

NOTES

1. This drawing should be read in relation to subject of the Title. Other information shown on drawing is to be considered indicative only. Reference should be made to appropriate drawing series for other information. Drawing to be read in conjunction with drawing 61033427-H-1300-01.
2. All dimensions are in millimetres unless otherwise stated.
3. The scheme design is based on the best information available at the time. Should existing columns/bollards or signs be disconnected throughout the new works, the Contractor is to ensure that electrical safety is addressed and reconnect to the geographically nearest available circuit, and be responsible for the potential design. Equally new columns/bollards and signs not identified here shall be similarly connected and as fitted drawing supplied accordingly.
4. Erection and installation works shall comply with the current issue and amendments of BS7671: 17th Edition IEE Regs 2011 Requirements for Electrical Installations, the current editions of the ILE Code of Practice for Electrical Safety in Public Lighting Operations and the Code of Practice for the Erection of Street Lighting published by the Association of Street Lighting Electrical Contractors.
5. New drawpits are to be kept clear of known services and underground cables in accordance with HSG47.
6. Services are present throughout this Site. The Contractor should be aware of this and all operations involving excavation should be completed with due care after consultation with Statutory Undertakers, as appropriate. The Contractor shall satisfy himself as to the precise locations of public utility plant, cable, pipe etc before excavating for the works. The owner of the overhead power lines shall be consulted to gain their approval of the clearances to the adjacent lighting columns. Overhead line warning signs are to be provided to columns adjacent to overhead lines.
7. Illuminated signs or signs over 0.3m squared shall not be fitted to lighting columns.
8. The design has been undertaken on the understanding that existing overhead services are to be removed.
9. The Contractor shall be responsible for final design of each foundation to ensure compliance for the relevant British Standard requirements and BD94/07.
10. Planted Foundations – In unpaved areas shall have hole completely back filled in one operation and the concrete shall be tamped and trowelled to form a watershed with a smooth U2 finish. Where topsoil has still to be applied to the area surrounding the column the concrete shall be brought to finish level by using a suitable shuttering. In paved areas operation is similar without watershed.
11. The column shall be left 48 hours after placing or until concrete has reached its design strength before placement of any attachments.
12. The column shall be truly vertical on completion of installation.
13. The column door shall face down stream to the traffic flow in the case of verge mounted columns.
14. Cable access duct to be fixed in to cable slot which shall be orange flexible polypropylene for private supply marked 'street lighting'.
15. All new underground cabling shall be ducted in orange UPVC ducts 110mm internal dia. Ducts to be double walled with smooth inner wall. Cable should be XLPE/PVC/SWA/PVC 600/1000V at a minimum cover depth of 500mm in verge and 750mm for Road Crossings. All ducts shall be imprinted "Street Lighting" and at 1m centres and have yellow warning tape 150mm above the cable.
16. Earthing to be provided as specification clause 1420 and MCX drawing 0509.
17. The Contractor is to ensure that all electrically energised equipment is correctly numbered in accordance with the local highway authority inventory numbering system before electrical inspection.
18. Power to columns to be provided by provision of new board DNO service. This is to be checked with new service supplier by Contractor. Power supplies to be confirmed following consultation with DNO by Contractor.

KEY

- Proposed lighting:
- Proposed galvanised steel road lighting column of10m height with planted base and post top Philips luma 2 lantern (eptic: Luma 2A RS DS_NW 1 17000 NW LED) capable of delivering 17Klm. The bracket and lantern are angled at 0°. Maximum column spacing 34.5m single sided and 32m staggered.
- Existing lighting:
- Galvanised steel road lighting column of 10m height with planted base C/W post top lantern.
- Galvanised steel road lighting column of 8m height with planted base C/W post top lantern.
- Galvanised mid hinged lighting column of 5m height with planted base C/W post top lantern.
- Pre-existing lighting column.
- Three phase feeder pillar.
- Illuminated bollard.
- 100mm Orange street lighting duct.
- Earth electrode inspection pit (EEIP)
- Duct access chamber (DAC)
- DNO Distribution network operator electricity service.

Column Setting Out Data				
Column Ref	Chainage	Setback (m)	Easting	Northing
LC1	NOT USED	0.5m from front of verge	11965.10	20456.880
LC2	NOT USED	0.5m from front of verge	11936.495	20471.221
LC3	NOT USED	0.5m from front of verge	11907.519	20484.800
LC4	NOT USED	0.5m from front of verge	11878.178	20497.571
LC5	NOT USED	0.5m from front of verge	11851.698	20511.778
LC6	NOT USED	0.5m from front of verge	11825.263	20525.961
LC7	NOT USED	0.5m from front of verge	11799.074	20537.446
LC8	NOT USED	0.5m from front of verge	11769.345	20545.992
LC9	NOT USED	0.5m from front of verge	11746.511	20521.576
LC10	NOT USED	0.5m from front of verge	11732.179	20564.349
LC11	NOT USED	0.5m from front of verge	11699.433	20542.348
LC12	NOT USED	0.5m from front of verge	11711.372	20515.371
LC13	NOT USED	0.5m from front of verge	11725.701	20504.878

NOTES

1. This drawing is to be read in conjunction with General Arrangement drawing 61033427/H/1300/01.

QUALITY PERFORMANCE FIGURES

Lighting Quality Figures					
Illuminance Performance Figures	Minimum Maintained Average Illuminance (lux) Eav	Minimum Maintained Illuminance (lux) Emin	Maximum Maintained Illuminance (lux) Emax	Minimum Maintained Overall Uniformity Emin/Eave (%) Uo	Diversity (Emin/Emax) Ud
Required BSEN13201-2:2003 Class CE3	15	-	-	40	-
Achieved at Roundabout Conflict Area	15.10	6.66	27.94	44	24
Luminance Performance	Minimum Maintained Average luminance (cd/m²) Lav	Minimum Maintained Overall Uniformity Lmin/Lave (%) Uo	Minimum Maintained Longitudinal Uniformity Lmin/Lmax (%) UI	Maximum Threshold Increment (%) TI	Surround Ratio (%) SR
Required BSEN13201-2:2003 Class ME4a	0.75	40	60	15	50
Achieved luminance single sided	0.76	53	69	11.11	96
Achieved luminance staggered	0.85	63	60	10.10	96
Notes: Figures for 7.3m carriageway.					

Client



Project

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Drawing Title

WREXHAM GATEWAY
STREET LIGHTING
SETTING OUT, KEY, NOTES AND PERFORMANCE
QUALITY FIGURES

B	SBO	SBO	LSS	LSS	MRD	11.08.14	FOR PLANNING
A	SBO	SBO	LSS	LSS	MRD	05.08.14	FOR PLANNING
-	SBO	SBO	LSS	LSS	MRD	27.06.14	PRELIMINARY
Rev.	Drawn	Ck'd.	App'd.	Date	Description		
Scale (at A1)		Date		Drawn		SC	
1:500		JUNE 2014					
Drg. no.							Rev.
61033427-H-1300-00							B