



Malmesbury Primary School

External Lighting Strategy Statement

April 2026



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1.2 The Proposed Scheme

The Proposed Development comprises the construction of a permanent public footpath and temporary construction access route associated with the expansion of Malmesbury Primary School.

The proposal includes the installation of low-level LED bollard lighting positioned along the footpath to provide safe and uniform illumination.

Lighting is restricted solely to the footpath corridor. No feature lighting, floodlighting or architectural lighting is proposed.

2.0 DESIGN CRITERIA & STANDARDS

2.1 Design Standards

The external lighting design has been developed in accordance with:

- BS 5489-1: Design of road lighting
- BS EN 13201: Road lighting performance requirements
- CIBSE Lighting Guide LG6 – The Exterior Environment
- ILP GN 01/21 – The Reduction of Obstrusive Light
- ILP GN 08/23 – Bats and Artificial Lighting at Night

The scheme has been designed to:

- Eliminate upward light ratio (0% ULOR)
- Minimise glare through optical control
- Prevent light spill beyond the footpath boundary
- Avoid intrusion into neighbouring properties

2.2 Ecology & Environmental Considerations

The lighting scheme has been designed to minimise ecological & environmental impact by:

- Using warm white LED light (2700K)
- Eliminating upward light
- Directing light only onto the footpath surface
- Minimising spill onto adjacent vegetation, hedgerows or habitats
- Avoiding root protection zones (based on the arboriculturist's tree protection plan)

3.0 PROPOSED DESIGN

3.1 Proposed Luminaires

The proposed luminaires are the:

DW Windsor Pharola DS

Key Characteristics:

- LED light source
- 2700K warm white colour temperature
- Zero upward light output (Dark Sky compliant)
- Integrated backshield to minimise light spill
- IP-rated for external use
- Low-glare control
- Suitable for footpath illumination

The luminaire has been selected due to its precise optical distribution and Dark Sky compliance, ensuring illumination is directed downward onto the path only.

Indicative mounting: approx. 1.0m

Indicative spacing: bollards currently at 10m centres

Final spacing will be confirmed through lighting calculations to ensure compliance with target lux levels and uniformity.

3.2 Lighting Controls

Lighting will be controlled via:

- Photocell control (dusk-to-dawn operation) or
- Photocell with timeclock (if required)

This ensures lighting is operational only during hours of darkness. Where appropriate, consideration may be given to part-night dimming to further reduce energy consumption and environmental impact.

3.3 Future Management and Adoption

The Applicant for planning application PL/2025/07919 is delivering the permanent footpath to improve connectivity and permeability in Malmesbury in connection with the Proposed

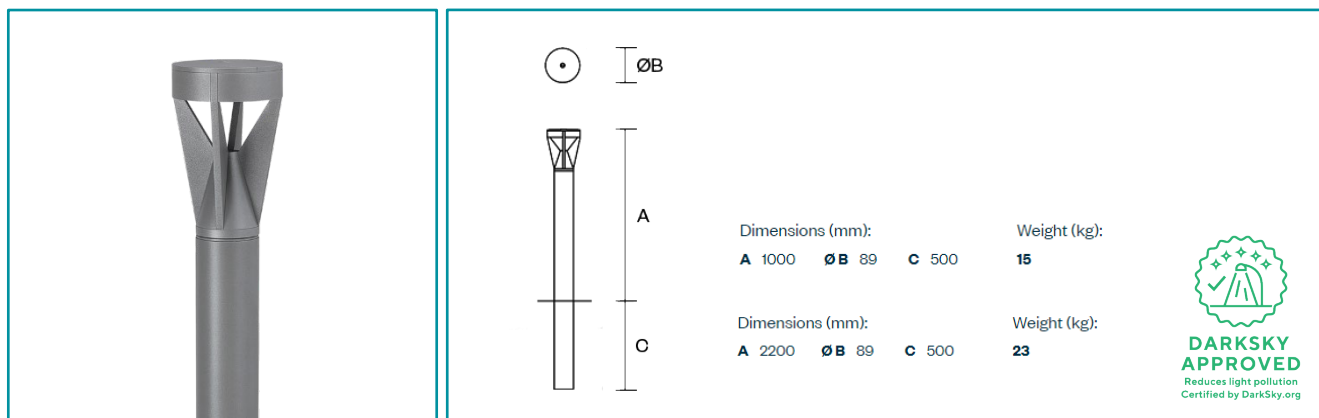
Development. It is considered that the Applicant will not be the long-term organisation responsible for the footpath management. Detail about the long-term management and adoption of the footpath will be agreed with the relevant authority.

3.4 Other Requirements

The bollards have been placed strategically to avoid the root protection zones. However, it is important to note the wiring connections to the bollards must also avoid these zones.



Appendix A – Proposed Luminaire Data



Sample Specification Text

Pharola DS 1000mm bollard. 9 LED light engine with outputs up to 1,523lm with a 3,000K colour temperature and symmetric or asymmetric light distribution. International Dark-Sky Association approved with 0% ULOR. Die-cast aluminium head with polycarbonate glazing and galvanised steel body. IP66 and IK10 protection. 100,000 hour (L70) lifetime. For -20 °C to +40 °C ambient operating temperatures. Class I.

Performance

Output (luminaire flux)	1,523lm (max)
Power	20W (max)
Efficacy	76lm/W (max)
Number of LEDs	9
Colour Temperatures	2,700K 3,000K 4,000K
Colour Rendering Index (CRI)	70 / 80
Distributions	Symmetric (180° backshield on request)
International Dark-Sky Association Approved	Yes (2,700K and 3,000K CCTs only)
Certifications	UKCA, CE

Mechanical

Mounting Options	Root mounted / Flange plate / 1 st Fix root
Glazing	Polycarbonate
Housing	Galvanised steel (body) Die-cast aluminium (head)
Colours	White RAL 9016 Black RAL 9005 Aluminium RAL 9006 Metallic Grey 9007 Metallic Dark Grey DB703 (other RAL colours on request)
Finish	Polyester powder coat
IP Rating	IP66
IK Rating	IK10
Weight	15kg (Pharola DS 1000) 23kg (Pharola DS 2200)

Electrical

Driver Options	On/off
Drive Current	700mA
Operating Voltage	220-240V
Electrical Class	Class I / Class II
Operating Temperature Limit	-20 °C to +40 °C
Rated Lifetime	100,000 hours (L70)

Controls

Control Options	Remote switch
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