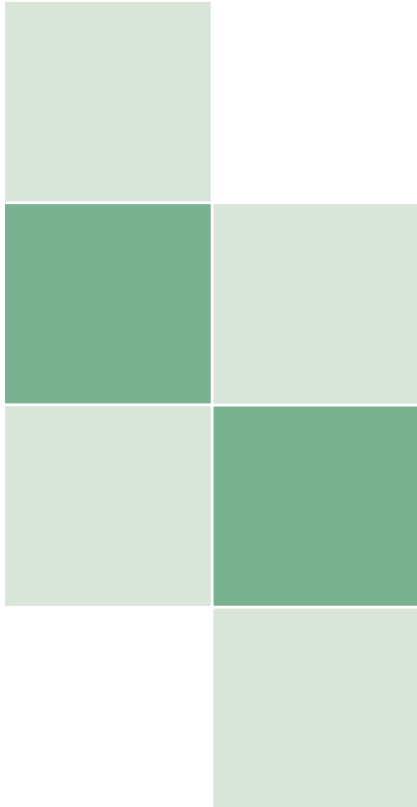




**Unit B
Birch Business Park
Whittle Lane, Heywood**

External Lighting Strategy Statement

Ref: 1974 R004 Rev 0 Date: 06/09/2021



Revision Record

Date	Reference	Revision	Prepared By	Checked By
06/09/2021	R004	0	RJ	DW

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1.0 Introduction

This report covers the external lighting to the surrounding areas of the proposed new Unit B, Birch Business Park. The lighting philosophy to the external realm is based on achieving a good level of maintained illuminance across the site, minimising dark areas to create a safe environment whilst avoiding light spillage and light pollution to surrounding areas.

The lighting scheme is based on energy efficient LED luminaires and seeks to illuminate architectural features of both the buildings and the external landscaping scheme. The external lighting also takes into consideration both the level and uniformity of lighting required for security, CCTV operation, safe movement of visitors, staff and residents to the buildings/landscaping around the site.

2.0 Design Standards, policy & guidance

2.1 Standards

The external lighting design has been carried out in accordance with the following standards: -

- SLL Code for Lighting
- BS 12464-2:2014
- BS5489-1: 2013 Code of practise for the design of road lighting
- CIBSE guide LG6 – 2016
- ILE Guidance Notes 2011

The lighting seeks to reduce lighting pollution by preventing upward light pollution through optimal mounting heights and local light distribution, and by utilising low energy efficient LED lighting luminaires that limit glare through design. The lighting design seeks to meet the guidance of the ILE guidance note 2011.

It is important that the lighting provides the appropriate levels of illumination and uniformity to ensure that adequate lighting is provided to the required roadways and pedestrian routes. The lighting should also offer an aesthetic quality.

The intention is to light the roadway and pedestrian routes to provide safe and secure access around the site. The illuminance levels will take into account feature areas to allow the integrated lighting to the structures and feature elements to be more visible, adding interest and depth to these areas.

Lighting levels will be suitable for pedestrian and vehicular access. Maintained average illuminance levels recommended by the standards above will be achieved as detailed typically on the external lighting strategy drawing. Lighting will be installed to provide sufficient illumination for safe circulation and to promote a feeling of safety and security.

3.0 Lighting control

The external lighting surrounding Unit B, is to be provided with a lighting control system capable of programming for timer control. The system shall allow for the flexible control of the luminaires including switching and dimming to meet various applications. The lighting control system shall be linked with external lux level sensors to ensure the lighting switches off at dawn and on at dusk.

4.0 Overview of the Particular Design

The external lighting design surrounding Unit B Birch Business Park, provides functional LED lighting by way of building mounted LED wall lights, column mounted LED lighting and bollard luminaires.

4.1 Car Park

The car parking area to the side of Unit B shall be illuminated using 8-metre-high column mounted luminaires. A number of the bollard fittings are provided for low level illuminance at the office stairs exit.



Proposed Column mounted luminaires & Bollards.

4.2 Service Yard & Loading Bays

The service yard lighting shall be provided by utilising high output, column mounted luminaires which shall provide functional illumination. It is proposed to install the luminaires on 8m metre columns. The lighting for the loading bays shall be provided by 10m high building mounted luminaries.



Proposed Column mounted & Wall mounted luminaires for Service Yard & Loading Bays.

4.3 Entrance and road lighting

Vehicular access routes shall be illuminated utilising aesthetic, column mounted luminaires which shall provide functional illumination. It is proposed to install the luminaires on 8m metre columns.



Proposed Column mounted luminaires.

4.4 Building perimeter lighting

It is proposed that the building perimeter lighting shall be via building mounted luminaires, mounted at 3.5m high.



Proposed building mounted perimeter luminaire.

5.0 Appendices

Appendix 1 – Exterior lighting drawing

The illuminance level plots indicated on drawing 1974-B-EX-6301 P1 confirm that there is no adverse impact on the amenity of residents within this and adjacent developments.

Appendix 2 – Exterior lighting calculation summary

Statistics				
Description	Symbol	Avg	Min	Min/Avg
Car Park	+	20 lux	6 lux	0.30
Loading Bays	+	59 lux	39 lux	0.66
Main Entrance	+	67 lux	60 lux	0.90
Perimeter	+	14 lux	7 lux	0.50
Service Yard	+	34 lux	15 lux	0.44
Spill	+	1 lux	0 lux	0.00

Appendix 3 – Luminaire Schedule

Schedule						
Symbol	Label	Quantity	Catalog Number	Description	Lumens Per Lamp	Wattage
	AW	6	DSX1.2.LA304.FW	Wall Mounted @ 10m	30330	286
	A1	3	DSX1.2.LA304.FW	Column Mounted @ 10m	30330	286
	B1	1	DSX0.1.LA084.AY	Column Mounted @ 8m	7802	64
	C1	7	DSX0.1.LA084.FW	Column Mounted @ 8m	8023	64
	DW	13	DWL.1.LA024.NR.W011	Wall Mounted @ 3.5m	1541	10.3
	E	2	DBD.1.LA014.DO.AY.W009	1m Bollard	932	9