

**GENERAL NOTES**

- Before construction commences, the site engineer shall ensure that all design information is mutually compatible with all other drawings and documents provided by the overseeing organisation and all drawings and documents are to be read in conjunction with one another.
- 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.
- 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.

**NOTES**

- This drawing is to be used in conjunction with the accompanying lighting reality report, design risk assessment and latest Hertfordshire County Council street lighting standard detail drawings and specifications.
- Any inaccuracies are to be reported to the overseeing organisation immediately.
- Electrical installation work shall be carried out in accordance with the requirements of the latest edition of the IET wiring regulations, BS 7671.
- 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.
- 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 agreement works until the date of formal adoption of the lighting assets.

**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. 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 ensure that all unidentified services are carefully located and reported.
- 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.
- Installation and Removal works should be carried out in accordance with Energy Network Association Technical Specification 43-8, Electricity at Work Regulations 1989, Construction Design and Management (CDM) 2015 & G39/1 and all other relevant Health and Safety Executive regulations.
- All works in the vicinity of any overhead cables shall conform to the requirements of Health and Safety Executive, Guidance Note GS6 "Avoidance of danger from overhead power lines"
- All works in the vicinity of underground mains or cables shall conform to the requirements of Health and Safety Executive, Health and Safety Guidance 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

**LIGHTING CLASSIFICATION**

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

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

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

Junction Conflict Class: C5  
 Minimum maintained average illuminance (Eav): >7.50 lux  
 Lighting uniformity (Emin/Eav): >0.40 (40%)

**RESIDUAL DESIGN HAZARDS:**

The location of existing utility services to be determined on site by the contractor.  
 All street lighting installation works should be carried out in accordance with the relevant standards including: BS 7671, G39/1, Energy Network Association Technical Specification 43-8, HSE HSG47 and the Institution of Lighting Professionals guidance document (ILP GP03)

- Overhead communication cables

Remove existing side entry mounted luminaire from bracket arm and hand back to Hertfordshire County Council for reuse or recycling and remove bracket. To be replaced with post top mounted luminaire on reducer spigot. An OSID sticker is to be installed at the base of the lighting column and inside the hood of the lantern	Luminaire Type: Urbis Schreder Ampera
	Luminaire Reference: Ampera EVO 1 50009 20 OLSON 700mA NW 740 45.5W 504992
	Mounting Type: Post top mounted on reducer spigot
	Luminaire Tilt: 0°
	Lumen Output: 5.76klm
	Charge Code: 42 0045 0000 100
	Luminaire Wattage: 45.5w
	Colour Temperature: Neutral White (4000K)
	Luminous Intensity: G3
	Control Gear: DALI enabled electronic control gear Telensa 1 part 5 pin CMS node fitted to a 7 PIN NEMA socket in accordance with Hertfordshire County Council specification only.
	Control Type: CMS controlled
	Supply: Existing to remain
	Secondary Isolator: Lucy Trojan Midi double pole isolator unit
	Internal Wiring: Wiring to luminaire shall be 2.5mm² PVC insulated flexible cable

Proposed galvanised tubular steel lighting column of 10.0 metre nominal height with a planted base and glass flake root protection as supplied by CU Phosco to Hertfordshire County Council specification. An OSID sticker is to be installed at the base of the lighting column and inside the hood of the lantern	Luminaire Type: Urbis Schreder Ampera
	Luminaire Reference: Ampera EVO 1 50009 20 OLSON 700mA NW 740 45.5W 504992
	Mounting Type: Post top mounted
	Luminaire Tilt: 0°
	Lumen Output: 5.76klm
	Charge Code: 42 0045 0000 100
	Luminaire Wattage: 45.5w
	Colour Temperature: Neutral White (4000K)
	Luminous Intensity: G3
	Control Gear: DALI enabled electronic control gear Telensa 1 part 5 pin CMS node fitted to a 7 PIN NEMA socket in accordance with Hertfordshire County Council specification only.
	Control Type: CMS controlled
	Supply: DNO
	Primary Isolator: DNO approved double pole isolator
	Secondary Isolator: Lucy Trojan Midi double pole isolator unit
	Internal Wiring: Wiring to luminaire shall be 2.5mm² PVC insulated flexible cable
	Door Orientation: Perpendicular to road facing away from oncoming traffic

- Existing lighting column to be removed from site. Luminaire to be removed and handed back to the Local Authority for reuse or recycling.
- Proposed private lighting column and luminaire. Shown for contributory lighting 'tie in' purposes only.

**UNIT IDENTIFICATION KEY:**  
 Proposed lighting column identification number  
 Existing lighting column identification number

**ELECTRICAL CONNECTION TYPE:**  
 Transfer distribution network operator connection

**ISOLUX CONTOUR KEY:**  
 0.20 Isolux contour line  
 1.00 Isolux contour line  
 2.00 Isolux contour line

R2	DESIGN CHANGES FOLLOWING LA REVIEW COMMENT	25/09/2023	SRH
R1	DESIGN CHANGES FOLLOWING LA REVIEW COMMENT	27/06/2023	SRH
R0	INITIAL DESIGN FOR REVIEW AND COMMENT	14/06/2023	SRH
REV	DESCRIPTION	DATE	BY

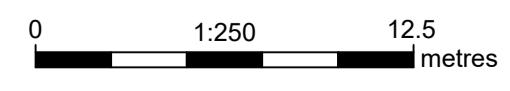


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SCHEME:	NORTHAW ROAD EAST, CUFFLEY		
DRAWING:	S278 STREET LIGHTING DESIGN		
CLIENT:	SIMPSON TWS		
DRAWING NUMBER:	SHD1023-SHD-HLS-NORTH-CUFFLEY-Street Lighting Layout-R2	DRAWN:	SRH
	SHEET 1 OF 1	CHECKED:	SRH
		APPROVED:	
CONTRACT NUMBER:	SHD1023	DATE:	14/06/2023
		SCALE @ A1	1:500
		REVISION:	R2

**PRELIMINARY DESIGN - NOT FOR CONSTRUCTION**

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.



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