



External Lighting Compliance Statement

Document Ref: 25035-50-Rp-003	Site: Norfolk House Farm
Project: Salad Storage & Dispatch Upgrade	Total Parcel Area: 5.4304 Hectares
Client: JEPCO	Authority: South Holland District Council

1.0 Introduction & Spatial Context

This statement has been prepared to support the planning application submitted on behalf of **JEPCO** for the proposed **Salad Storage and Dispatch Upgrade** at **Norfolk House Farm**. The proposed development represents a targeted and contained infrastructure upgrade to improve cold-chain operational efficiency, encompassing a new Crop Intake Building, Chill Store extensions, a Dispatch Area, Tray Returns, and associated surface water management infrastructure.

While the physical footprint of the new structural extensions is contained within the existing built complex, the wider operational context of the surrounding agricultural infrastructure covers a total parcel area of **5.4304 hectares**. This document details the technical parameters, hardware configurations, and environmental mitigation measures governing the external lighting network to ensure full compliance with **South Holland District Council Local Plan Policies 3, 23, and 25**.

2.0 Lighting Design Objectives & Environmental Zoning

The application site is situated within a rural landscape characterized as an **E2 Environmental Zone** (Low district brightness / Rural surroundings) in accordance with the *Institution of Lighting Professionals (ILP) Guidance Notes for the Reduction of Obtrusive Light*. The core lighting design objectives are defined as follows:

- To provide safe, secure, and functional illumination for logistical maneuvering, vehicle loading, and nocturnal agricultural operations.
- To completely eliminate upward light spill (sky glow) to protect the dark-sky character of the surrounding rural environment.
- To restrict boundary glare and light intrusion, ensuring zero light nuisance beyond the 5.4304 ha site boundary.
- To minimize energy consumption through automated control systems and precision-engineered operational regimes.

3.0 Technical Specifications & Luminaire Criteria

To achieve the required environmental constraints, all proposed external light fixtures must adhere to strict technical specifications. The system layout relies on specialized architectural hardware deployed across key operational zones:

3.1 Service Yard & Access Roadway Luminaires

External illumination within loading bays, service yards, and heavy-goods vehicle maneuvering zones will be provided by column-mounted and building-mounted flat-glass LED units. These units are configured with an **Upward Light Output Ratio (ULOR) of exactly 0%**. The integration of internal horizontal lenses and external physical cowls ensures that light paths are strictly directed downward onto active concrete pads, eliminating glare and horizontal stray light.

3.2 Building Canopy & Personnel Lighting

All low-level safety lighting around personnel access doors, walk-ways, and architectural canopies will utilize recessed or fully shielded under-canopy downlights. These luminaires are physically prevented from emitting light above the horizontal plane, ensuring light distributions remain focused strictly on working surfaces.

3.3 Spectral Distribution Controls

All external light sources will operate using energy-efficient LEDs limited to a warm-white color profile with a correlated color temperature (CCT) **not exceeding 3000K**. High-intensity cool-white or blue-spectrum wavelengths are explicitly banned from the specification to reduce unnecessary environmental glare and limit the visual impact of the installation within the local landscape.

4.0 Operational Control & System Management

The external lighting system will be governed by an automated Horticultural and Site Management control system to guarantee that illumination is only generated when strictly necessary for operations and safety:

- **Photoelectric Cell Control:** External lighting circuits will be monitored via photocells to prevent operation during daylight hours, ensuring automatic activation only when natural ambient light falls below operational parameters.
- **Time-Switch Curtailment:** Time-switches will isolate specific non-essential service zones during extended periods of inactivity, dropping the installation into a low-intensity security state to minimize the site's nighttime environmental profile.
- **Manual Overrides:** Localized overrides will be restricted to enclosed internal control rooms, ensuring that external modifications cannot be made without operational authorization.

5.0 Policy Compliance & Conclusion

The engineering layout and fixture configuration detailed in this statement represent a highly controlled, dark-sky compliant approach to external lighting design. By confining all luminous flux to active working areas within the built complex and eliminating upward and boundary light spill, the proposal safeguards the rural night landscape.

The project provides a sustainable infrastructure upgrade that completely aligns with the requirements of **South Holland District Council Local Plan Policies 3 (Design and Character), 23 (Landscape Character), and 25 (Light Pollution)**, delivering a modern, efficient facility that respects its rural setting.