

Agree details for Planning Condition 5 (Lighting) of Planning Permission P2020/0501

Land off March Hywel, Cilfrew, Neath, SA10 8ND

Construction of two detached dwellings together with associated works including access and drainage.

Planning Condition 5 of the granted planning permission P2020/0501 requires the following:

Prior to the erection of any lighting, a light mitigation strategy, including measures to reduce light spillage onto adjacent habitats, shall be submitted to and approved in writing by the Local Planning Authority. The light mitigation strategy shall be implemented prior to first occupation of either of the dwellings and retained in accordance with the approved details.

Reason:

To ensure that animal and plant species and habitats listed under the Conservation of Habitats and Species Regulations 2010 are adequately protected; and to ensure compliance with Policies SP15 and EN6 of the Neath Port Talbot Local Development Plan.

Bats - Roost

The British mammal where artificial lighting can have the most significant effect on is bats. Light falling on a bat roost entrance/exit point can delay bats from emerging, which shortens the amount of time available to them for foraging, energetically speaking affecting the species. The main peak of nocturnal insect abundance occurs at and soon after dusk, a delay in emergence means this vital time for feeding is missed. Worst case scenario will see the bat species abandon the roost. Bats can potentially utilise the same roost over many years and disturbance of this sort can have a significant effect. It is likely to be deemed a breach of the national and European legislation that protects

Bats – Foraging/Commuting

Artificial lighting can also affect the feeding behaviour of bats and their use of commuting routes. Many nocturnal-flying species of insect are attracted to lamps that emit short wavelength (UV and blue light) component and many species of bats such as Pipistrelle sp. take advantage of the concentration of insects around white street lights as a source of prey. However, many light sensitive species such as Long-eared bats, Barbastelle, Greater and Lesser Horseshoe bats and the Myotis species generally avoid external lights. Lighting can also have a detrimental if it illuminates important foraging habitats such as river corridors, woodland edges and hedgerows used by bats. Lighting along roads have also been proven to create barriers which some bat species cannot cross. It is also known that insects are attracted to lit areas from further afield further impacting the ability of light-sensitive bat species feeding in adjacent habitat.

Legal protection of bats

All species of bat and their roost sites (whether bats are present at the time or not) are fully protected under international and domestic legislation. The international protection (the EC Habitats Directive) has been transposed into national laws by means of the Conservation of Habitats and Species Regulations 2017 (England and Wales).

Lighting in the vicinity of a bat roost causing disturbance and potential abandonment of the roost could constitute an offence both to a population and to individuals. It is therefore important that the use of an area by bats is thoroughly assessed before artificial lighting is changed or added in the vicinity of a roost or where bats may commute or forage.

Lighting Design Principals

With regards to the site lighting the following design principals will be adopted to incorporate sensitive light onsite and on retained boundary habitats to minimise the effect on light sensitive species such as bat:

- Minimise the amount of lighting,
- Do not illuminate areas where birds are nesting,
- Avoid light ecologically sensitive areas,
- Avoid the use of reflective materials under lights,
- Minimise light spread,
- Minimise the height of any lighting,
- Avoid lighting when possible,
- Use barriers to shield ecologically sensitive areas,
- Limit the period of illumination.

Appropriate luminaire specifications

Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following should be considered when choosing luminaires:

- All luminaires should lack UV elements when manufactured,
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability,
- A warm white spectrum should be adopted to reduce blue light component,
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats,
- Any external security lighting should be set on motion-sensors and short (1min) timers.
- External lighting spread restricted to less than 5m.

Site Lighting Specification:

Location	Lighting Example	Specification
Front Entrance		LAP Candiac Outdoor LED up & down wall light with PIR Sensor. • Warm White • 2 x 350lm • Plastic Diffuser • Adjustable Dusk to Dawn Sensor • 3000K Colour Temperature.
Rear & Side Entrance		LAP Candiac Outdoor LED up & down wall light with PIR Sensor. • Warm White • 2 x 350lm • Plastic Diffuser • 3000K Colour Temperature.