

STREET LIGHTING DESIGN RISK ASSESSMENT



info@shdlighting.co.uk 07834 490 192 www.shdlighting.co.uk

Document:	SHD2504-SHD-HLG-GLEN-RA-EO-St Helens Lighting Design Risk Assessment-R0	
Prepared by:	SHD Lighting Consultancy Ltd	26/11/2025
Scheme Title:	Glen Dimplex	
Brief Description:	S278 street lighting design	
Considerations:	The lighting scheme has been designed in accordance with BS 5489-1:2020	
Specification:	St Helens Metropolitan Borough Council	

This document must be read in conjunction with SHD2504-SHD-HLG-GLEN-DR-EO-Lighting Layout-R0

No information was available on the location of:

- Any existing or proposed low or high voltage underground electricity cables
- Any existing or proposed low or high voltage overhead electricity cables
- Any existing or proposed low, medium or high-pressure gas main pipes
- Any existing or proposed water main pipes
- Any existing or proposed underground or overhead communication cables

All services are to be located and identified prior to installing or removing any equipment.

All works should be carried out in accordance with the current versions of the following guidance documents:

- HSE GS6 - Avoiding Danger from Overhead Power Lines
- ENA 43-8 - Overhead Line Clearances
- HSE HSG 47 - Avoiding Danger from Underground Services
- G39/1 - Highway Electrical Safety

Details of existing statutory undertakers' plant are to be obtained by the client before installing or removing any equipment.

The contractor is 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.

Any damage to any plant or apparatus shall be repaired at the contractor's expense.

No works shall be constructed until technical approval has been obtained from the local authority or the overseeing organisation by the developer.

Should works be constructed without approval from the local authority or overseeing organisation, they will be entirely at the developer's risk.

DESIGNER'S RISK ASSESSMENT												
	HAZARD IDENTIFICATION / ACTIVITY	APPLICABLE (Y/N)	ACTIVITY	WHAT IS THE HAZARD AND WHO / WHAT IS AT RISK	INITIAL RISK ASSESSMENT			DESIGN CONTROL MEASURES	RESIDUAL RISK ASSESSMENT			FURTHER CONTROL MEASURES / RECOMMENDATIONS
					SEVERITY (S)	LIKELIHOOD (L)	RISK (S x L)		SEVERITY (S)	LIKELIHOOD (L)	RISK (S x L)	
1	During construction of the works	Y	Installation of highway lighting equipment adjacent to footpath	Public & Operatives	5	3	15	Install barriers to protect public from works area	2	2	4	
2	Electricity	Y	Below ground works	Striking underground electricity cable - electrocution/burning. Workforce and site personnel.	5	4	20	Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig.	5	2	10	Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47.
3	Gas	Y	Below ground works	Striking underground gasmain - explosion, gas leak. Workforce and site personnel.	5	4	20	Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig.	5	2	10	Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47.
4	Water	Y	Below ground works	Striking underground water main - flooding hazard. Workforce and site personnel.	5	4	20	Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig.	5	2	10	Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47.
	(S)		(L)		Risk Rating (RR=S x L)							
	1		1		Insignificant	Acceptable						
	2		2		Low	Acceptable with effective control measures						
	3		3		Medium	Not acceptable, risks need investigation to consider reasonable practical improvements						
	4		4		Significant	Review urgently required to determine if the risk can be removed or controls improved						
	5		5		High	Risks must be removed or reduced						

DESIGNER'S RISK ASSESSMENT												
	HAZARD IDENTIFICATION / ACTIVITY	APPL(CABLE (Y/N)	ACTIVITY	WHAT IS THE HAZARD AND WHO / WHAT IS AT RISK	INITIAL RISK ASSESSMENT			DESIGN CONTROL MEASURES	RESIDUAL RISK ASSESSMENT			FURTHER CONTROL MEASURES / RECOMMENDATIONS
					SEVERITY (S)	LIKELIHOOD (L)	RISK (S x L)		SEVERITY (S)	LIKELIHOOD (L)	RISK (S x L)	
5	Telecom / Data	Y	Below ground works	Striking underground telecoms or data service cables.	5	4	20	Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig.	5	2	10	Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47.
6	Highway Lighting	Y	Below ground works	Striking underground highway lighting cable - electrocution / burning hazard. Workforce and site personnel.	5	4	20	Ensure CAT scans are undertaken to locate services/utilities. No works to be undertaken without a valid permit to dig.	5	2	10	Principal Contractor must ensure that all excavations are carried out in accordance with HSG 47.
7	Overhead data lines	Y	During lighting column installation or MEWP striking overhead lines	Loss of service / Injury to site personnel.	3	3	9	Contractor to be aware of any overhead cables.	2	1	2	All installations shall be in accordance with GS6 and G39 - No work to be undertaken in the vicinity zone
8	Overhead power lines	Y	Installation of lighting columns	Loss of service / Injury to site personnel.	5	3	15	Columns to be located outside vicinity zone in accordance with G39.	2	1	2	All installations shall be in accordance with GS6 and G39 - No work to be undertaken in the vicinity zone - Consult with DNO for guidance.
	(S)		(L)	Risk Rating (RR=S x L)								
	1		1	Insignificant Acceptable								
	2		2	Low Acceptable with effective control measures								
	3		3	Medium Not acceptable, risks need investigation to consider reasonable practical improvements								
	4		4	Significant Review urgently required to determine if the risk can be removed or controls improved								
	5		5	High Risks must be removed or reduced								

DESIGNER'S RISK ASSESSMENT												
	HAZARD IDENTIFICATION / ACTIVITY	APPLI(CA)BLE (Y/N)	ACTIVITY	WHAT IS THE HAZARD AND WHO / WHAT IS AT RISK	INITIAL RISK ASSESSMENT			DESIGN CONTROL MEASURES	RESIDUAL RISK ASSESSMENT			FURTHER CONTROL MEASURES / RECOMMENDATIONS
					SEVERITY (S)	LIKELIHOOD (L)	RISK (S x L)		SEVERITY (S)	LIKELIHOOD (L)	RISK (S x L)	
9	Working adjacent to highway	Y	Maintenance of equipment	Site Personnel being struck by errant vehicles.	5	3	15	Column doors to face away from oncoming vehicles and columns to be sited to the rear of footway when possible.	4	1	4	Compliance with design contract documents, method statements and working procedures.
10	Working at height	Y	Installation of luminaires	Dropping materials / tools from height.	4	3	12	Barriers to be placed around columns and suitable PPE shall be worn.	4	1	4	Operative to warn pedestrians of hazard overhead.
11	Electric Vehicle Charging Points		Clearance distances between lighting columns and EV charging system (including connected vehicle) must be greater than 2.5m, when connected to different earthing systems.	Electric shock	5	3	15	Locate EV points, greater than 2.5m away from lighting column	5	2	10	Lighting design and EV point locations to be assessed
12												
	(S)		(L)		Risk Rating (RR=S x L)							
	1		1		Insignificant	Acceptable						
	2		2		Low	Acceptable with effective control measures						
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