
Disturbance includes, but is not limited to, any disturbance which is likely:

1. to impair their ability –
to survive, to breed or reproduce, or to rear or nurture their young, or
in the case of animals of a hibernating or migratory species, to hibernate or migrate; or

2. to affect significantly the local distribution or abundance of the species to which they belong.

Defra and the Welsh Government will publish a joint guidance document on the interpretation of the offences relating to disturbance, and to damage and destruction of breeding sites and resting places.

There are other offences relating to possession, transport and sale.

NRW issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

If you are a householder and have concerns about bats at your property (other than queries related to planning applications or a development), contact the NRW Enquiry Line for advice, telephone 0300 065 3000

Appendix 13.6: Legislation Relating to Birds

All wild birds, their nests and eggs are protected. It is an offence to intentionally:

- kill, injure or take any wild bird,
- take, damage or destroy the nest of a Golden Eagle, White-tailed Eagle or Osprey (even if disused),
- take, damage or destroy the nest of any wild bird whilst it is in use or being built,
- take, damage or destroy an egg or any wild bird,
- possess any live or dead wild bird or the egg of any wild bird, or any derivative

Many rare birds are listed on Schedule 1, which makes it an offence to intentionally or recklessly:

- disturb a Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturb dependent young of such a bird

Natural Resources Wales (NRW) issues licences for specific purposes, so that you can undertake legitimate work without breaking the law. See ‘Bird licensing’ for more information.

Appendix 13.7: Lighting Guidance

(Appropriate Luminaire Specifications:
Guidance Note GN08/23 Bats and Artificial Lighting at Night (*ILP 2023*))

• All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used
• LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability
• A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component
• Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012)
• Internal luminaires can be recessed where installed in proximity to windows to reduce glare and light spill
• Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges
• Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards
• Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01
• Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt
• Where appropriate, external security lighting should be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate
• Use of a Central Management System (CMS) with additional web-enabled devices to light on demand
• Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS
• The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues.
• Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely.