

DATE: 7 December 2020
DESIGNER: EDC
PROJECT No: C19037
PROJECT NAME: St Kevin's Strategic Housing Development



In Accordance with:

Guidance Notes for Planners, Engineers, Architects, and Developers (Bat Conservation Ireland, 2010)

Bats and Lighting in the UK – Bats and the Built Environment Series (Institute of Lighting Professionals, September 2018).

The north-western area of the site in particular must cater for bat protection. There is a walkway where the lighting is supplied by low level bollards to ensure the light impact to the bats is minimised. Bat corridors are also identified on the main site layout drawing.

Public Lighting Report

**St Kevin's Strategic Housing Development
At the former St. Kevin's Hospital and Grounds,
Shanakiel, Cork**

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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	Overall Estate	-1993.07	-201.86	284.92	351.78	1.50	1.50
2	Entrance Way	-1842.48	73.87	88.07	27.79	1.49	1.46
3	Spine Road	-1858.41	-7.01	20.34	92.75	1.45	1.50
4	Estate - North Section	-1910.66	40.65	153.80	49.31	1.49	1.49
5	Walkway - Between Block D ...	-1928.07	6.74	72.77	37.02	1.49	1.48
6	Estate - Western Side	-1989.82	-94.72	142.82	108.82	1.49	1.49
7	Estate - Eastern Side	-1848.30	-110.91	124.04	136.34	1.49	1.50
8	Estate - South	-1989.82	-133.26	139.90	61.54	1.49	1.47
9	Estate - Southern Walkway	-1920.19	-184.75	185.25	82.26	1.49	1.50
10	Walkway - Rear Block H	-1839.55	13.45	77.08	20.08	1.48	1.43
11	Walkway - Northern Pass	-1931.20	92.47	115.94	26.24	1.41	0.29

Luminaires

Luminaire A Data



Supplier	Philips
Type	BGP702 DW50
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	5.00
File Name	Luma Gen2 Micro_BGP702_DW50_5000_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	595.5, 51.0, 0.0
Lamp S/P Ratio	1.30
No. in Project	41

Luminaire B Data



Supplier	Philips
Type	BDS592 MDS LED40/830 NO
Lamp(s)	LED40-3S/830
LampFlux(klm)/Colour	4.00 830/
File Name	BDS592 1 xLED40-3S_830 MDS.Idt
Maintenance Factor	0.76
Lum. Int. Class	G3
Lamp S/P Ratio	0.00
No. in Project	38

Luminaire C Data



Supplier	Urbis Schreder
Type	PHAROS 0 Symmetrical 8 LEDs 350mA N W Cylindrical, PC, Frosted
Lamp(s)	8 LEDs NW
Lamp Flux (klm)	0.65
File Name	PHAROS 0 8 LEDs 350mA NW 356004 Cylindrical PC Frosted Symmetrical TF.Idt
Maintenance Factor	0.76
Lum. Int. Class	None
Lamp S/P Ratio	1.47
No. in Project	10

Layout

ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out- reach	Target X	Target Y	Target Z
1	A	-1782.43	104.03	6.00	115.00	0.00	0.00	0.55			
2	A	-1806.06	106.42	6.00	289.00	0.00	0.00	0.55			
3	A	-1831.14	97.12	6.00	291.00	0.00	0.00	0.55			
4	A	-1849.13	84.53	6.00	337.00	0.00	0.00	0.55			
5	B	-1892.04	66.23	6.00	272.00	0.00	0.00	0.00			
6	A	-1854.17	68.23	6.00	270.00	0.00	0.00	0.55			
7	A	-1867.48	57.82	6.00	90.00	0.00	0.00	0.55			
8	A	-1825.96	65.59	6.00	289.00	0.00	0.00	0.55			
9	A	-1829.10	49.15	6.00	98.00	0.00	0.00	0.55			
10	A	-1855.27	37.98	6.00	0.00	0.00	0.00	0.55			
11	A	-1808.70	51.30	6.00	98.00	0.00	0.00	0.55			
12	A	-1855.48	14.96	6.00	0.00	0.00	0.00	0.55			
13	A	-1792.70	76.91	6.00	282.00	0.00	0.00	0.55			
14	A	-1767.04	85.13	6.00	289.00	0.00	0.00	0.55			
15	A	-1768.59	29.77	6.00	185.00	0.00	0.00	0.55			
16	B	-1783.83	62.82	6.00	100.00	0.00	0.00	0.00			
17	B	-1863.50	26.59	6.00	0.00	0.00	0.00	0.00			
18	B	-1889.28	26.65	6.00	0.00	0.00	0.00	0.00			
19	B	-1796.61	25.08	6.00	96.00	0.00	0.00	0.00			
20	A	-1831.14	14.80	6.00	180.00	0.00	0.00	0.55			
21	B	-1815.37	24.93	6.00	0.00	0.00	0.00	0.00			
22	A	-1871.31	1.85	6.00	270.00	0.00	0.00	0.55			
23	A	-1902.31	-8.02	6.00	90.00	0.00	0.00	0.55			
24	A	-1834.84	-8.55	6.00	180.00	0.00	0.00	0.55			
25	B	-1852.35	-18.39	6.00	0.00	0.00	0.00	0.00			
26	B	-1855.27	-41.90	6.00	0.00	0.00	0.00	0.00			
27	B	-1858.93	-58.24	6.00	0.00	0.00	0.00	0.00			
28	A	-1840.58	-38.37	6.00	61.00	0.00	0.00	0.55			
29	A	-1813.81	-35.46	6.00	259.00	0.00	0.00	0.55			
30	A	-1788.74	-40.09	6.00	259.00	0.00	0.00	0.55			
31	A	-1757.43	-45.51	6.00	259.00	0.00	0.00	0.55			
32	B	-1798.19	-58.68	6.00	180.00	0.00	0.00	0.00			
34	B	-1917.79	15.08	6.00	345.00	0.00	0.00	0.00			
35	A	-1930.83	-14.56	6.00	130.00	0.00	0.00	0.55			
36	B	-1948.60	-28.84	6.00	0.00	0.00	0.00	0.00			
37	A	-1939.55	-55.39	6.00	44.00	5.00	0.00	0.55			

Layout Continued

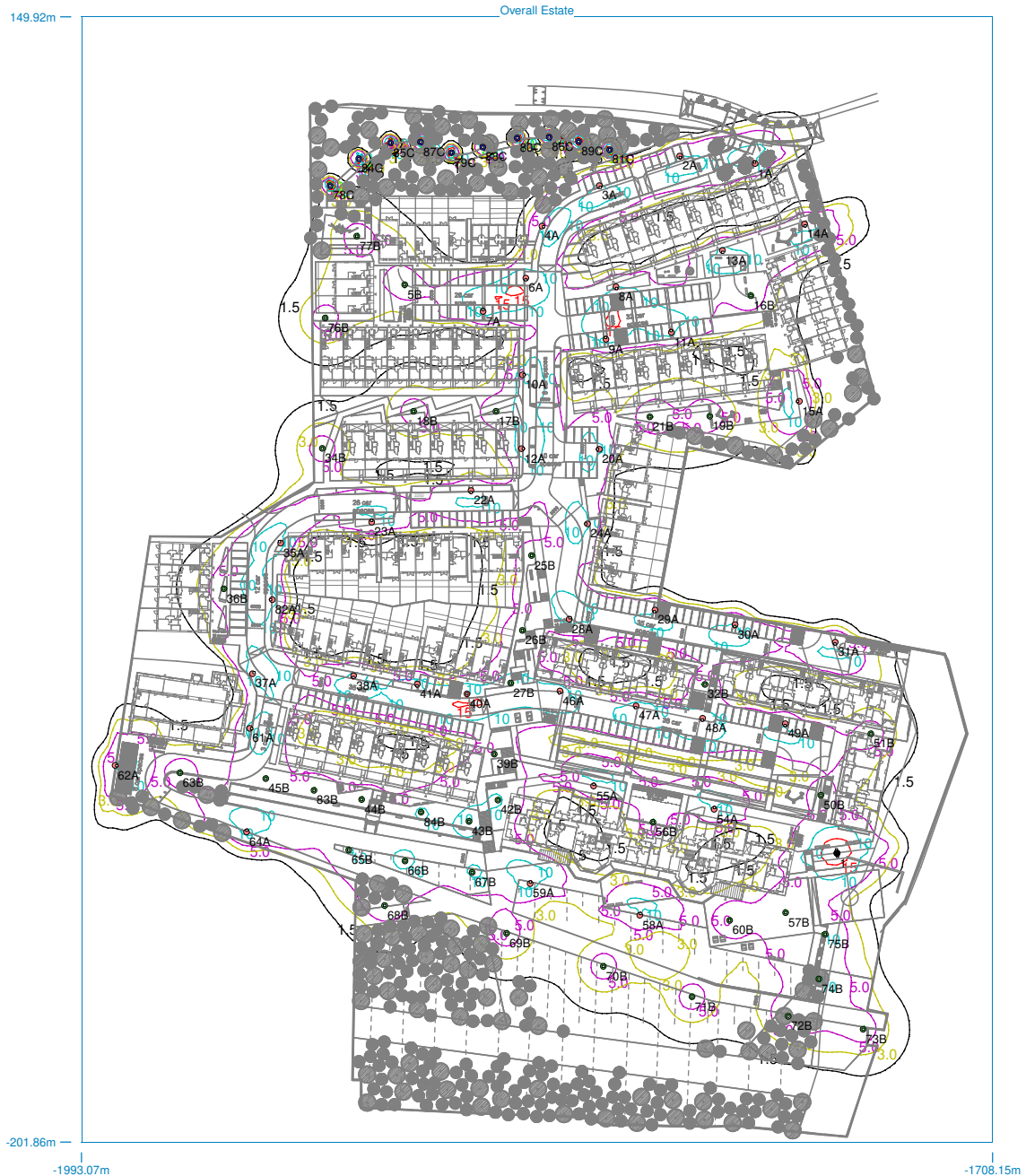
ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out- reach	Target X	Target Y	Target Z
38	A	-1908.01	-56.01	6.00	258.00	0.00	0.00	0.55			
39	B	-1864.00	-80.57	6.00	78.00	0.00	0.00	0.00			
40	A	-1872.53	-61.69	6.00	273.00	0.00	0.00	0.00			
41	A	-1888.06	-58.60	6.00	258.00	0.00	0.00	0.55			
42	B	-1862.90	-94.92	6.00	78.00	0.00	0.00	0.00			
43	B	-1871.92	-101.52	6.00	78.00	0.00	0.00	0.00			
44	B	-1905.51	-94.71	8.00	78.00	0.00	0.00	0.00			
45	B	-1935.42	-88.16	8.00	78.00	0.00	0.00	0.00			
46	A	-1843.50	-60.80	6.00	258.00	0.00	0.00	0.55			
47	A	-1819.68	-65.44	6.00	258.00	0.00	0.00	0.55			
48	A	-1798.86	-69.34	6.00	258.00	0.00	0.00	0.55			
49	A	-1773.05	-71.05	6.00	258.00	0.00	0.00	0.55			
50	B	-1761.89	-93.41	6.00	78.00	0.00	0.00	0.00			
51	B	-1746.30	-74.13	6.00	78.00	0.00	0.00	0.00			
51/1	A	-1756.88	-111.45	6.00	278.00	0.00	0.00	1.05			
52/1	A	-1756.88	-111.45	6.00	98.00	0.00	0.00	1.05			
54	A	-1795.31	-97.73	6.00	78.00	0.00	0.00	0.55			
55	A	-1832.98	-90.45	6.00	78.00	0.00	0.00	0.55			
56	B	-1814.38	-101.78	6.00	78.00	0.00	0.00	0.00			
57	B	-1772.94	-130.05	6.00	101.00	0.00	0.00	0.00			
58	A	-1818.50	-130.87	6.00	78.00	0.00	0.00	0.55			
59	A	-1852.81	-120.99	6.00	78.00	0.00	0.00	0.55			
60	B	-1790.44	-132.45	6.00	78.00	0.00	0.00	0.00			
61	A	-1940.44	-72.48	6.00	349.00	0.00	0.00	0.55			
62	A	-1982.57	-84.00	6.00	349.00	0.00	0.00	0.55			
63	B	-1962.26	-86.34	6.00	78.00	0.00	0.00	0.00			
64	A	-1941.47	-104.86	6.00	78.00	0.00	0.00	0.55			
65	B	-1909.56	-110.49	6.00	78.00	0.00	0.00	0.00			
66	B	-1891.89	-113.91	6.00	78.00	0.00	0.00	0.00			
67	B	-1870.93	-117.47	6.00	78.00	0.00	0.00	0.00			
68	B	-1898.28	-127.79	6.00	279.00	0.00	0.00	0.00			
69	B	-1860.20	-136.54	6.00	70.00	0.00	0.00	0.00			
70	B	-1829.89	-146.87	6.00	70.00	0.00	0.00	0.00			
71	B	-1802.23	-156.40	6.00	70.00	0.00	0.00	0.00			
72	B	-1772.13	-162.49	6.00	70.00	0.00	0.00	0.00			
73	B	-1748.73	-166.47	6.00	70.00	0.00	0.00	0.00			

Layout Continued

ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out- reach	Target X	Target Y	Target Z
74	B	-1762.51	-150.78	6.00	160.00	0.00	0.00	0.00			
75	B	-1760.59	-136.77	6.00	160.00	0.00	0.00	0.00			
76	B	-1916.89	55.77	6.00	70.00	0.00	0.00	0.00			
77	B	-1906.99	81.34	6.00	70.00	0.00	0.00	0.00			
78	C	-1915.36	97.18	1.00	301.00	0.00	0.00	0.00			
79	C	-1877.43	107.50	1.00	269.00	0.00	0.00	0.00			
80	C	-1856.86	112.05	1.00	269.00	0.00	0.00	0.00			
81	C	-1827.91	108.37	1.00	262.00	0.00	0.00	0.00			
82	A	-1933.37	-32.29	6.00	180.00	0.00	0.00	0.55			
83	B	-1920.40	-91.82	8.00	78.00	0.00	0.00	0.00			
84	B	-1886.93	-98.68	6.00	78.00	0.00	0.00	0.00			
84	C	-1906.41	105.56	1.00	301.00	0.00	0.00	0.00			
85	C	-1896.52	110.51	1.00	301.00	0.00	0.00	0.00			
86	C	-1846.86	112.29	1.00	301.00	0.00	0.00	0.00			
87	C	-1887.05	110.82	1.00	301.00	0.00	0.00	0.00			
88	C	-1867.59	109.20	1.00	301.00	0.00	0.00	0.00			
89	C	-1837.68	110.95	1.00	301.00	0.00	0.00	0.00			

Horizontal Illuminance (lux)

Overall Estate



Results

Eav	7.15
Emin	0.45
Emax	23.67
Emin/Emax	0.02
Emin/Eav	0.06

Horizontal Illuminance (lux)

Entrance Way

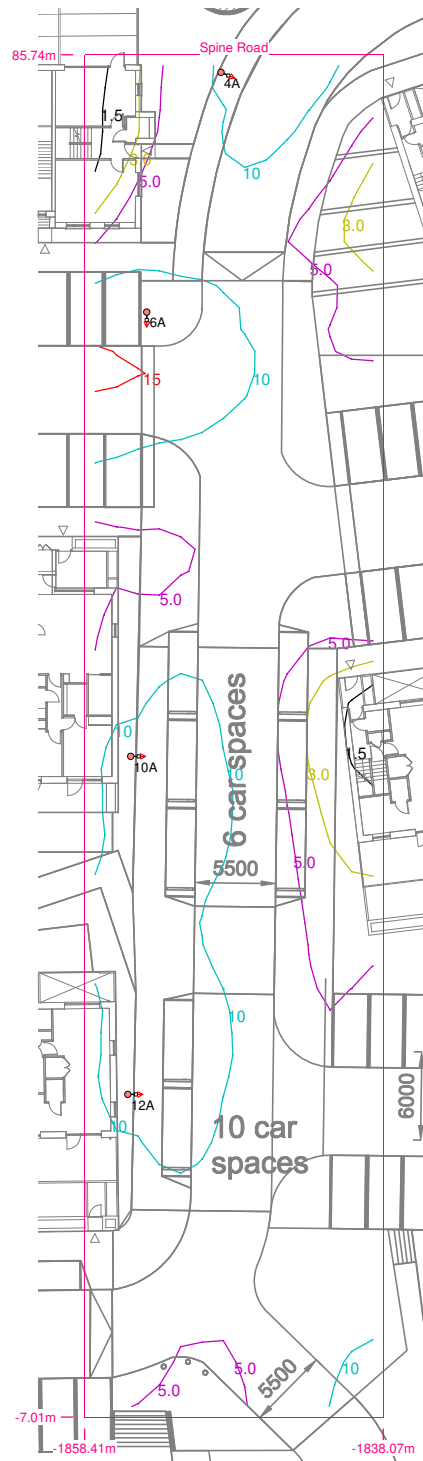


Results

Eav	7.72
Emin	1.46
E _{max}	20.69
E _{min} /E _{max}	0.07
E _{min} /E _{av}	0.19

Horizontal Illuminance (lux)

Spine Road

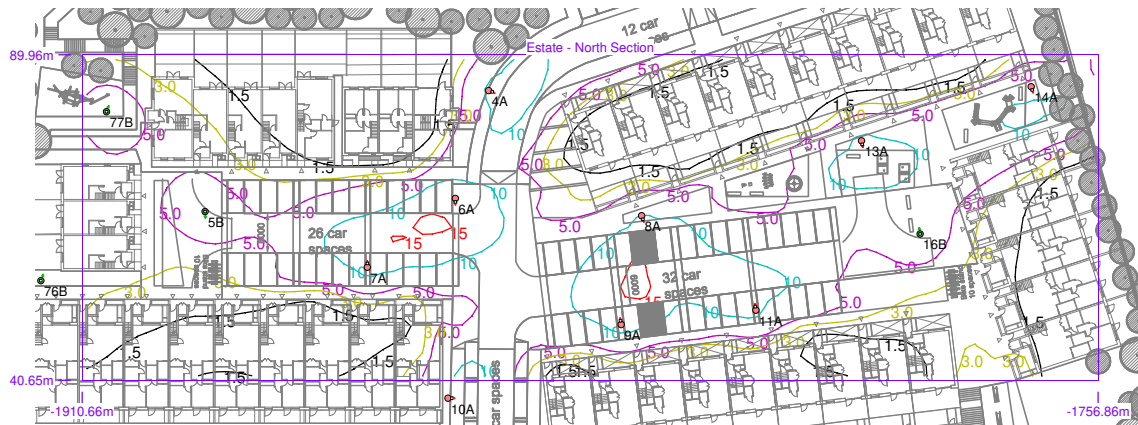


Results

Eav	7.89
Emin	1.87
Emax	15.96
Emin/Emax	0.12
Emin/Eav	0.24

Horizontal Illuminance (lux)

Estate - North Section

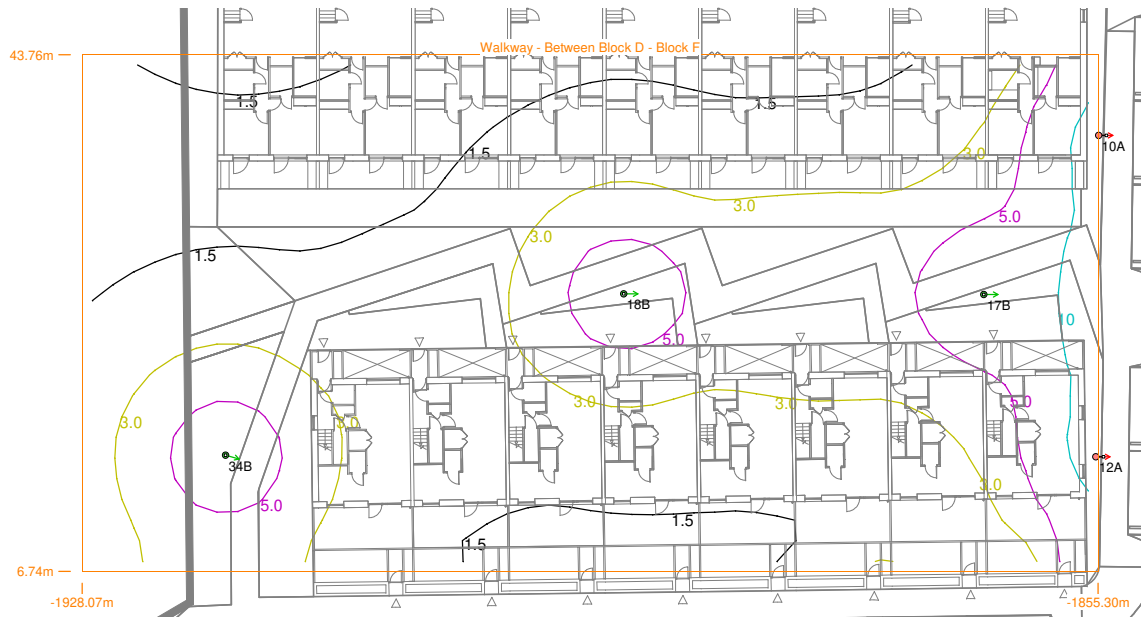


Results

Eav	7.39
Emin	1.68
Emax	15.87
Emin/Emax	0.11
Emin/Eav	0.23

Horizontal Illuminance (lux)

Walkway - Between Block D - Block F

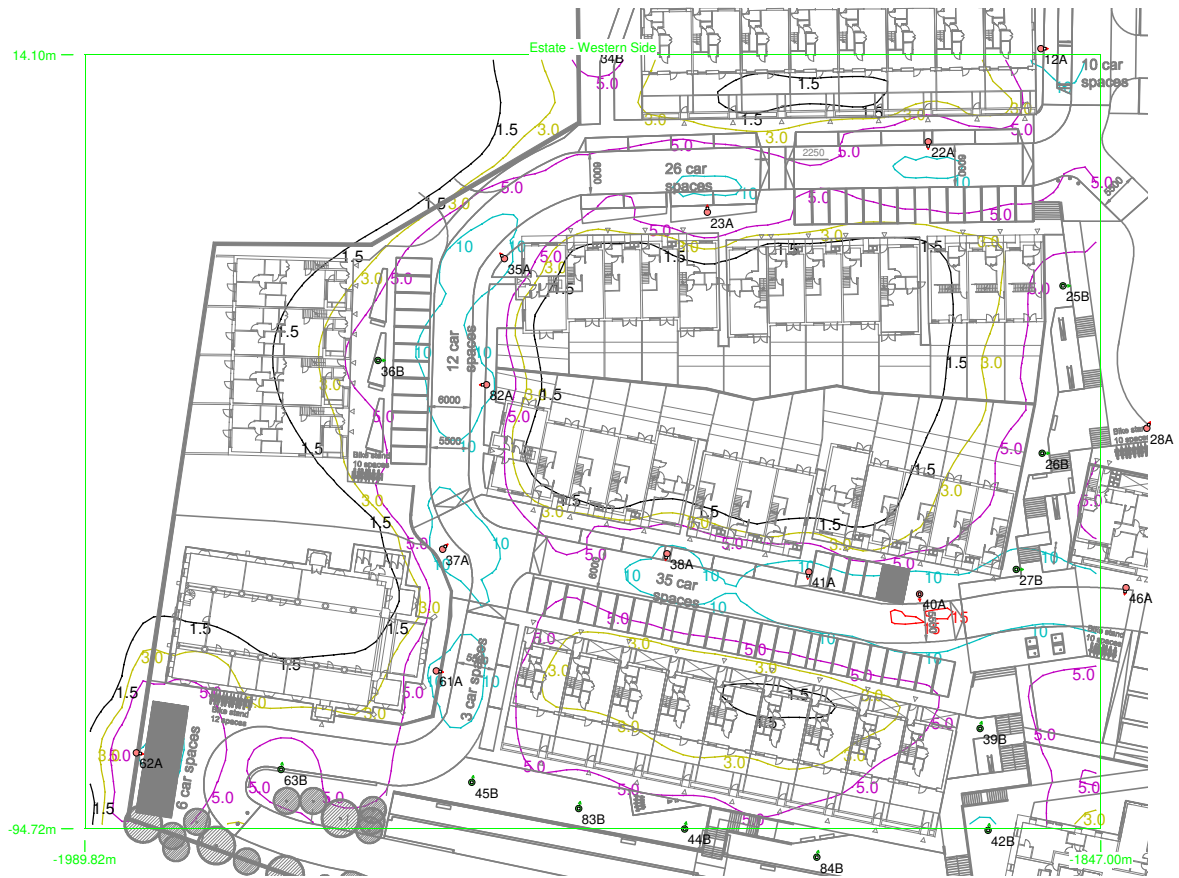


Results

Eav	4.79
Emin	1.90
E _{max}	11.64
E _{min} /E _{max}	0.16
E _{min} /E _{av}	0.40

Horizontal Illuminance (lux)

Estate - Western Side

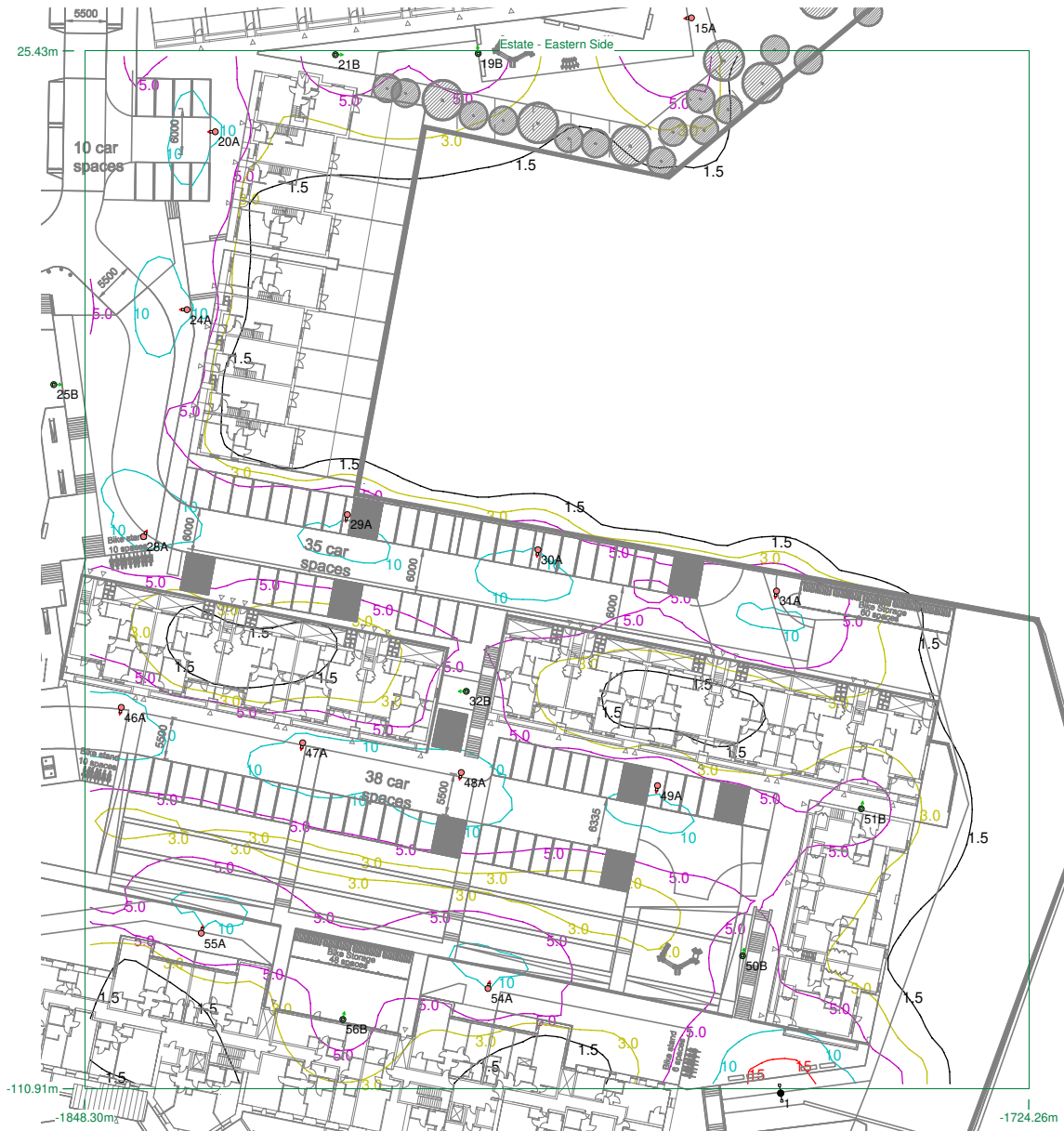


Results

Eav	7.35
Emin	2.15
Emax	15.44
Emin/Emax	0.14
Emin/Eav	0.29

Horizontal Illuminance (lux)

Estate - Eastern Side

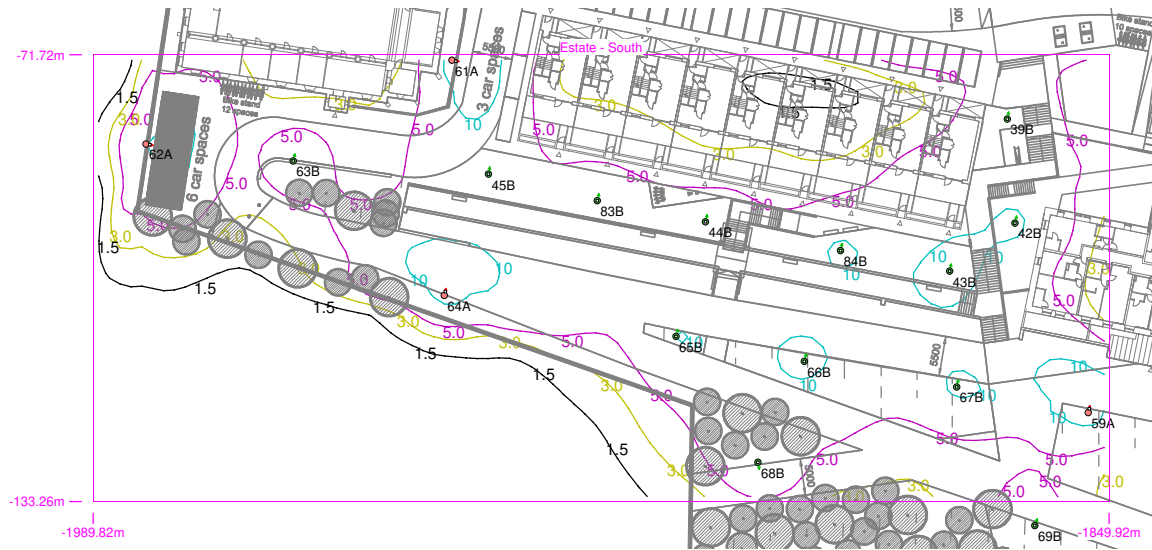


Results

Eav	7.33
Emin	2.08
Emax	16.49
Emin/Emax	0.13
Emin/Eav	0.28

Horizontal Illuminance (lux)

Estate - South

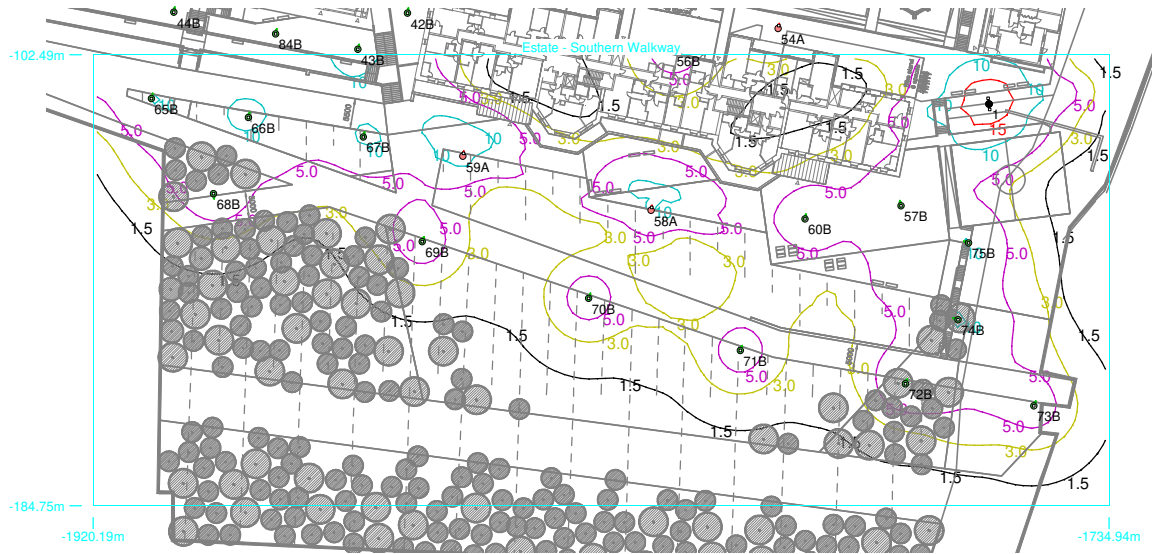


Results

Eav	6.95
Emin	2.46
Emax	12.73
Emin/Emax	0.19
Emin/Eav	0.35

Horizontal Illuminance (lux)

Estate - Southern Walkway

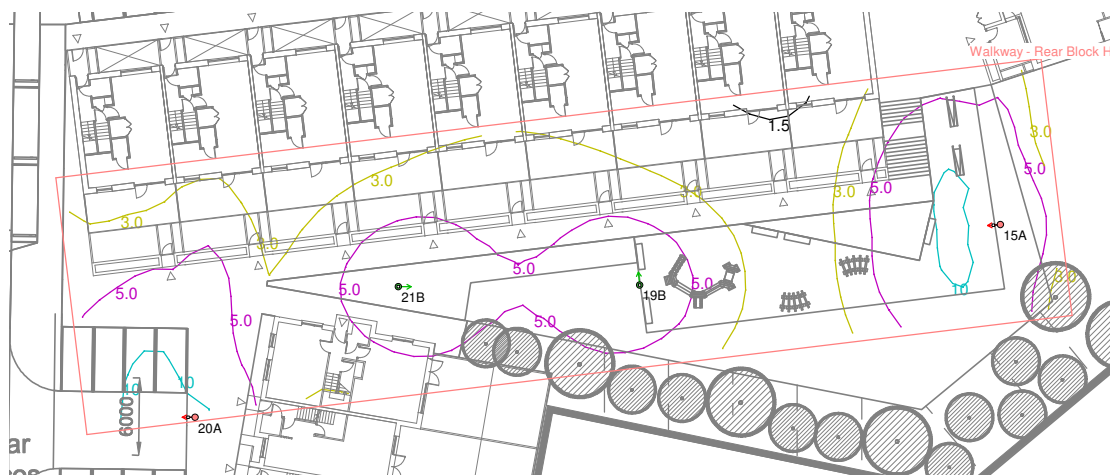


Results

Eav	6.42
Emin	2.12
Emax	16.07
Emin/Emax	0.13
Emin/Eav	0.33

Horizontal Illuminance (lux)

Walkway - Rear Block H

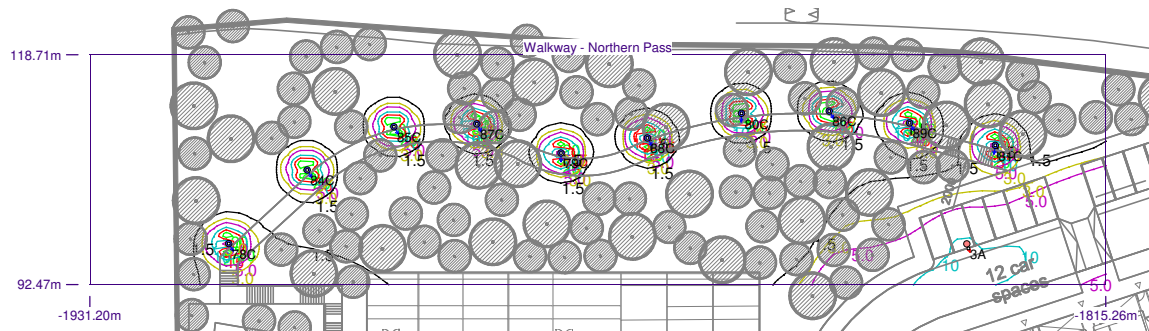


Results

Eav	6.09
Emin	2.10
Emax	11.27
Emin/Emax	0.19
Emin/Eav	0.34

Horizontal Illuminance (lux)

Walkway - Northern Pass



Results

Eav	6.68
Emin	0.27
Emax	24.44
Emin/Emax	0.01
Emin/Eav	0.04