

LIGHTING DESIGNERS' HAZARD ANALYSIS AND RISK ASSESSMENT

Scheme Name: Rockingham Phase 2, Birdwell				Risk Before Mitigation			Residual Risk After Mitigation	Residual Risk			How is this passed to the contractor?			
Parish: Barnsley														
Scheme Ref: Y20112														
Carried out by: N Poundall														
Date: 11 February 2022				Likelihood	Severity	Rating	Likelihood	Severity	Rating	Information on Residual Risk	PCI	Spec	Drawings	
Ref	Activity	Hazard	Who might be harmed											
1	Undertaking excavations to install a lighting column	Buried Services	Operatives	3	4	12	Column positions to be designed to avoid known service locations as far as possible. Existing and proposed service routes to be indicated on drawings where possible and made available to street lighting contractor. Contractor to CAT scan area where excavations are to take place as part of the contractors approved method statement. Hand dig in the vicinity of services as per 'Avoiding Danger From Underground Services HSG47'	1	4	4	Risk cannot be designed out by street lighting designer. Risk to be managed by contractors and implement safe systems of work.	x		
2	Undertaking excavations to install a lighting column	Slips, trips and falls on site	Operatives	2	3	6	Uneven ground and open excavations/trenches for lighting columns/ducting likely to be encountered on site. Appropriate footwear and PPE to be worn. To be managed through contractor's management systems and safe systems of work; a risk which a competent contractor should anticipate to encounter whilst undertaking this activity.	1	3	3	Risk cannot be designed out by street lighting designer. Risk to be managed by contractors and implement safe systems of work.	x		
3	Installation of a lighting column	Manual handling and injury	Operatives	3	3	9	Manual handling activities to be avoided wherever possible. Mechanical lifting will be required to reduce manual handling. Lifting points to be detailed / specified.	1	3	3	Risk cannot be designed out by street lighting designer. Risk to be managed by contractors and implement safe systems of work.	x		
4	Installation of lighting column	Working at height; falls from height	Operatives	2	4	8	Exposure reduced by using platforms hoists and harnesses. Lantern may be installed and connected on column at ground level, with column hoisted into position using a Hiab vehicle, reducing the need to visit the lantern at height once the replacement column is installed. Where working at height is required, it is to be managed through contractor to management process a safe system of work to minimise risk of falling/falls from height. A risk that a competent contractor should anticipate.	1	4	4	Risk cannot be designed out by street lighting designer. Risk to be managed by contractors and implement safe systems of work.	x		
5	Installation of lighting column	Fall of objects	Operatives / Members of public	2	3	6	As much as possible of the fit out of the column and replacement luminaire will be carried out a ground level before column erection. Contractor to implement a safe system of work to minimise risk of objects falling during removal, structural testing and installation of columns. Tools should be attached to the operative by a lanyard when working at height on lighting. To be managed through contractor's management systems - risk one which a competent contractor should anticipate.	1	3	3	Risk cannot be designed out by street lighting designer. Risk to be managed by contractors and implement safe systems of work.	x		
6	Working on live electrical equipment	Electrocution	Operatives	2	4	8	Contractor to be provided with details of existing LV network. Competent contractor is expected to observe the requirements of the Health and Safety at Work Act, Electricity at Work Regulations, Electricity Supply and Continuity Regulations, BS7671, ILP Code of Practice for Electrical Safety, for maintenance procedures. Lone working with electrical equipment is not recommended. Isolate live equipment when completing installation tasks where possible.	1	4	4	Risk cannot be designed out by street lighting designer. Risk to be managed by contractors and implement safe systems of work.	x		
7	General site working	Movement of site plant and vehicles	Operatives	3	3	9	If required, traffic management to be employed as necessary for live traffic for the replacement/installation of lighting columns on existing highway/potentially within the development site. Safe system of work to be employed to cater for site traffic. Street Lighting Contractor to be fully site inducted. To be managed through contractor's management systems - risk which a competent contractor should anticipate. Appropriate PPE to be worn.	2	3	6	Risk cannot be designed out by street lighting designer. Risk to be managed by contractors and implement safe systems of work.	x		
8	Ecology restrictions as per information provided by the client	Poorly designed lighting having a detrimental impact on local ecology, particular bats and their foraging / commuting patterns	Environment	3	3	9	LED lanterns to be managed and installed at a degree upward tilt to minimise upward light and ensure light is provided in the required areas. Columns which are installed on the site boundary shall have external rear louvers proposed to limit light spill beyond the extents of the development. Lighting columns to be 6m in height, reducing potential barrier effect for bats. Lighting design class to be P5, one of the lowest levels available in the British Standard.	1	2	2	Design mitigation implmented in accordance with ILP GN01/21 and ILP GN08/18 to reduce risks of lighting design having harmful impacts on local ecology. Risk reduced to levels deemed to be negligible.			x