

LIGHTING CLASSIFICATION

This lighting design has been produced in accordance with current:
BS 5489-1:2020, CEN/TR 13201-1:2014 & BS EN 13201-2:2015 outdoor lighting documents and guidelines.

Road lighting classification: P4 (BS 5489-1:2020,Table A.5)

Minimum maintained average illuminance (Eav): >5.00 lux <7.50 lux
Minimum illuminance (Emin): >1.00 lux
Emin/Eav (uniformity): >0.20 (>20%)

Footpath lighting classification: P5 (BS 5489-1:2020,Table A.5)

Minimum maintained average illuminance (Eav): >3.00 lux <4.50 lux
Minimum illuminance (Emin): >0.60 lux
Emin/Eav (uniformity): >0.20 (>20%)

NO ECOLOGY OR ENVIRONMENTAL REPORTS WERE AVAILABLE DURING THE TIME THE LIGHTING CALCULATION AND LIGHTING LAYOUT DRAWINGS WERE PRODUCED.

GENERAL NOTES

- All documents shall be checked to ensure they are compatible by the contractor before construction commences. In the event of apparent ambiguity or contradiction, SHD Lighting Consultancy Ltd and the overseeing organisation shall be notified immediately.
SHD Lighting Consultancy Ltd accept no liability in the event of not being notified and where construction work has commenced.
- Before construction commences, the site engineer shall ensure that all setting out information is mutually compatible with all the drawings and documents provided by the overseeing organisation and all drawings and documents are to be read in conjunction with one another.
- This lighting design has been prepared in accordance with the HEMSA/HEA Guidance Note - CDM2015 Regulations, Issue 1.1 dated 09/04/15 - Procedure 2 and The Construction (Design and Management) Regulations 2015 - PART 3 Health and safety duties and roles - 9. Duties of designers.
- Current statutory service record plans should be obtained by the contractor / overseeing organisation before commencement of any street lighting installation or removal works.
- All services are to be located and identified prior to installing or removing any lighting columns. All works should be carried out in accordance with HSE GS6, ENA 43-8, HSE HGS47, G39/1 and all relevant HSE regulations

NOTES

- All works are to be carried out in accordance with the latest 'The specification for road lighting, illuminated traffic signs and bollards in Oldham & Rochdale'.
- Any inaccuracies are to be reported to the overseeing organisation or site engineer immediately.
- The information on this drawing does not account for installation considerations, site conditions or provide any form of risk assessment.
- No account is taken for the blocking effect caused by buildings,trees, etc.
- The calculation shown by this drawing assumes that the whole area being considered is in the same plane, i.e. there are no changes in gradient or elevation.
- It should be assumed by the contractor that not all services have been identified during the design period. It is the responsibility of the contractor to take all necessary steps to ensure that any such unidentified services are carefully located and not damaged.
- The contractor shall identify the location of any overhead electrical or communication equipment prior to the undertaking of any onsite works. Should the presence of such equipment be identified, the contractor shall consult with the relevant statutory undertaker for further guidance.
- Final lighting column positions shall be agreed onsite with the Oldham and Rochdale street lighting representative.
- Final lighting column identification numbers shall be agreed with the Oldham and Rochdale street lighting representative.
- Lighting column foundations shall be designed in accordance with the latest 'The specification for road lighting, illuminated traffic signs and bollards in Oldham & Rochdale' and the manufacturer datasheet's for the columns, soil types and environmental conditions present.
- All new lighting units shall integrate within the existing Oldham & Rochdale central management system (CMS) network and be a stand alone fully operable and prior to adoption shall be proven and witnessed to be fully working.
- Each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.
- The contractor shall provide the Oldham and Rochdale street lighting representative with as-built drawings, test certificates and column and luminaire data sheets and details of all CMS node reference in accordance with the latest 'the specification for road lighting, illuminated traffic signs and bollards in Oldham & Rochdale'.
- The contractor shall keep and provide accurate records to the Oldham and Rochdale street lighting representative and service provider in relation to the identification numbers associated with all central management system control equipment in accordance with the latest 'The specification for road lighting, illuminated traffic signs and bollards in Oldham & Rochdale'.
- There shall be a requirement for one lantern to have the capability of mounting a Harvard (Lucy Zodion) branch node via 20mm dia hole in the lantern's canopy, using a NEMA socket replacement kit for the 20mm dia hole, and plugging into the DALI driver via a Vizion/DALI interface control unit.
- Electrical installation work shall be carried out in accordance with the requirements of the latest edition of the IET wiring regulations, BS 7671.
- Proposed lighting columns shall be installed to the back edge of the proposed footway construction within adopted highway and shall not obscure property windows/doors or private access/driveways.
- The minimum distance for a lighting column to be erected from the kerb face in a service strip shall be 1000mm
- The developer will be required to pay any energy liability charges with their electricity supplier until the date of formal adoption of the development.
- The developer will be responsible, unconditionally, for the condition,operation and any risk or liability of all the highways electrical equipment on all approved Section 38 agreement works until the date of formal adoption of the development.
- The planting of trees near to lighting columns is to be avoided as future growth may inhibit lighting levels. Due to the layout of the plots and associated driveways it is inevitable that there will be conflict with proposed landscaping features. Where such instances occur the lighting will take precedence in order to satisfy the requirements of the British standard.

STATUTORY SERVICE NOTES

- Current statutory service record plans should be obtained by the contractor / overseeing organisation before the commencement of any street lighting installation or removal works.
- All services are to be located and identified prior to installing or removing any lighting columns. Installation and Removal works should be carried out in accordance with ENA TS 43-8, EAWR 1989, CDM 2015 & G39/1 and all other relevant HSE regulations.
- All works in the vicinity of any overhead cables shall conform to the requirements of HSE guidance note GS6 "avoidance of danger from overhead lines"
- All works in the vicinity of underground mains or cables shall conform to the requirements of HSE guidance note HGS47 "Avoiding danger from underground services" and any additional requirements specified by the relevant undertaker.
- The contractor will be responsible for liaison with the undertakers and for programming the agreed protection and / or diversion works to any statutory undertakers apparatus into the overall works programme

The details provided on this drawing are subject to comments by all the relevant approving authorities or overseeing organisation. No construction works shall take place until technical approval has been obtained by the approving authority or overseeing organisation.
It is to be understood that these drawings and the information shown are preliminary only and shall not be used for construction. Should the contractor commence work on site prior to obtaining technical approval, then it is entirely at their own risk and no liability shall be accepted by SHD Lighting Consultancy Ltd.



Qty 32

Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: 1B0601METR10GR
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.
Post top mounted
Manufacturer Ref: VMX.2.LA033.V1.F4Q1.W018
Luminaire Order Ref: VMX.2.LA033.V1.F4Q1.W018.PT1.T7 T.LRD.CL8.L007
Lumen Output: 2.59 klm
Charge Code: 42 0018 0000 100
Luminaire wattage: 18 w
Colour Temperature: 3000k (Warm White)
Luminaire Tilt Inclination: 0°
Luminous Intensity: G4
Control Gear: Philips Xitanium dimmable DALI enabled driver
Control Type: Lucy Zodion Vizion Central Management System – UniNode 3 with 5 pin suitable for 7 pin NEMA sockets
Dimming Profile: CMS controlled
Supply: IDNO electrical supply connection
Primary Isolator: IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)
Secondary Isolator: N/A
Internal Wiring: Internal wiring to luminaire shall be 3 core 1.5mm² PVC insulated flexible cable to BS 6004 and 300/500v grade
Door Orientation: Facing road



Qty 6

Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: 1B0601METR10GR
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.
Post top mounted
Manufacturer Ref: VMX.2.LA023.V1.F4Q1.W013
Luminaire Order Ref: VMX.2.LA023.V1.F4Q1.W013.PT1.T7 T.LRD.CL8.L007
Lumen Output: 1.82 klm
Charge Code: 42 0013 0000 100
Luminaire wattage: 13 w
Colour Temperature: 3000k (Warm White)
Luminaire Tilt Inclination: 0°
Luminous Intensity: G4
Control Gear: Philips Xitanium dimmable DALI enabled driver
Control Type: Lucy Zodion Vizion Central Management System – UniNode 3 with 5 pin suitable for 7 pin NEMA sockets
Dimming Profile: CMS controlled
Supply: IDNO electrical supply connection
Primary Isolator: IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)
Secondary Isolator: N/A
Internal Wiring: Internal wiring to luminaire shall be 3 core 1.5mm² PVC insulated flexible cable to BS 6004 and 300/500v grade
Door Orientation: Facing road



Qty 5

Proposed galvanised **raise and lower mid-hinged** tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: CC6780 - 6M TRENT PR POST TOP
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.
Post top mounted
Manufacturer Ref: VMX.2.LA023.V1.F4Q1.W013
Luminaire Order Ref: VMX.2.LA023.V1.F4Q1.W013.PT1.T7 T.LRD.CL8.L007
Lumen Output: 1.82 klm
Charge Code: 42 0013 0000 100
Luminaire wattage: 13 w
Colour Temperature: 3000k (Warm White)
Luminaire Tilt Inclination: 0°
Luminous Intensity: G4
Control Gear: Philips Xitanium dimmable DALI enabled driver
Control Type: Lucy Zodion Vizion Central Management System – UniNode 3 with 5 pin suitable for 7 pin NEMA sockets
Dimming Profile: CMS controlled
Supply: Private cable network
Primary Isolator: 32A double pole switch with BS 88 Type 2 6A fuse to luminaire
Secondary Isolator: N/A
Internal Wiring: Internal wiring to luminaire shall be 3 core 1.5mm² PVC insulated flexible cable to BS 6004 and 300/500v grade
Door Orientation: Facing road



Qty 29

Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base and glass flake root protection as supplied by Valmont Stainton to Oldham & Rochdale Borough Council Street Lighting Specification.

Column Reference: 1B0601METR10GR
Holophane V-max with LM6 aluminium body and canopy with each lantern shall have a visible sticker, stating the wattage and lumen output, provided by the manufacturer at the time of order.
Post top mounted
Manufacturer Ref: VMX.2.LA043.V1.F4Q1.W023
Luminaire Order Ref: VMX.2.LA043.V1.F4Q1.W023.PT1.T7 T.LRD.CL8.L007
Lumen Output: 3.33 klm
Charge Code: 42 0023 0000 100
Luminaire wattage: 23 w
Colour Temperature: 3000k (Warm White)
Luminaire Tilt Inclination: 0°
Luminous Intensity: G4
Control Gear: Philips Xitanium dimmable DALI enabled driver
Control Type: Lucy Zodion Vizion Central Management System – UniNode 3 with 5 pin suitable for 7 pin NEMA sockets
Dimming Profile: CMS controlled
Supply: IDNO electrical supply connection
Primary Isolator: IDNO approved TOFCO double pole cut-out. Installed through 38mm red elbow duct. (ENW approved spec.)
Secondary Isolator: N/A
Internal Wiring: Internal wiring to luminaire shall be 3 core 1.5mm² PVC insulated flexible cable to BS 6004 and 300/500v grade
Door Orientation: Facing road



Qty 8

Future development phase S38 street lighting column
1m² concrete hard standing around base compartment of proposed lighting column

Proposed galvanised steel feeder pillar (Model: TOFCO Ltd: FP140 or equivalent)
Indicates direction of travel of raise/lower lighting column.
Proposed 6mm² XLPE/SWA/PVC 3 core cable with copper conductors laid in 100mm orange UPVC ducting denoted with 'STREET LIGHTING' at 1000mm intervals diametrically opposed, laid in trench, depth to invert to be minimum 450mm in footway and minimum 750mm in carriageway

Feeder pillar, chambers and ducting location's shown on this drawing are indicative only and final setting out positions to be determined by the site engineer or overseeing organisation.

UNIT IDENTIFICATION KEY:

LC** Proposed lighting column identification number
EX** Existing lighting column identification number
FP** Feeder pillar identification number

ELECTRICAL CONNECTION TYPE:

Proposed independent DNO supply connection
Disconnect existing DNO supply connection
Private cable termination type:
Refer to SHD418-SHD-HEL-Electrical-DR-EO-Electrical-R5

ISOLUX CONTOUR KEY:

0.20 Isolux contour line
0.60 Isolux contour line
1.00 Isolux contour line
2.00 Isolux contour line

EXISTING EQUIPMENT:

Existing lighting column to remain
Existing lighting column to be uprooted and removed from site.
Luminaire to be removed and handed back to the local authority for reuse or recycling.

R5	DEVELOPMENT LAYOUT CHANGE 01/08/2022	05/08/2022	SRH
R4	DEVELOPMENT LAYOUT CHANGE 04/05/2022	13/05/2022	SRH
R3	ADDED COLUMNS O/S PLOTS 1 TO 13	26/01/2022	SRH
R2	DEVELOPMENT LAYOUT CHANGE 07/01/2022	07/01/2022	SRH
R1	RENUMBERED LIGHTING COLUMNS	07/12/2021	SRH
R0	INITIAL DESIGN FOR REVIEW AND COMMENT	29/11/2021	SRH
REV	DESCRIPTION	DATE	BY



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SCHEME:	OFF DON STREET, MIDDLETON		
DRAWING:	S38 STREET LIGHTING DESIGN		
CLIENT:	KELLEN HOMES		
DRAWING NUMBER:	SHD418-SHD-HLG-DONS-DR-EO-Lighting Layout-R5	DRAWN:	SRH
	SHEET 1 OF 5	CHECKED:	SRH
		APPROVED:	
CONTRACT NUMBER:	SHD418	DATE:	29/11/2021
		SCALE @ A1:	1:500
		REVISION:	R5

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION