

DATE: 11 February 2022

DESIGNER: N Poundall

Nathan Poundall Lighting Ltd



PROJECT No: Y20112

PROJECT NAME: Rockingham Phase 2, Birdwell, Barnsley

Lighting designed to BS5489-1:2020 lighting class P4.

Table A.5 - Environmental zone E2, traffic flow 'Normal', suggests P5 class. However, this is an access road for commercial /industrial space. HGV's expected, along with mix of other road users (pedestrians/cyclists). As a result, it is deemed appropriate to raise the class by one to P4.

Eav = 5.00 - 7.50 lux

Emin = 1.00 lux

Optimum spacing = 47.0m

Design spacings at 45.0m to allow +2m tolerance for on site constraints during construction.

Outdoor Lighting Report

PREPARED BY: Nathan Poundall
on behalf of RWO Associates

Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Grid 1 - P4	435879.03	401076.25	136.36	73.66	1.50	1.47
2	Grid 2 - P4	435691.27	401056.80	77.35	158.19	1.49	1.49

Luminaires

Luminaire A Data

Supplier	Urbis Schreder
Type	AXIA 3.2 5279 Integrated lenses 32 OSLO N SQUARE GIANT@800mA
Lamp(s)	32 OSLO SQUARE GIANT@800mA NW 740 230V
LampFlux(klm)/Colour	10.31 NW 4000K/70
File Name	AXIA 3.2 5279 32 OSLO SQUARE GIANT 800mA NW 740 78W 430122 Integrated le...
Maintenance Factor	0.92
Imax70,80,90(cd/klm)	758.9, 149.6, 0.0
No. in Project	1



Luminaire C Data

Supplier	Urbis Schreder
Type	AXIA 3.1 5294 Integrated lenses 16 OSLO N SQUARE GIANT@700mA
Lamp(s)	16 OSLO SQUARE GIANT@700mA NW 740 230V
LampFlux(klm)/Colour	4.79 NW 4000K/70
File Name	AXIA 3.1 5294 16 OSLO SQUARE GIANT 700mA NW 740 35.6W 435812 Integrated ...
Maintenance Factor	0.92
Imax70,80,90(cd/klm)	588.3, 39.6, 0.0
No. in Project	7

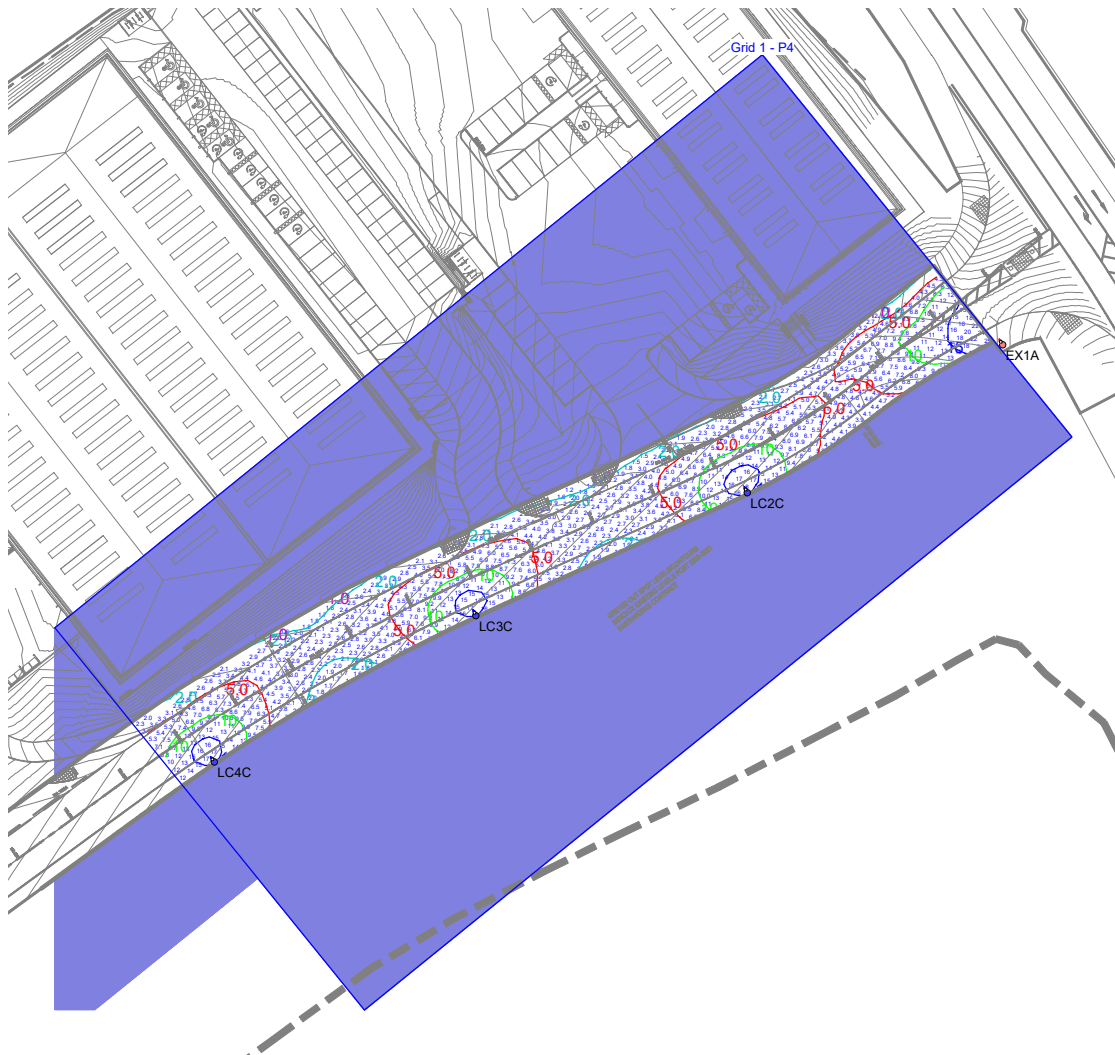


Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
EX1	A	435974.63	401175.87	10.00	120.00	0.00	0.00	0.50			
LC2	C	435936.38	401153.73	8.00	115.00	0.00	0.00	0.50			
LC3	C	435895.73	401135.29	8.00	115.00	0.00	0.00	0.50			
LC4	C	435856.55	401113.37	8.00	124.00	0.00	0.00	0.50			
LC5	C	435820.17	401086.99	8.00	125.00	0.00	0.00	0.50			
LC6	C	435783.60	401060.36	8.00	126.00	0.00	0.00	0.50			
LC7	C	435748.76	401034.89	8.00	127.00	0.00	0.00	0.50			
LC8	C	435738.24	401053.29	8.00	39.00	0.00	0.00	0.50			

Horizontal Illuminance (lux)

Grid 1 - P4

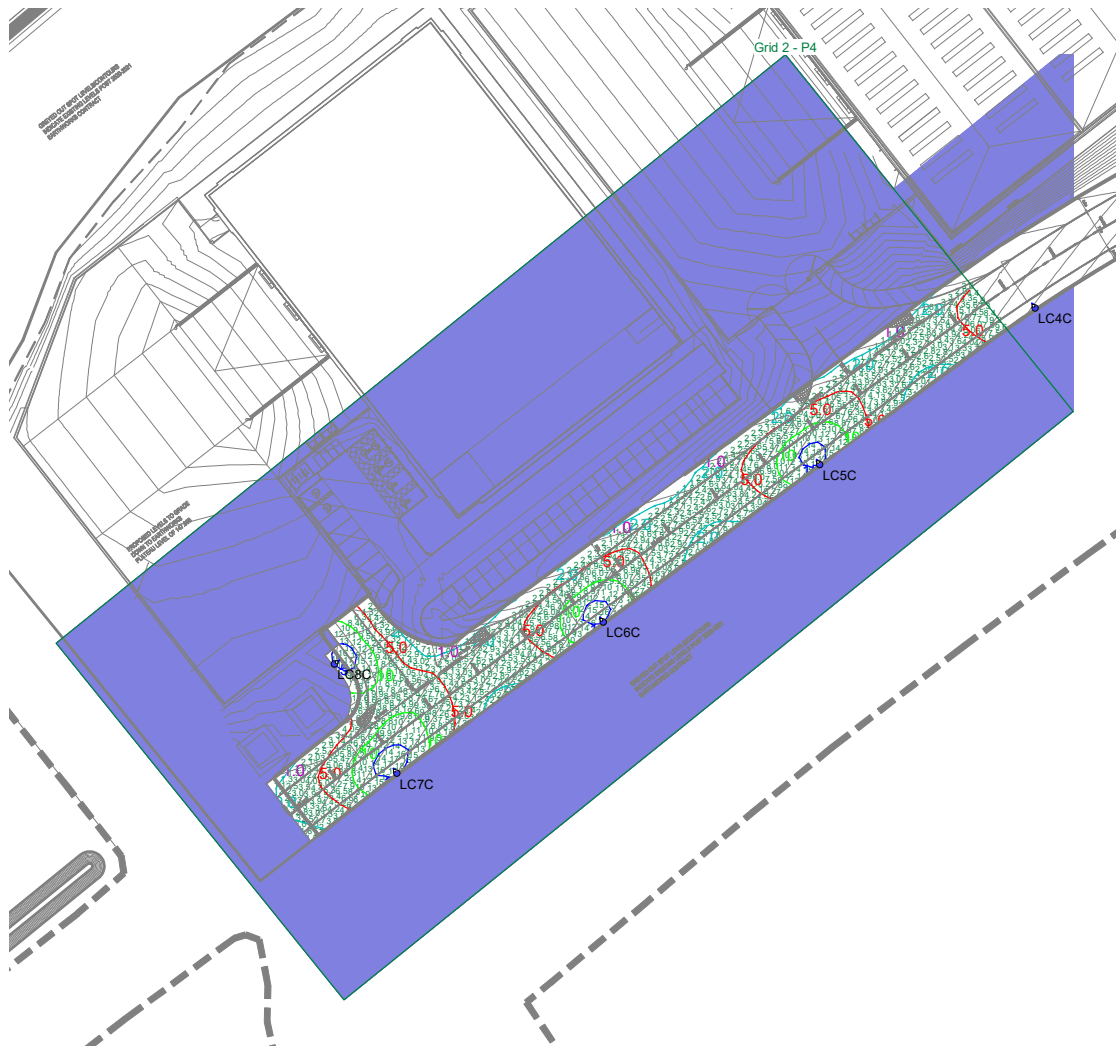


Results

Eav	6.20
Emin	1.05
Emax	24.52
Emin/Emax	0.04
Emin/Eav	0.17

Horizontal Illuminance (lux)

Grid 2 - P4



Results

Eav	5.83
Emin	1.02
Emax	17.91
Emin/Emax	0.06
Emin/Eav	0.17