



BDB Design Build Ltd
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26th June 2025

FAO: Paul Wilson, BDB Design Build Ltd

Re: SE 3387, CMS Rockingham, Tankersley, Barnsley, South Yorkshire, S74 0SB

Dear Paul,

Condition 4 states the following:

Notwithstanding the submitted details, prior to the commencement of works, details of the external/internal lighting shall be submitted to and approved in writing by the Local Planning Authority. The details/report shall be reviewed and produced by a suitably qualified ecologist and clearly demonstrate that lighting will not adversely impact wildlife using key corridors, foraging and commuting features and roosting sites. The details shall include, but are not limited to the following:

- Identification of areas/features on site that are particularly sensitive e.g. breeding, resting, foraging and commuting sites.
 - A drawing showing dark corridors and buffer areas.
 - A report and drawings showing how and where external lighting will be installed so that it can be clearly demonstrated that areas to be lit will not disturb or prevent species using their territory or having access to breeding sites/resting places, this should include;
 - Technical descriptions, design or specification of external lighting to be installed including shields, cowls or blinds where appropriate;
 - A description of the luminosity of lights and their light colour
 - A drawing(s) showing the location and where appropriate the elevation and height of the light fixings;
 - Methods to control lighting control (e.g. timer operation, passive Infrared Sensors (PIR));
- and
- Lighting contour plans, both horizontal and vertical where appropriate taking into account hard and soft landscaping

The original PEA recommends the following, based on the following guidance Bat Conservation Trust publications 'Artificial Lighting and Wildlife' (2014) and 'Bats and Artificial Lighting in the UK' (2018):

- Using warm white, narrow spectrum lights with little or no UV;

- Low wattage (eg 20W);
- Directional lighting with near full horizontal cut off, mounted at a low height;
- Minimum height columns at maximum spacing.

However, the guidance for artificial lighting has since been updated with the release of the Institute of Lighting Professionals (ILP) and Bat Conservation Trust publication 'Bats and Artificial Lighting at Night' (2023)

In line with the update, we have summarised the guidance as the following:

- Remove or minimize artificial lighting close to vegetative commuting corridors;
- Using warm white (2700kelvin or lower), narrow spectrum lights (LEDs) with little or no UV;
- Directional lighting with near full horizontal cut off;
- 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.
- Use of bollards or low-level downward-directional luminaires should only be considered in specific circumstances due to issues such as glare, poor illumination and unacceptable light outputs.
- Where appropriate, external security lighting should be set on motion-sensors and set to as short as 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.

The proposed luminaires and their associated lamps are listed as follows:

VIVA-CITY Pro – 120w LED FW70
 VIVA-CITY Pro – 60w LED FW70
 SEMITA Urban – 6w LED OC
 VIVA-City Flood – 120w LED FW70
 VIVA-CITY Pro– 60w LED AY70
 VIVA-CITY Pro– 180w LED FW70
 VIVA-City Flood – 60w LED FW70

The specifications for the proposed luminaires are as follows.

- All specified lamps are listed as having a colour temperature of 4000kelvin. This exceeds the stated 2700kelvin lamps recommended under current guidelines.
- Light spill onto sensitive habitats typically exceeds 5 lux within adjacent light-sensitive habitats. However, the scheme has been designed to achieve the health and safety requirement for safe illuminance of the associated car parking.
- All these units are confirmed to have a negligible Upward Light Ratio.
- No bollard or low-level downward-directional luminaires are to be incorporated into the lighting scheme.

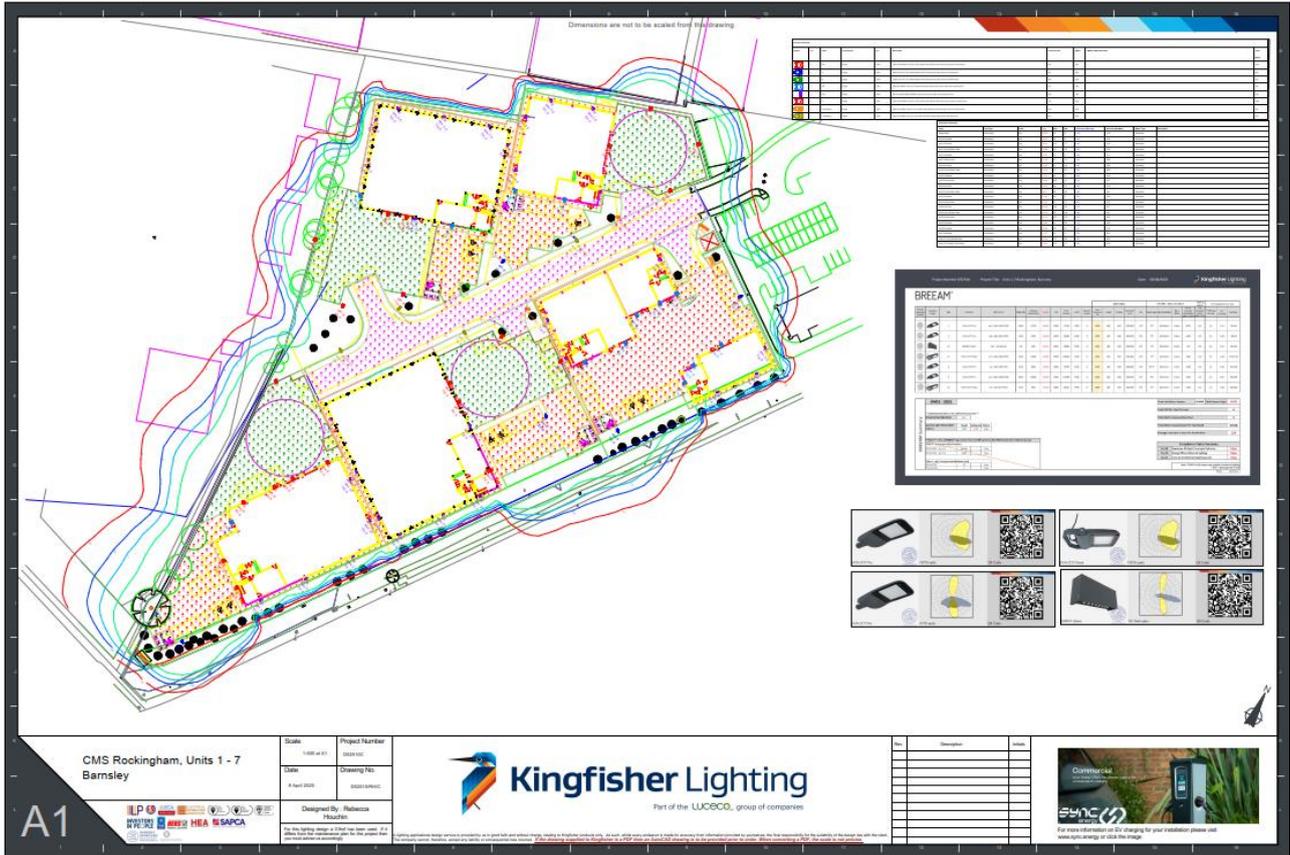


Figure 1. Proposed lighting scheme supplied by Kingfisher Lighting

LIGHT SENSITIVE ECOLOGICAL RECEPTORS

On site

On site existing and proposed habitats include existing trees, wildflower grassland seeding, species rich lawn, native hedgerow and tree/shrub planting. These areas provide roosting, breeding and sheltering opportunities for wildlife and provide a source of food for species in general.

Adjacent to site

Existing broadleaf woodland is present along the south-western boundary of the site and the grassland road verge at the eastern site boundary which provides commuting and foraging habitat for bats (confirmed following bat survey undertaken by Smeeden Foreman, May 2025), breeding opportunities for local bird populations and commuting opportunities for terrestrial mammals.

activity survey did not record any commuting or foraging activity throughout the duration of the survey. A second static bat detector was deployed at the south-western site boundary and recorded only two instances of bat activity of common pipistrelle *Pipistrellus pipistrellus* throughout the survey. Whilst these observations are limited, the minimal activity indicates the western boundary trees and adjacent trees are not a component of an important commuting route for the local bat community and that overall bat activity within the site boundary appears to be low.

Conclusion

Following review of the proposed light fittings the proposed lighting scheme conforms to the updated guidance (ILP & BCT, 2023) based on the universal use of LED luminaires with a negligible upper light output ratio (ULOR).

The position of on-site lighting has been designed to achieve minimum security and health & safety requirements for associated car parking and road infrastructure. In terms of light spill, the proposed lighting scheme does not conform to current guidance provided as projected light spill onto adjacent and on-site existing and proposed habitats exceeds 1 lux and are specified as utilising 4000k lamps rather than the recommended 2700k. However, lux levels associated with boundary and off-site features, such as street lighting and electronic signage, typically shed light within identified light-sensitive areas that exceeds this value significantly.

Overall bat activity following site survey in May 2025 determined use of western boundary habitats to be negligible to low. As result, the impact of the proposed lighting scheme deviations on the local bat community is expected to be negligible.

Kind Regards,



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Ecologist
Bat Licence Reference: Bats: 2024-44500 (Class 1)

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