

Light Impact Assessment (LIA): to include a detailed lighting scheme, providing the following details:

1. Technical Assessment: A site-specific lighting assessment and lux contour plan (horizontal and vertical) demonstrating that light intrusion into the windows of any sensitive neighbouring residential premises will not exceed the permitted values for the relevant Environmental Zone (e.g., E2, E3, or E4), as defined in the ILP Guidance Note 1/21: The Reduction of Obtrusive Light.

To address ecological sensitivities on site, particularly the presence of bats, the lighting design has been developed with a focus on minimising disturbance while maintaining safe operational lighting levels. A warm 2700K colour temperature has been specified to significantly reduce blue-light content, which is known to be more disruptive to bat species. In addition, lower mounting elevations have been incorporated to limit upward and outward light spill, ensuring illumination is directed only where required. These measures collectively support a bat-friendly approach by reducing glare, minimising sky glow, and preventing unnecessary illumination of surrounding habitats. The design aligns with guidance from the ILP and relevant ecological best-practice standards, ensuring the lighting scheme balances environmental protection with functional site requirements.

Please see the attached lighting design : This design considers the degradation of the existing luminaires over the last 4 years and adding in additional 16 luminaires to achieve the specification of 500 lux 0.7, the results on the design initial values.

We have labled all local properties and calculated these within the software, the Cd values are all under 7500cd and lux levels are 1lux or less which is under the 5 lux permitted on the ILP document.

The design also displays the upward light ratio being 0.2% which is below the maximum requirements of 2.5%.

2. Equipment Specifications: Details of the luminaires, including their make, model, LED colour temperature, mounting height, and aiming angles.

- LAFL167NRS6NST727 & LAFL179NRS6WST727 have been used throughout the design, the datasheet attached displays it colour temperature.
- The lighting design displays their mounting heights on the columns; these columns are existing 15m columns.
- The aiming of the luminaires is provided on the on the lighting design this shows the angles and allows for the install the luminaires.

2. Mitigation Measures: Details of any physical shielding, cowls, or louvres to be fitted to the luminaires to prevent glare and sky glow.

- We have added rear shields to the Amnis bodies to reduce the backlight onto the trees or roads.
- The Amnis has a built in Cowl which reduce the upward light and prevents excessive upward light and glare.

3. Operational Controls: An automated management plan, including the use of timers or sensors to ensure the lights are switched off no later than a specified curfew.

- Unfortunately, Kingfisher cannot comment on these operational controls.