

DATE: 11 December 2023

DESIGNER: Alex Naper

PROJECT No: SES 14223

PROJECT NAME: Proposed LRD Application at Grande Road, Baldoyle, Dublin 13



Client: Rondesere Ltd

Road frontage section designed in accordance with EN13201-2:2015 Category P4.

Access Junction meets recommendations of EN13201-2:2015 Category C5.

Residential area designed in accordance with EN13201-2:2015 Category P4.

MF derived from: 0.92 x 0.90 (LMF (Low pollution environment & 72 month cleaning cycle) x LLMF) LLMF values @ 100,000 hours & 25 degrees C.

Outdoor Lighting Report

PREPARED BY: Sabre Electrical Services Ltd.
Unit 11,
Bellview Industrial Estate,
Tolka Valley Road,
Dublin 11
Phone Number: 01 8110875
Contact: Graham Sheehan
eMail: graham@sabrelighting.ie

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	415.31	402.66	114.00	24.00	1.50	1.50
2	Grid 2	450.41	396.90	27.00	13.49	1.50	1.50
3	Grid 3	433.65	342.29	37.45	57.00	1.50	1.50

Luminaires

Luminaire A Data



Supplier	Philips
Type	BGP291 DW50
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	3.60
File Name	LumiStreet Gen2 Micro_BGP291_DW50_3 600_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	609.4, 39.0, 0.0
No. in Project	3

Luminaire B Data



Supplier	C U Phosco
Type	P863-16-P4-NW-E0600-31W
Lamp(s)	740P NW
Lamp Flux (klm)	3.50
File Name	P863-16-P4-NW-E0600-31W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	648.0, 178.8, 0.0
No. in Project	2

Luminaire C Data



Supplier	Philips
Type	BGP291 DW50
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	3.60
File Name	LumiStreet Gen2 Micro_BGP291_DW50_3 600_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	609.4, 39.0, 0.0
No. in Project	1

Luminaire D Data



Supplier	Philips
Type	BGP291 DN25
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	1.00
File Name	LumiStreet Gen2 Micro_BGP291_DN25_10 00_6LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	705.1, 87.1, 0.0
No. in Project	4

Layout

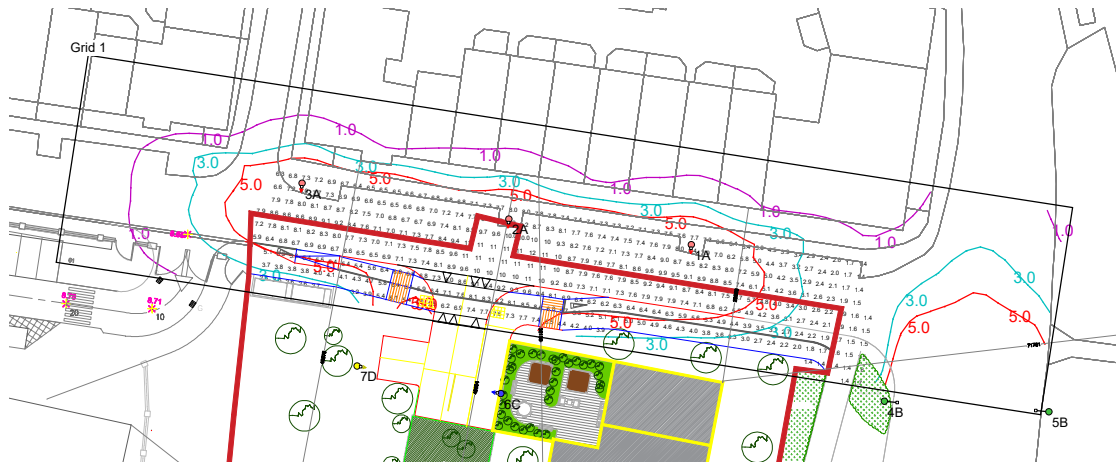
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	488.01	404.69	6.00	266.00	0.00	0.00	0.40			
2	A	467.12	407.62	6.00	263.00	0.00	0.00	0.40			
3	A	443.44	411.73	6.00	264.00	0.00	0.00	0.40			
4	B	510.08	386.77	8.00	355.00	0.00	0.00	1.50			
5	B	528.92	385.55	8.00	174.00	0.00	0.00	1.50			
6	C	466.19	387.64	6.00	170.00	0.00	0.00	0.40			
7	D	449.77	390.80	5.00	349.00	0.00	0.00	0.40			
8	D	462.86	362.44	5.00	182.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
9	D	451.18	370.23	5.00	36.00	0.00	0.00	0.40			
10	D	446.95	345.67	5.00	260.00	0.00	0.00	0.40			

Horizontal Illuminance (lux)

Grid 1

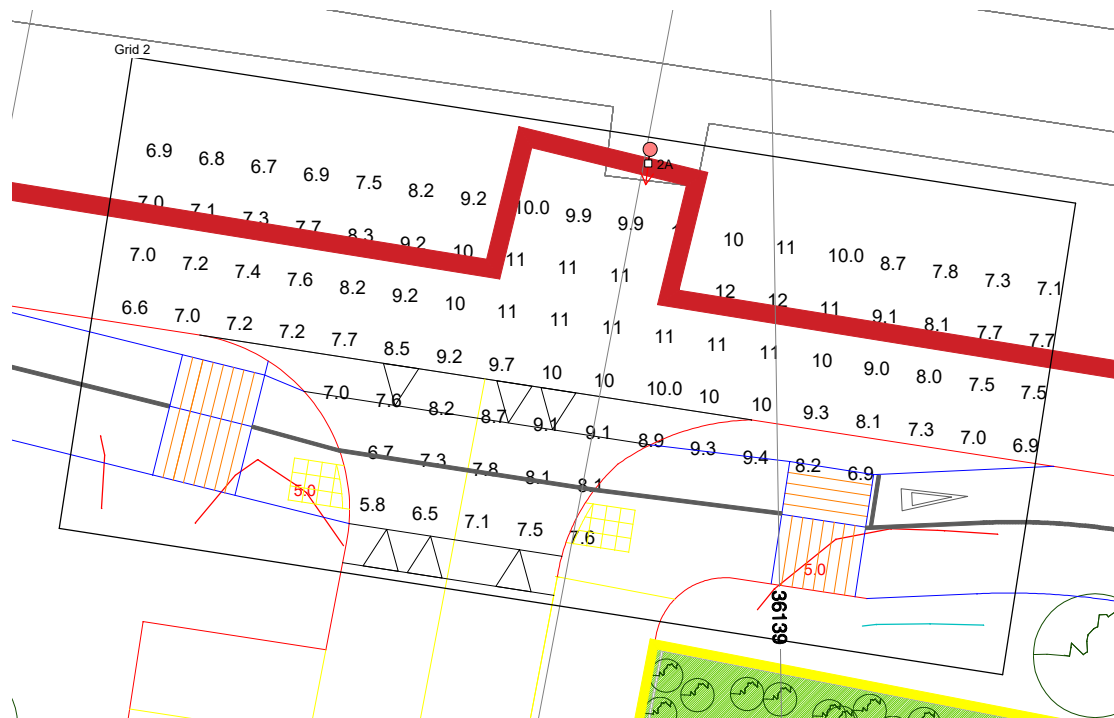


Results

Eav	6.41
Emin	1.36
Emax	11.57
Emin/Emax	0.12
Emin/Eav	0.21

Horizontal Illuminance (lux)

Grid 2



Results

Eav	8.65
Emin	5.81
E _{max}	11.65
Emin/E _{max}	0.50
Emin/Eav	0.67

Horizontal Illuminance (lux)

Grid 3



Results

Eav	6.96
Emin	1.37
Emax	13.79
Emin/Emax	0.10
Emin/Eav	0.20