

DATE: 27 June 2022
DESIGNER: Alex Naper
PROJECT No: SES 09121 Rev D
PROJECT NAME: Barnhill Residential Development



Client: Alanna Homes Ltd & Alcove Ireland Four Ltd

Grids 4,7, 12 - 18.

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

Access roads designed in accordance with EN13201-2:2015 Category P3.

Step sections designed in accordance with I.S.EN17210-2021 with illuminance levels as per the recommendations of BS8300-1:2018 Table 5 Stairways and ramps (open) in the external environment.

Rev A: Client name updated.

Rev B: Revised site layout,

Rev C: Updated as per comments.

Rev D: Updated layout.

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	184403.83	1002576.87	235.30	298.00	117.65	149.00
2	Grid 2	184582.41	1002776.52	235.30	169.17	117.65	84.58
3	Grid 3	184478.63	1002918.51	364.38	332.64	182.19	166.32
4	Grid 4	184858.67	1002936.49	282.67	374.00	1.50	1.50
5	Grid 5	184575.81	1002705.94	309.86	298.00	154.93	149.00
6	Grid 6	184671.36	1003054.36	63.00	163.00	31.50	81.50
7	Grid 7	184867.94	1002809.80	165.00	282.69	1.50	1.50
8	Grid 8	184637.63	1002616.66	283.05	169.17	141.53	84.58
9	Grid 9	184315.18	1002755.06	131.64	191.13	65.82	95.56
10	Grid 10	184277.52	1002995.52	190.43	260.70	95.22	130.35
11	Grid 11	184181.78	1002792.73	135.00	375.26	67.50	187.63
12	Grid 13	184763.95	1003237.09	3.17	6.16	1.06	0.25
13	Grid 14	184849.04	1003271.88	54.00	33.00	1.50	1.50
14	Grid 14	184833.17	1003227.75	27.00	62.94	1.50	1.50
15	Grid 15	184795.58	1003084.17	90.00	34.44	1.50	1.50
16	Grid 16	184839.80	1003136.37	60.00	90.00	1.50	1.50
17	Grid 17	184834.46	1002846.33	102.00	72.00	1.50	1.50
18	Grid 18	184767.34	1002894.11	102.00	137.64	1.50	1.50

Luminaires

Luminaire A Data

Supplier	C U Phosco
Type	E950-28-P4A-727-C550-14W
Lamp(s)	727N
Lamp Flux (klm)	2.03
File Name	E950-28-P4A-727-C0550-14W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	23



Luminaire B Data

Supplier	C U Phosco
Type	E950-28-P4A-727-C350-10W
Lamp(s)	727N
Lamp Flux (klm)	1.33
File Name	E950-28-P4A-727-C0350-10W.ies
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	14



Luminaire C Data

Supplier	C U Phosco
Type	P863-128-R2E-730-W3-375-49W
Lamp(s)	730SS
Lamp Flux (klm)	6.92
File Name	P863-128-R2E-730-W3-375-49W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	463.7, 84.3, 0.0
No. in Project	14

Luminaire D Data

Supplier	C U Phosco
Type	P863-128-P3-730-W3-350-46W
Lamp(s)	730SS
Lamp Flux (klm)	6.19
File Name	P863-128-P3-730-W3-350-46W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	343.1, 133.7, 0.7
No. in Project	3

Luminaires

Luminaire E Data

Supplier	C U Phosco
Type	E950-28-R3A-727-C350-10W
Lamp(s)	727N
Lamp Flux (klm)	1.36
File Name	E950-28-R3A-727-C0350-10W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	716.7, 30.5, 0.3
No. in Project	53

Luminaire F Data

Supplier	C U Phosco
Type	P863-128-R2E-730-W3-275-37W
Lamp(s)	730SS
Lamp Flux (klm)	5.13
File Name	P863-128-R2E-730-W3-275-37W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	463.7, 84.3, 0.0
No. in Project	2



Luminaire G Data

Supplier	C U Phosco
Type	E950-28-F2A-727-C550-14W
Lamp(s)	727N
Lamp Flux (klm)	2.06
File Name	E950-28-F2A-727-C0550-14W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	623.6, 113.9, 0.3
No. in Project	2

Luminaire H Data

Supplier	C U Phosco
Type	P863-128-P3-730-W3-350-46W
Lamp(s)	730SS
Lamp Flux (klm)	6.19
File Name	P863-128-P3-730-W3-350-46W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	343.1, 133.7, 0.7
No. in Project	2



Luminaire I Data

Supplier	C U Phosco
Type	E950-28-R3A-727-C350-10W
Lamp(s)	727N
Lamp Flux (klm)	1.36
File Name	E950-28-R3A-727-C0350-10W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	716.7, 30.5, 0.3
No. in Project	4

Luminaire J Data

Supplier	C U Phosco
Type	E950-28-P4A-727-C550-14W
Lamp(s)	727N
Lamp Flux (klm)	2.03
File Name	E950-28-P4A-727-C0550-14W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	2

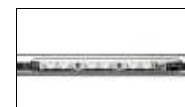
Luminaire K Data

Supplier	C U Phosco
Type	P863-128-R2E-740-W5-375-49W
Lamp(s)	740SS
Lamp Flux (klm)	7.61
File Name	P863-128-R2E-740-W5-375-49W.ies
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	463.7, 84.3, 0.0
No. in Project	1



Luminaire N Data

Supplier	Urbis Schreder
Type	ALINEA Handrail 5121 - 3 LED 350mA WW Profiled Poly Clear, Sm
Lamp(s)	3 LEDs WW
Lamp Flux (klm)	0.37
File Name	ALINEA Handrail 5121 3 LED 350mA WW Profiled Poly Clear Smooth WO7314.Idt
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	230.6, 22.2, 4.1
No. in Project	5



Luminaires

Luminaire O Data

Supplier	C U Phosco
Type	E950-28-P4A-727-SA0550-24W
Lamp(s)	727SA
Lamp Flux (klm)	2.69
File Name	E950-28-P4A-727-SA0550-24W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	551.4, 55.4, 4.1
No. in Project	13

Luminaire P Data



Supplier	Urbis Schreder
Type	TECEO GEN2 1 5121 Flat, Glass Extra Clear, Smooth Light Exhaust
Lamp(s)	24 XP-G3@300mA WW 730 230V
LampFlux(klm)/Colour	3.69 WW 3000K/70
File Name	TECEO GEN2 1 5121 24 XP-G3 300mA WW 730 22.5W 444992 Flat, Glass Extra Clear
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	313.5, 33.1, 0.0
No. in Project	15

Luminaire Q Data



Supplier	Urbis Schreder
Type	TECEO GEN2 1 5119 Flat, Glass Extra Clear, Smooth Light Exhaust
Lamp(s)	16 XP-G3@300mA WW 730 230V
LampFlux(klm)/Colour	2.46 WW 3000K/70
File Name	TECEO GEN2 1 5119 16 XP-G3 300mA WW 730 15.6W 444952 Flat, Glass Extra Clear
Maintenance Factor	0.85
Imax70,80,90(cd/klm)	439.7, 41.6, 0.0
No. in Project	6

Luminaire R Data

Supplier	C U Phosco
Type	E950-28-A2A-730-C350-10W
Lamp(s)	730N
Lamp Flux (klm)	1.25
File Name	E950-28-A2A-730-C0350-10W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	470.3, 22.7, 0.9
No. in Project	9

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	Q	184871.07	1003134.81	5.00	168.00	0.00	0.00	0.40			
2	P	184859.49	1003158.37	6.00	355.00	0.00	0.00	1.00			
3	Q	184855.76	1003193.23	5.00	203.00	0.00	0.00	0.40			
4	E	184885.44	1003217.75	5.00	279.00	0.00	0.00	0.40			
5	E	184911.76	1003223.62	5.00	288.00	0.00	0.00	0.40			
6	E	184940.85	1003230.34	5.00	279.00	0.00	0.00	0.40			
7	E	184961.53	1003234.93	5.00	275.00	0.00	0.00	0.40			
8	E	184819.05	1003141.73	6.00	111.00	0.00	0.00	0.40			
9	P	184858.95	1003158.47	7.00	131.00	0.00	0.00	1.00			
10	Q	184844.01	1003210.80	5.00	351.00	0.00	0.00	0.40			
11	Q	184840.21	1003177.95	5.00	348.00	0.00	0.00	0.40			
12	P	184858.97	1003157.95	8.00	241.00	0.00	0.00	1.00			
13	P	184804.35	1003103.65	6.00	100.00	0.00	0.00	1.00			
14	P	184804.39	1003103.10	7.00	236.00	0.00	0.00	1.00			
15	A	184793.04	1003240.36	6.00	285.00	0.00	0.00	0.40			
16	A	184815.32	1003246.20	6.00	283.00	0.00	0.00	0.40			
17	A	184832.77	1003233.58	6.00	101.00	0.00	0.00	0.40			
18	P	184804.89	1003103.26	8.00	346.00	0.00	0.00	1.00			
19	E	184756.55	1003259.41	5.00	11.00	0.00	0.00	0.40			
20	E	184761.09	1003278.51	5.00	283.00	0.00	0.00	0.40			
21	E	184779.24	1003256.08	5.00	196.00	0.00	0.00	0.40			
22	E	184767.48	1003257.30	5.00	286.00	0.00	0.00	0.40			
23	E	184766.49	1003269.34	5.00	103.00	0.00	0.00	0.40			
24	E	185019.37	1003134.53	5.00	116.00	0.00	0.00	0.40			
25	E	185045.68	1003145.76	5.00	118.00	0.00	0.00	0.40			
26	E	185061.77	1003136.58	5.00	19.00	0.00	0.00	0.40			
27	E	185072.83	1003114.60	5.00	28.00	0.00	0.00	0.40			
28	E	185070.95	1003101.35	5.00	320.00	0.00	0.00	0.40			
29	E	185015.77	1003061.34	5.00	14.00	0.00	0.00	0.40			
30	E	185056.42	1003085.55	5.00	285.00	0.00	0.00	0.40			
31	E	185034.24	1003076.15	5.00	286.00	0.00	0.00	0.40			
32	R	185017.41	1003043.39	5.00	150.00	0.00	0.00	0.40			
33	E	184991.33	1003042.86	5.00	302.00	0.00	0.00	0.40			
34	Q	184856.42	1003227.46	5.00	174.00	0.00	0.00	0.40			
35	E	184928.05	1002996.57	5.00	199.00	0.00	0.00	0.40			
67	H	184743.04	1003056.20	8.00	292.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
68	H	184779.26	1003063.39	8.00	106.00	0.00	0.00	0.40			
69	D	184806.46	1003083.35	8.00	295.00	0.00	0.00	0.40			
70	D	184836.51	1003087.41	8.00	108.00	0.00	0.00	0.40			
200	A	184761.90	1003234.03	6.00	280.00	0.00	0.00	0.40			
212	A	184785.69	1003143.05	6.00	300.00	0.00	0.00	0.40			
215	E	184791.11	1003130.50	6.00	111.00	0.00	0.00	0.40			
216	I	184776.50	1003088.10	6.00	19.00	0.00	0.00	0.40			
226	D	184862.74	1003105.29	8.00	266.00	0.00	0.00	0.40			
227	C	184873.80	1003082.67	8.00	20.00	0.00	0.00	0.40			
228	C	184888.29	1003048.53	8.00	20.00	0.00	0.00	0.40			
229	F	184913.55	1003016.30	6.00	205.00	0.00	0.00	0.40			
230	F	184928.23	1002982.39	6.00	205.00	0.00	0.00	0.40			
231	C	184940.25	1002962.53	8.00	131.00	0.00	0.00	0.40			
232	C	184913.75	1002936.69	8.00	135.00	0.00	0.00	0.40			
233	C	184885.73	1002908.33	8.00	138.00	0.00	0.00	0.40			
234	C	184850.29	1002890.81	8.00	327.00	0.00	0.00	0.40			
235	K	184854.16	1002853.38	8.00	41.00	0.00	0.00	0.40			
236	C	184870.41	1002867.02	8.00	227.00	0.00	0.00	0.40			
237	E	184905.00	1002961.32	5.00	357.00	0.00	0.00	0.40			
301	E	184892.01	1003009.96	5.00	229.00	0.00	0.00	0.40			
302	E	184889.22	1003025.98	5.00	321.00	0.00	0.00	0.40			
303	E	184941.36	1002994.52	5.00	297.00	0.00	0.00	0.40			
304	E	184966.95	1003005.78	5.00	297.00	0.00	0.00	0.40			
305	C	184967.35	1002980.25	8.00	113.00	0.00	0.00	0.40			
306	C	184994.02	1002991.88	8.00	118.00	0.00	0.00	0.40			
63	E	185079.25	1003091.17	5.00	100.00	0.00	0.00	0.40			
308	E	185020.91	1003023.01	5.00	156.00	0.00	0.00	0.40			
309	A	184974.34	1003026.80	6.00	23.00	0.00	0.00	0.40			
310	A	184981.29	1003043.02	6.00	202.00	0.00	0.00	0.40			
311	A	184958.57	1003063.76	6.00	15.00	0.00	0.00	0.40			
312	A	184966.88	1003076.13	6.00	204.00	0.00	0.00	0.40			
313	A	184944.50	1003097.92	6.00	16.00	0.00	0.00	0.40			
314	A	184895.38	1003096.21	6.00	287.00	0.00	0.00	0.40			
315	A	184927.22	1003109.59	6.00	287.00	0.00	0.00	0.40			
316	A	184914.50	1003091.30	6.00	108.00	0.00	0.00	0.40			
317	G	184924.72	1003129.09	6.00	23.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
318	G	184948.07	1003126.48	6.00	197.00	0.00	0.00	0.40			
319	E	184931.96	1003145.47	5.00	219.00	0.00	0.00	0.40			
320	E	184909.93	1003129.20	5.00	116.00	0.00	0.00	0.40			
321	E	184885.07	1003118.69	5.00	98.00	0.00	0.00	0.40			
322	E	184948.64	1003145.14	5.00	110.00	0.00	0.00	0.40			
323	E	184976.89	1003157.55	5.00	117.00	0.00	0.00	0.40			
324	A	184820.65	1003153.71	6.00	275.00	0.00	0.00	0.40			
81	B	184882.98	1003162.45	5.00	242.00	0.00	0.00	0.40			
326	E	184886.39	1003145.53	5.00	262.00	0.00	0.00	0.40			
327	E	184914.23	1003147.52	5.00	280.00	0.00	0.00	0.40			
328	E	184941.94	1003157.92	5.00	295.00	0.00	0.00	0.40			
329	E	184968.90	1003166.42	5.00	280.00	0.00	0.00	0.40			
330	E	184997.61	1003169.26	5.00	281.00	0.00	0.00	0.40			
331	A	184968.48	1003127.01	6.00	289.00	0.00	0.00	0.40			
332	A	184956.64	1003108.28	6.00	114.00	0.00	0.00	0.40			
333	A	184995.25	1003125.03	6.00	109.00	0.00	0.00	0.40			
334	A	185002.97	1003142.03	6.00	301.00	0.00	0.00	0.40			
335	A	185013.93	1003159.37	6.00	198.00	0.00	0.00	0.40			
336	A	184995.40	1003186.63	6.00	20.00	0.00	0.00	0.40			
337	A	184984.83	1003211.86	6.00	26.00	0.00	0.00	0.40			
94	I	184739.26	1003272.15	5.00	110.00	0.00	0.00	0.40			
95	E	184770.20	1003247.99	5.00	100.00	0.00	0.00	0.40			
96	N	184763.91	1003237.70	1.00	13.00	0.00	0.00	0.40			
97	N	184763.34	1003240.28	1.00	13.00	0.00	0.00	0.40			
98	N	184762.79	1003242.78	1.00	12.00	0.00	0.00	0.40			
99	N	184765.93	1003242.27	1.00	195.00	0.00	0.00	0.40			
100	N	184766.66	1003239.26	1.00	195.00	0.00	0.00	0.40			
101	O	184850.97	1003279.94	5.00	103.00	0.00	0.00	0.40			
102	O	184865.96	1003283.68	5.00	105.00	0.00	0.00	0.40			
103	O	184879.24	1003287.21	5.00	103.00	0.00	0.00	0.40			
104	O	184889.29	1003293.40	5.00	205.00	0.00	0.00	0.40			
105	O	184864.98	1003289.72	5.00	103.00	0.00	0.00	0.40			
106	O	184865.05	1003289.14	5.00	281.00	0.00	0.00	0.40			
107	O	184879.46	1003293.33	5.00	292.00	0.00	0.00	0.40			
108	O	184878.81	1003296.64	5.00	103.00	0.00	0.00	0.40			
109	O	184868.07	1003301.19	5.00	281.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
110	O	184881.03	1003303.37	5.00	284.00	0.00	0.00	0.40			
111	O	184855.82	1003293.40	5.00	276.00	0.00	0.00	0.40			
112	O	184854.82	1003299.43	5.00	21.00	0.00	0.00	0.40			
113	O	184845.18	1003292.02	5.00	281.00	0.00	0.00	0.40			
114	P	184839.22	1003279.35	6.00	35.00	0.00	0.00	1.00			
115	P	184838.74	1003279.09	7.00	171.00	0.00	0.00	1.00			
116	P	184839.10	1003278.69	8.00	281.00	0.00	0.00	1.00			
117	P	184842.89	1003252.11	6.00	50.00	0.00	0.00	1.00			
118	P	184842.50	1003251.73	7.00	186.00	0.00	0.00	1.00			
119	P	184842.94	1003251.44	8.00	296.00	0.00	0.00	1.00			
120	P	184829.34	1003120.05	6.00	50.00	0.00	0.00	1.00			
121	P	184828.95	1003119.67	7.00	186.00	0.00	0.00	1.00			
122	P	184829.39	1003119.38	8.00	296.00	0.00	0.00	1.00			
123	Q	184836.14	1003137.77	5.00	348.00	0.00	0.00	0.40			
124	B	184905.54	1003162.06	5.00	281.00	0.00	0.00	0.40			
125	B	184919.41	1003164.81	5.00	198.00	0.00	0.00	0.40			
126	B	184934.04	1003178.23	6.00	274.00	0.00	0.00	0.40			
127	B	184963.01	1003184.63	5.00	282.00	0.00	0.00	0.40			
128	B	184962.03	1003175.06	5.00	196.00	0.00	0.00	0.40			
129	E	185029.54	1003168.14	5.00	265.00	0.00	0.00	0.40			
130	E	185056.50	1003156.46	5.00	222.00	0.00	0.00	0.40			
131	B	184969.93	1003096.24	5.00	115.00	0.00	0.00	0.40			
132	B	184975.65	1003112.02	5.00	24.00	0.00	0.00	0.40			
133	E	185094.14	1003100.17	5.00	259.00	0.00	0.00	0.40			
134	E	185032.79	1003063.26	5.00	140.00	0.00	0.00	0.40			
135	E	184864.07	1003212.80	5.00	279.00	0.00	0.00	0.40			
140	I	184756.73	1002961.80	5.00	330.00	0.00	0.00	0.40			
142	E	184775.86	1002986.39	5.00	309.00	0.00	0.00	0.40			
143	E	184796.91	1003003.62	5.00	307.00	0.00	0.00	0.40			
144	E	184824.03	1003015.95	5.00	286.00	0.00	0.00	0.40			
145	C	184866.40	1003041.18	8.00	20.00	0.00	0.00	0.40			
146	C	184865.76	1003041.00	8.00	199.00	0.00	0.00	0.40			
147	C	184851.95	1003075.39	8.00	20.00	0.00	0.00	0.40			
148	C	184851.31	1003075.21	8.00	204.00	0.00	0.00	0.40			
149	C	184842.13	1003047.63	8.00	20.00	0.00	0.00	0.40			
150	E	184850.96	1003021.69	5.00	269.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
151	E	184906.35	1002986.28	5.00	195.00	0.00	0.00	0.40			
152	A	184994.20	1003020.12	6.00	200.00	0.00	0.00	0.40			
153	B	184962.44	1003102.04	5.00	115.00	0.00	0.00	0.40			
154	A	184977.87	1003004.85	6.00	28.00	0.00	0.00	0.40			
155	B	184956.67	1003198.51	6.00	24.00	0.00	0.00	0.40			
156	B	184942.36	1003205.50	6.00	102.00	0.00	0.00	0.40			
157	B	184945.61	1003214.86	6.00	275.00	0.00	0.00	0.40			
158	B	184792.89	1003240.72	6.00	106.00	0.00	0.00	0.40			
159	B	184815.18	1003246.49	6.00	106.00	0.00	0.00	0.40			
160	E	184976.42	1003231.52	5.00	17.00	0.00	0.00	0.40			
161	J	184734.18	1003227.88	6.00	279.00	0.00	0.00	0.40			
162	J	184758.18	1003127.70	6.00	297.00	0.00	0.00	0.40			
163	I	184767.80	1003121.00	5.00	111.00	0.00	0.00	0.40			
158	E	184810.98	1003256.66	5.00	19.00	0.00	0.00	0.40			
159	E	184806.33	1003270.04	5.00	311.00	0.00	0.00	0.40			
160	E	184800.27	1003269.28	5.00	217.00	0.00	0.00	0.40			
161	R	184891.86	1003200.12	5.00	227.00	0.00	0.00	0.40			
162	R	184904.15	1003198.30	5.00	319.00	0.00	0.00	0.40			
163	R	184906.76	1003187.96	5.00	217.00	0.00	0.00	0.40			
164	R	185030.88	1003115.54	5.00	23.00	0.00	0.00	0.40			
165	R	185034.24	1003101.48	5.00	23.00	0.00	0.00	0.40			
166	R	184993.80	1003098.35	5.00	23.00	0.00	0.00	0.40			
168	R	185002.92	1003074.53	5.00	19.00	0.00	0.00	0.40			
168	R	185002.41	1003074.13	5.00	207.00	0.00	0.00	0.40			

Horizontal Illuminance (lux)

Grid 4

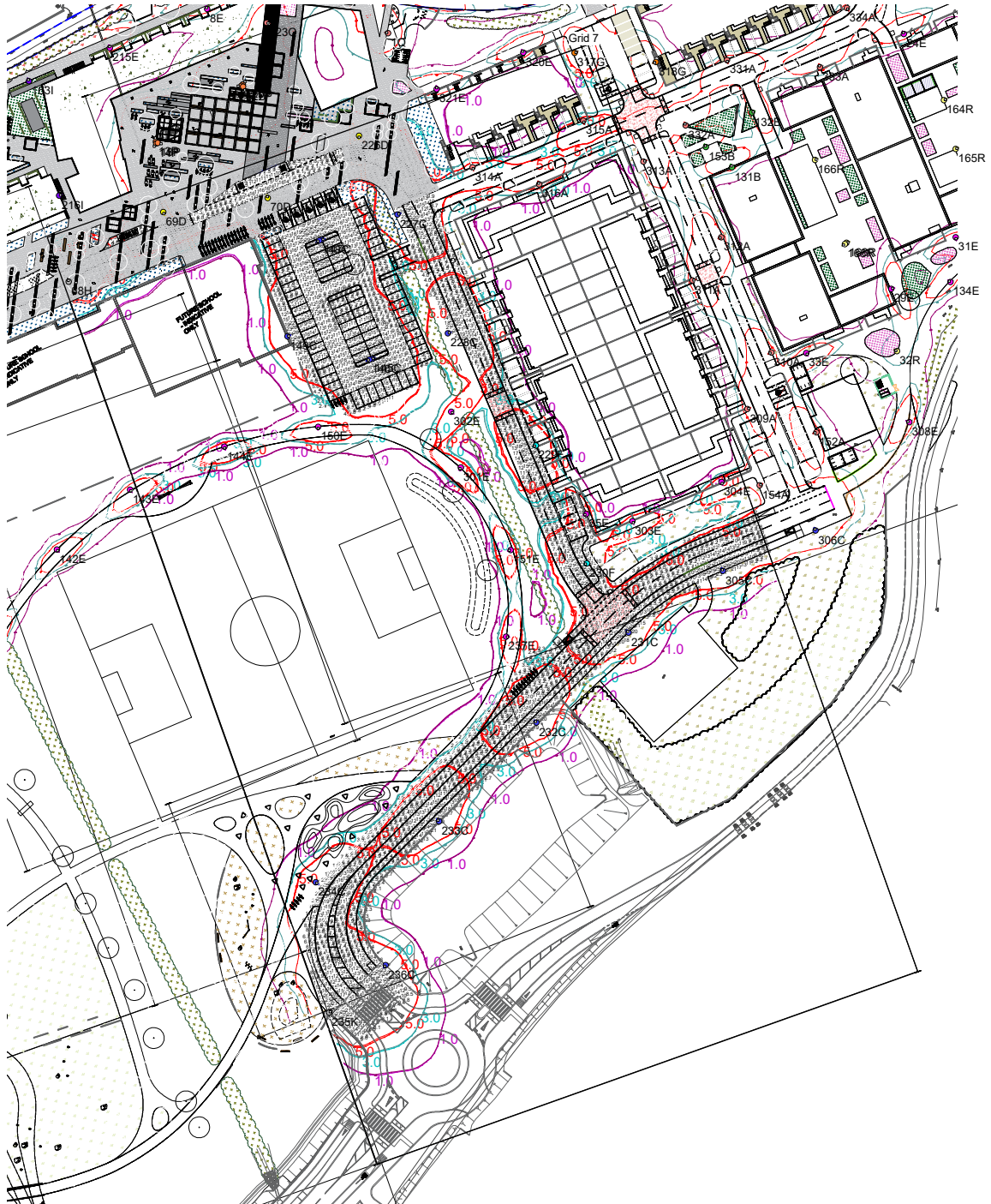


Results

Eav	6.16
Emin	1.23
E _{max}	58.57
E _{min} /E _{max}	0.02
E _{min} /E _{av}	0.20

Horizontal Illuminance (lux)

Grid 7

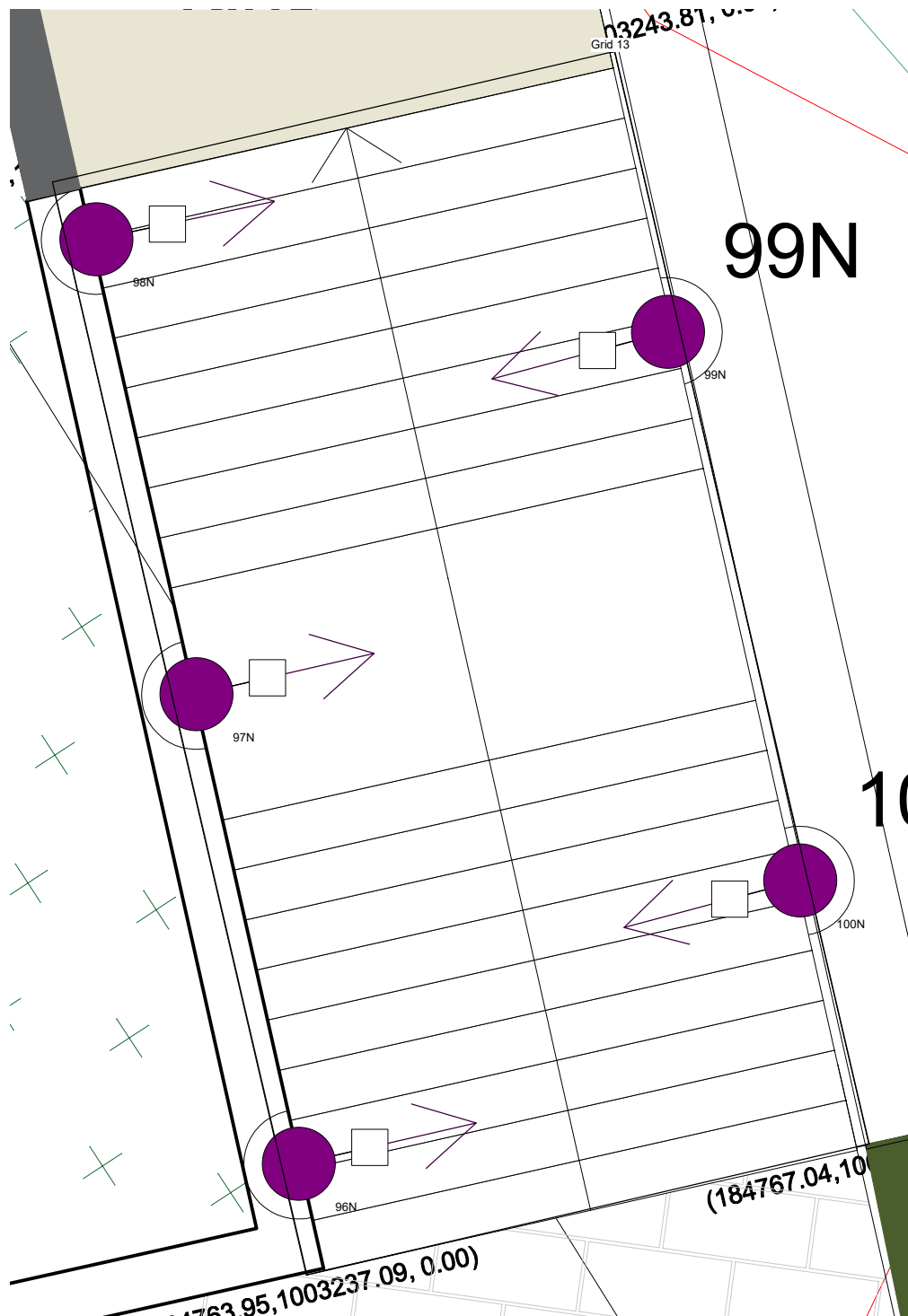


Results

Eav	10.12
Emin	2.12
Emax	35.91
Emin/Emax	0.06
Emin/Eav	0.21

Horizontal Illuminance (lux)

Grid 13

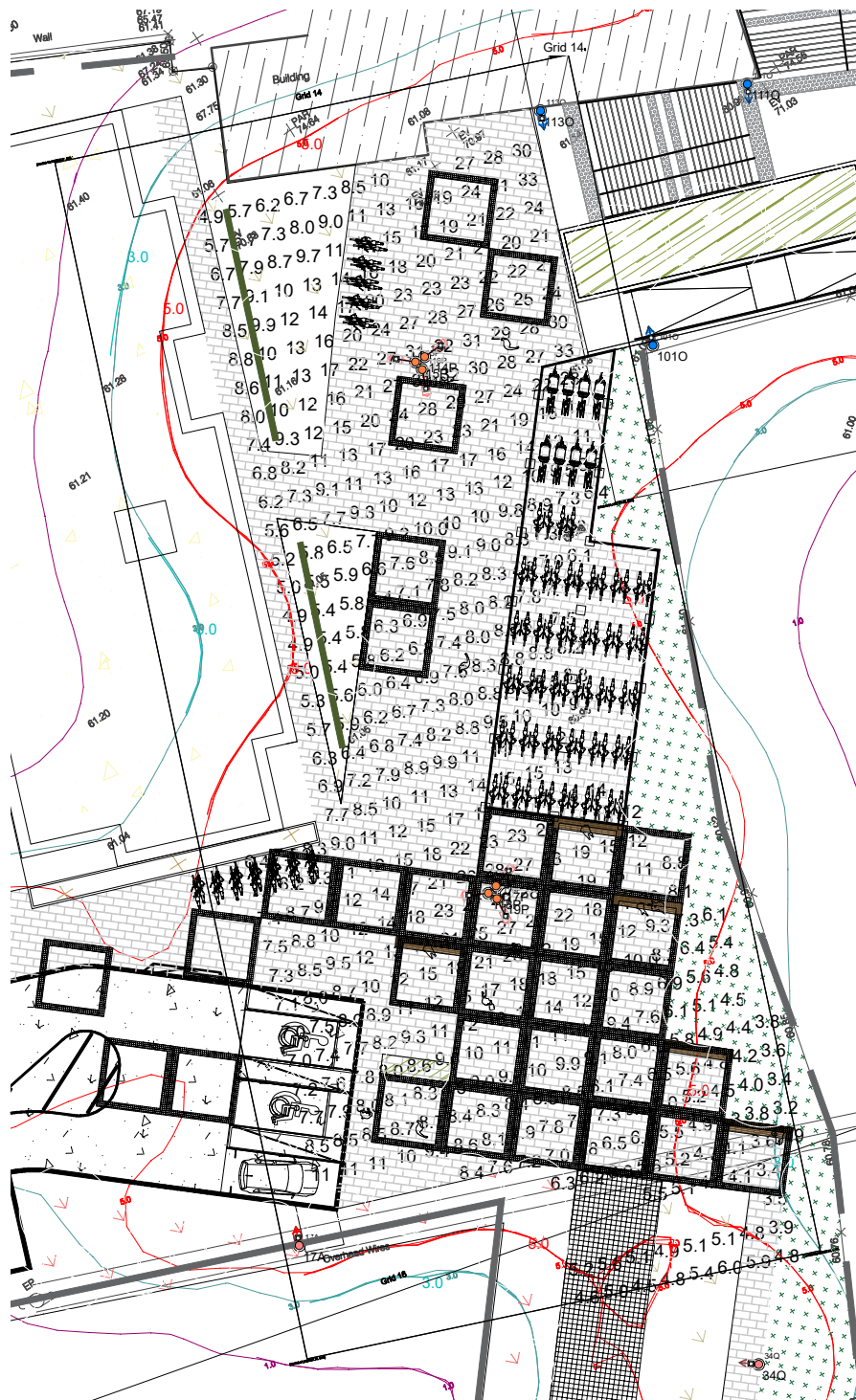


Results

Eav	56.07
Emin	17.07
Emax	103.55
Emin/Emax	0.16
Emin/Eav	0.30

Horizontal Illuminance (lux)

Grid 14

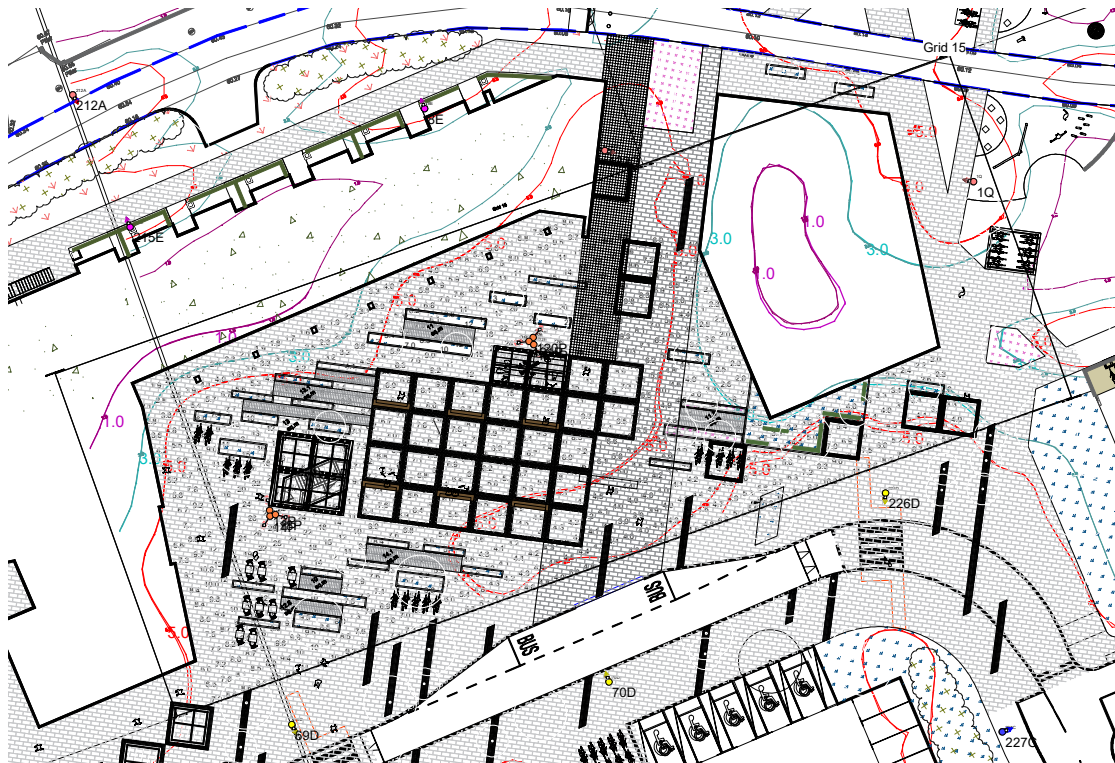


Results

Eav	11.87
Emin	2.93
Emax	33.20
Emin/Emax	0.09
Emin/Eav	0.25

Horizontal Illuminance (lux)

Grid 15



Results

Eav	8.30
Emin	1.64
Emax	29.08
Emin/Emax	0.06
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 16



Results

Eav	6.36
Emin	1.41
Emax	29.05
Emin/Emax	0.05
Emin/Eav	0.22

Horizontal Illuminance (lux)

Grid 17



Results

Eav	0.00
Emin	0.00
Emax	0.00
Emin/Emax	0.00
Emin/Eav	0.00

Horizontal Illuminance (lux)

Grid 18



Results

Eav	6.99
Emin	1.40
Emax	19.58
Emin/Emax	0.07
Emin/Eav	0.20