

External Lighting Scheme - P/2017/0409 - Condition12

Holiday Lodges and Fishing Pods at Commonwood Fishery, Buck Road, Commonwood, Holt Wrexham LL13 9TF. Client: Mr and Mrs Paul Dunn, Horseshoe Barn, Borrass Road, Wrexham LL13 9TL

The Lighting Scheme utilises low level bollard lighting with the emphasis on background illumination for safety and way-marking rather than full illumination. Lighting is therefore restricted to a Low Level Bollard Light outside each unit with the remainder of the access drive way-marked with a bollard at approximately 25 metre intervals.

The sources of external lighting of the proposed development will comprise of:

- Lighting associated with the vehicle access & pedestrian routes through the development
- A Low Level Bollard Light outside each unit
- One external Bulkhead Light to each unit, the managers Lodge and 2 bulkhead fittings for the Central Facilities Building lighting the entrances & exits.

Please refer to the attached Data Sheets for Specifications of the Bollards and Bulk Head fittings.

It is recommended that external lighting meets British Standards. However, due to the rural nature of the site and the type of development - the level of illumination has been significantly reduced from the British Standard. Lighting is therefore provided for way-marking only and customers will be made aware of this within the sites information packs for Health and Safety information.

Strategy for Luminaire Type and Light Source

2 alternative bollard options are provided to enable the operator to have a choice of bollard type should a certain unit become unavailable or cost rules out one of the options. The bollard luminaires selected both utilize LED light source, with a neutral white colour temperature (4000K) and a low upwards light ratio (less than 1%) to minimize upwards light pollution or sky glow.

The bollard luminaire utilised in **option 1** is 1m in height, with a 360 degree distribution. The bollard utilised in **option 2** is 0.58 in height, with a single side distribution.

The building mounted luminaires are proposed for each of the Lodges x 1, Pods x 1, the Central Facilities Building x 2 and Managers Accommodation x1. A round bulkhead LED luminaire has been selected, with an eyelid to reduce upwards light.

External Luminaire Control Strategy

Photocells will be used as a primary control on all luminaires, to enable the luminaires to operate dusk until dawn, ensuring that no luminaires will be left on during daylight hours. The external lighting will operate dusk until dawn.