

DATE: 2 January 2025

DESIGNER: Alex Naper

PROJECT No: SES 18524 Rev B

PROJECT NAME: Cherry Orchard Point Phase 2 - Waterman Moylan



Residential spine road designed in accordance with EN13201-2:2015 Category P3.

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

Step sections designed in accordance with I.S.EN17210-2021 Accessibility and usability of the built environment - Functional requirements & S.R. CEN/TR 17621:2021 Accessibility and usability of the built environment - Technical performance criteria and specifications with illuminance levels as per recommendations of EN12464-2:2014 5.12.15.

Ramp section designed in accordance with EN13201-2:2015 Category C1.

MF derived from: 0.92 x 0.99 or 0.9 x 0.99 (LMF (Low pollution environment & 72 month cleaning cycle) x LLMF x LSF) LLMF & LSF values @ 100,000 hours & 25 degrees C Ta.

Rev A: Updated as per comments.

Rev B: Project name updated.

Outdoor Lighting Report

PREPARED BY:

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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	Grid 1	707634.78	732875.14	255.78	302.00	1.50	1.50
2	Grid 2	707599.10	732949.27	205.00	63.00	1.50	1.50
3	Grid 3	707536.96	733150.80	12.35	2.01	0.35	0.67
4	Grid 4	707540.40	733175.37	25.67	20.75	1.43	1.48

Luminaires

Luminaire B Data



Supplier	C U Phosco
Type	P863-128-R2E-730-W3-250-34W
Lamp(s)	730SS
Lamp Flux (klm)	4.71
File Name	P863-128-R2E-730-W3-250-34W.ies
Maintenance Factor	0.90
Imax70,80,90(cd/klm)	463.7, 84.3, 0.0
No. in Project	8

Luminaire C Data



Supplier	C U Phosco
Type	E950-28-F2A-730-C600-16W
Lamp(s)	730N
Lamp Flux (klm)	2.28
File Name	E950-28-F2A-730-C0600-16W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	623.6, 113.9, 0.3
No. in Project	8

Luminaire D Data



Supplier	C U Phosco
Type	E950-28-P4P-730-C600-16W
Lamp(s)	730N
Lamp Flux (klm)	2.08
File Name	E950-28-P4P-730-C0600-16W.ies
Maintenance Factor	0.81
Imax70,80,90(cd/klm)	792.6, 411.3, 0.6
No. in Project	12

Luminaire F Data



Supplier	C U Phosco
Type	E950-28-P4P-730-C350-10W
Lamp(s)	730N
Lamp Flux (klm)	1.27
File Name	E950-28-P4P-730-C0350-10W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	792.6, 411.3, 0.6
No. in Project	10

Luminaire I Data



Supplier	C U Phosco
Type	E950-28-P4A-730-C350-10W
Lamp(s)	730N
Lamp Flux (klm)	1.37
File Name	E950-28-P4A-730-C0350-10W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	659.3, 183.1, 0.3
No. in Project	1

Luminaire J Data



Supplier	C U Phosco
Type	E950-28-R3A-730-SD0650-28W
Lamp(s)	730SA
Lamp Flux (klm)	3.92
File Name	E950-28-R3A-730-SD0650-28W.ies
Maintenance Factor	0.83
Imax70,80,90(cd/klm)	380.1, 27.7, 4.3
No. in Project	5

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	B	707594.65	732997.17	8.00	308.00	0.00	0.00	0.45			
2	B	707620.63	733000.91	8.00	138.00	0.00	0.00	0.45			
3	B	707590.14	732976.78	8.00	134.00	0.00	0.00	0.45			
4	B	707638.65	733029.60	8.00	283.00	0.00	0.00	0.45			
5	B	707678.44	733030.84	8.00	135.00	0.00	0.00	0.45			
6	B	707686.79	733062.13	8.00	310.00	0.00	0.00	0.45			
7	B	707709.47	733062.58	8.00	135.00	0.00	0.00	0.45			
8	B	707722.15	733092.08	8.00	311.00	0.00	0.00	0.45			
Phase 1 9	I	707649.28	733005.95	6.00	17.00	0.00	0.00	0.40			
10	F	707651.82	733048.85	6.00	235.00	0.00	0.00	0.40			
11	C	707631.29	733047.04	6.00	41.00	0.00	0.00	0.40			
12	D	707632.58	733067.96	6.00	128.00	0.00	0.00	0.40			
13	D	707650.31	733098.34	6.00	309.00	0.00	0.00	0.40			
14	D	707672.43	733122.11	6.00	314.00	0.00	0.00	0.45			
15	D	707691.15	733123.44	6.00	40.00	0.00	0.00	0.45			
16	F	707706.61	733107.69	8.00	45.00	0.00	0.00	0.45			
17	D	707674.71	733139.83	6.00	43.00	0.00	0.00	0.40			
18	D	707654.53	733159.86	6.00	45.00	0.00	0.00	0.40			
19	C	707643.03	733154.11	6.00	138.00	0.00	0.00	0.40			
20	C	707615.46	733160.56	6.00	42.00	0.00	0.00	0.40			
21	F	707600.16	733176.08	6.00	57.00	0.00	0.00	0.40			
22	C	707631.72	733176.98	6.00	250.00	0.00	0.00	0.40			
23	F	707582.27	733172.52	6.00	140.00	0.00	0.00	0.40			
24	D	707557.92	733145.09	6.00	132.00	0.00	0.00	0.40			
25	D	707561.11	733129.33	6.00	222.00	0.00	0.00	0.40			
26	D	707603.22	733117.27	6.00	136.00	0.00	0.00	0.40			
27	D	707617.68	733137.30	6.00	309.00	0.00	0.00	0.40			
28	D	707584.44	733110.68	6.00	309.00	0.00	0.00	0.40			
29	D	707574.44	733116.13	6.00	223.00	0.00	0.00	0.40			
30	F	707565.16	733091.57	6.00	136.00	0.00	0.00	0.40			
31	C	707615.16	733085.29	6.00	226.00	0.00	0.00	0.40			
32	C	707600.31	733100.31	6.00	224.00	0.00	0.00	0.40			
33	C	707587.48	733085.50	6.00	54.00	0.00	0.00	0.40			
34	C	707605.75	733067.57	6.00	36.00	0.00	0.00	0.40			
35	F	707684.89	733021.38	6.00	230.00	0.00	0.00	0.40			
36	F	707703.16	733003.04	6.00	228.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
37	F	707639.45	733008.21	6.00	43.00	0.00	0.00	0.40			
38	F	707675.68	732971.83	6.00	43.00	0.00	0.00	0.40			
39	F	707657.75	732989.92	6.00	43.00	0.00	0.00	0.40			
40	J	707561.89	733175.12	6.00	329.00	0.00	0.00	0.40			
41	J	707557.48	733172.79	6.00	130.00	0.00	0.00	0.40			
42	J	707545.62	733172.40	6.00	31.00	0.00	0.00	0.40			
43	J	707545.49	733145.12	6.00	230.00	0.00	0.00	0.40			
44	J	707540.89	733150.17	6.00	225.00	0.00	0.00	0.40			

Horizontal Illuminance (lux)

Grid 1



Results

Eav	5.27
Emin	1.03
Emax	34.08
Emin/Emax	0.03
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 2

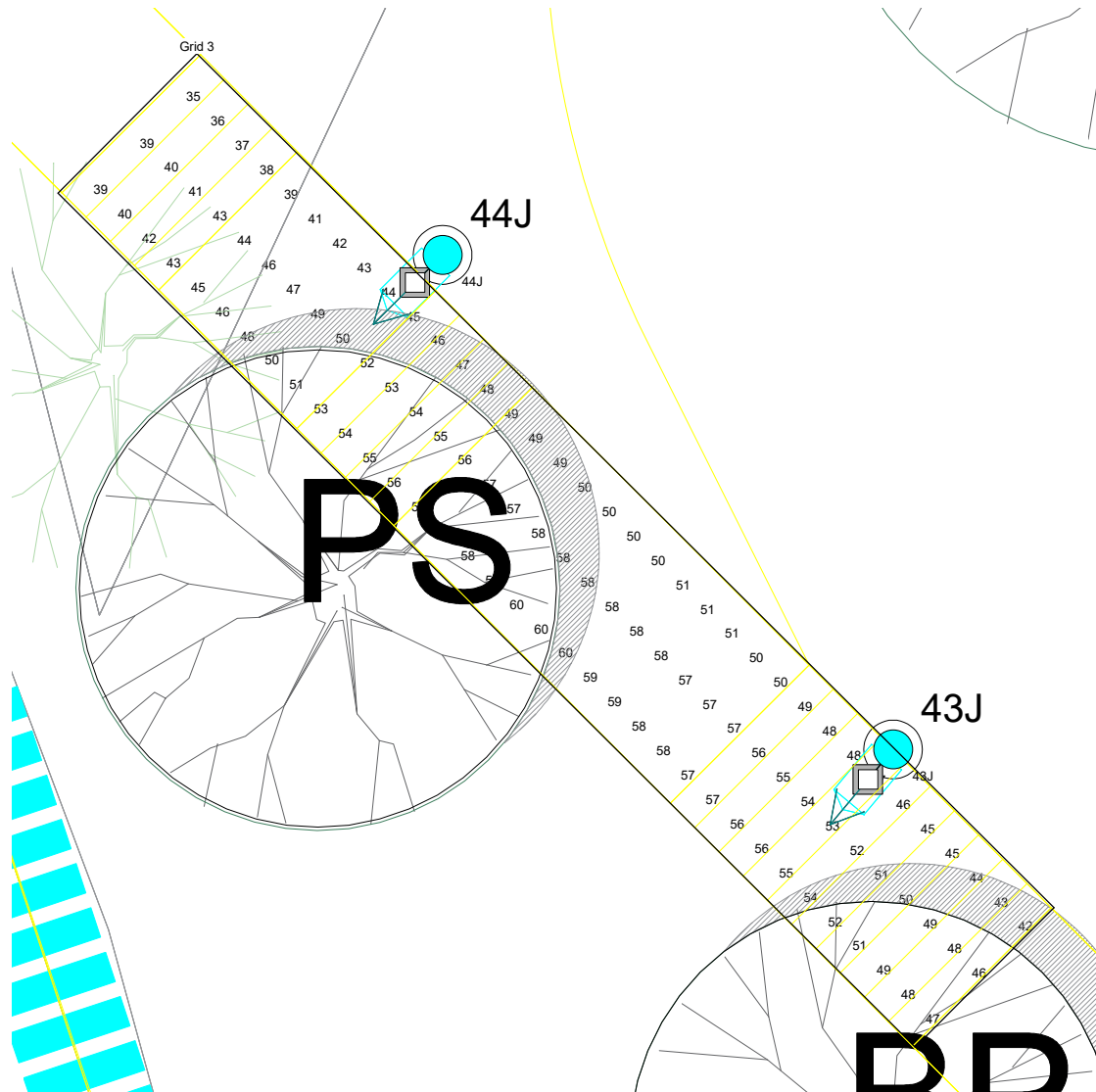


Results

Eav	7.82
Emin	1.59
Emax	20.29
Emin/Emax	0.08
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 3

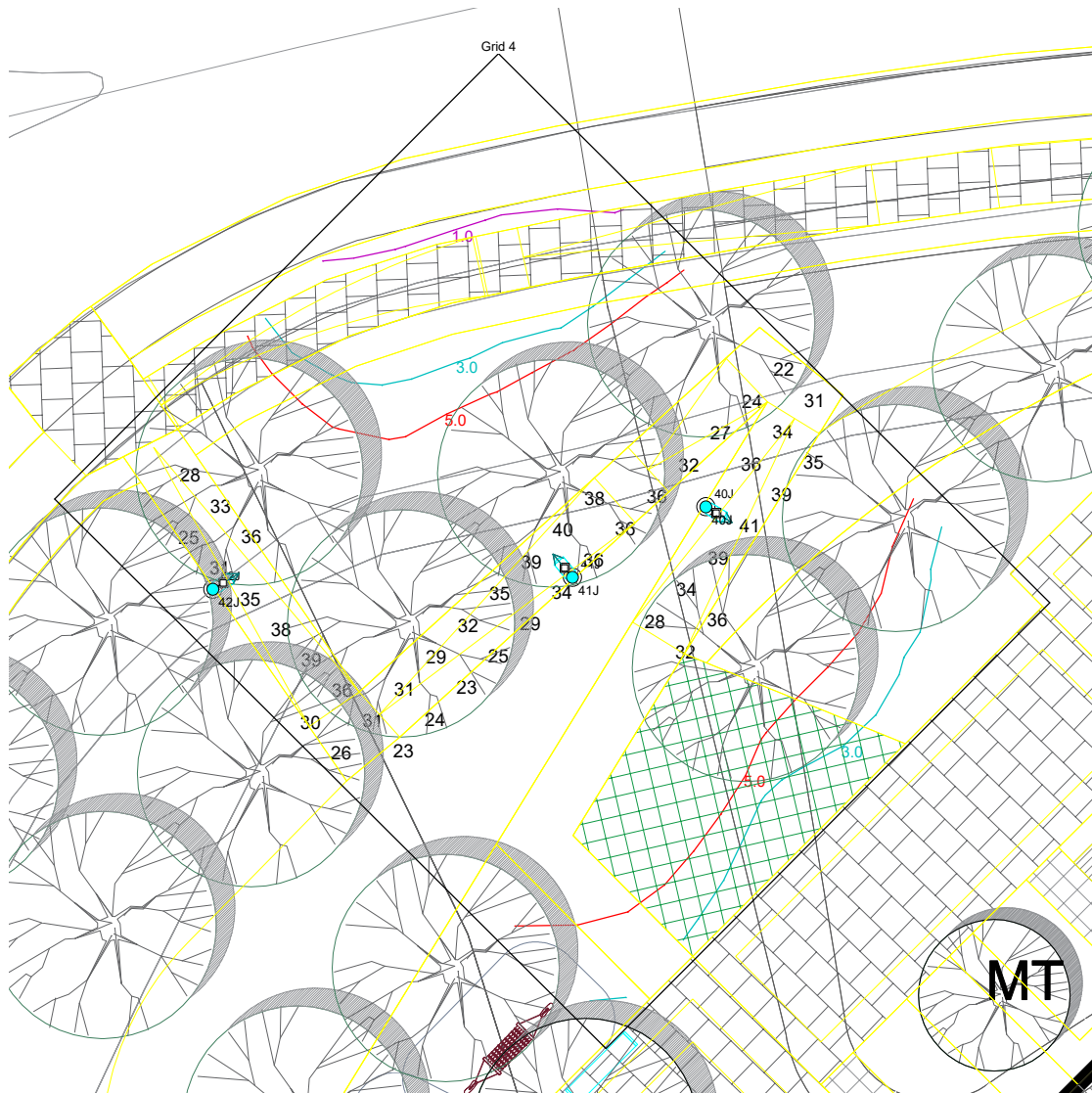


Results

Eav	50.09
Emin	34.57
E _{max}	59.80
Emin/E _{max}	0.58
Emin/Eav	0.69

Horizontal Illuminance (lux)

Grid 4



Results

Eav	32.20
Emin	21.51
E _{max}	41.15
Emin/E _{max}	0.52
Emin/Eav	0.67