

Street Lighting PFI

Section 38 Design Brief – Wildhouse Lane, Milnrow

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The specification for equipment to be used and lighting standards to be achieved are as follows:

Equipment

Column Type -	Valmont Stainton Galvanised tubular steel, planted root with Glass Flake protection to O&R Specification (1B0601METR10GR).
Mounting Height -	6m post top nominal height for Section 38
Lantern-	Holophane V-max luminaire having an LM6 Aluminium body and canopy with an appropriately sized Philips Xitanium dimmable Dali enabled driver and a 7 pin Nema Socket mounted on the canopy utilising the Leafnut monitoring system – Post Top Mounted (Luminaires for residential road and side street lighting shall have adequate optical control to minimise light pollution and obtrusive light to properties and to control glare. Installed intensities shall not exceed the limits of Class G1 (as defined in Annex A of BS EN 13201-2: 2003) and the upward light output ratio (ULOR) shall not exceed 0.03..
LED-	*LED OUTPUT* 3000k cct as necessary to achieve lighting standard having a colouring-rendering index Ra =>60 and a colour temperature between 1950K and 3300K
CMS Node-	Harvard LeafNut Central Management System (Lucy Zodion) – UniNode 3 with 5 pin suitable for 7 pin Nema sockets.
CMS Branch Node-	There shall be a requirement for one lantern to have the capability of mounting a Harvard (LucyZodion) 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.
DNO Service Cut Out	ENW Approved TOFCO Single Phase Double Pole cut-out having the service cable enter the column, via the cable entry slot, through a RED elbow duct to meet ENW specifications. (Please advise of the IDNO where deemed applicable and state on the drawing)

Lighting Standard

For the on-site roads forming part of the proposed section 38, adoptable highway;

BS 5489-1: 2013 Classification P4 (No SP Ratio) meeting the requirements of Schedule 2 – Street Lighting Output Specification, 1.2.6 Residential roads and associated ways.

There is currently no lighting along Wildhouse Lane at the proposed site egress/ingress point. At detailed design stage the Developer, or their Agent, shall contact and liaise with Rochdale Council's Street Lighting Department seeking their guidance, and provision of a proposed lighting plan that will accompany and form part of a section 278 scheme.

Calculation Factors

Overall Maintenance Factor	Please refer to Eon's O & R – S38 Lantern Schedule
Lamp Lumen Output	as prescribed by the design to meet the desired standard. Please refer to Eon's O & R – S38 Lantern Schedule and Photometric Data Files.
SP Ratio	NA

Standard Detail References

- 13.03 – Installation of Steel Lighting Columns B
- 13.04 - Column Door Alignment
- 14.05 - Termination of Cables Type L5 REV A
- 14.26 - Base Compartment General Arrangement REV A
- 14.27 - Column and Sign Numbering Detail
- 14.28 - Termination Labels in Base Compartment

(Please place a request where any further standard details are required)

All electricity supplies to proposed columns shall be taken directly from the Electricity Companies low voltage mains cable.

It is the responsibility of the Developer to ensure there is sufficient area to plant the street lighting columns in the positions indicated prior to design approval.

All street lighting column positions shall be marked out on site by the Rochdale Council Street Lighting Engineer.

The provision of a Distribution Network Operator Connection shall be made to each individual street lighting column, ordered direct from the Distribution Network Operator by the Developer who will be required to bear the cost thereof.

Programming and liaison with the Distribution Network Operator and their Contractors is the sole responsibility of the Developer.

The street lighting installation shall not be accepted as complete until:

1. A copy of the Proposed lighting design has been submitted, including:
 - a. Details of all proposed Apparatus types;
 - b. Locations of the proposed Apparatus; and
 - c. Written confirmation by the developer that the proposed design complies with the Required Standards
2. The Local Authority has received As Built drawings
3. The Local Authority has received all test certificates, as specified in 'The Specification for Road Lighting, Illuminated Traffic Signs and Bollards in Oldham & Rochdale' document for Developers.
4. The installation has been inspected for compliance with the design specification and has been installed in accordance with Oldham & Rochdale PFI Street Lighting Specification.
5. Through a night time inspection, observed as being fully operational.
6. Any outstanding remedial work has been completed.

Design Submission

As part of the design submission the Developer shall provide the following so that a design review can be carried out;

1. Document Register detailing all submitted documents
2. Design methodology showing parameters for each road or Issued Design Brief
3. PDF Lighting reality calculation files for each road to be supplied. Area calculations and min and max straight road calculations to be provided for the applicable scenarios used.
4. Designer risk assessment
5. PDF plan indicating positions of all equipment to be installed together with a key listing all lighting equipment together with any necessary reference numbers. Type of electrical connection must be shown. The scaled plan should be at a suitable scale to scale off the locations of equipment.
6. PDF plan coloured to show the area of adoption by OMBC/RMBC
7. Copy of DNO/IDNO underground asset location
8. BSCP520 Inventory Spreadsheet for all adoptable electrical apparatus to be completed.
9. Written confirmation by the Developer that the proposed design complies with the required standards