

DATE: 14 June 2024
DESIGNER: M Buckley CEng MIEI MCIBSE
PROJECT No: C1301 - Public Lighting R5
PROJECT NAME: The Railyard Apartments



Grid 1 - Albert Street
Grid 2 - Albert Street & Albert Road Intersection
Grid 3 - Albert Street & Albert Quay Intersection
Grid 4 - Albert Road
Grid 5 - Albert Quay

This report incorporates the current residential development site plan with previously agreed lighting upgrades to the public realm as per planning number: 21/40237 RFI: 8122021

Outdoor Lighting Report

PREPARED BY: MBA Engineers
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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	-167.43	-57.32	150.67	162.54	1.86	2.62
2	Grid 2	-82.16	49.38	48.24	54.57	1.93	2.18
3	Grid 3	-71.56	-56.04	35.97	39.82	1.44	1.59
4	Grid 4	-110.70	77.04	47.17	28.34	1.89	1.13
5	Grid 5	-141.66	-37.57	73.88	24.56	1.48	1.44

Luminares

Luminaire A Data

Supplier	
Type	DYANA2 LED 72L50 WS 740 BP CL2 MLE
Lamp(s)	LED_DYNL_11951 111W
LampFlux(klm)/Colour	11.95 4000/70
File Name	96264373_(STD).LDT
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	410.4, 237.6, 0.0
No. in Project	12

Luminaire B Data



Supplier	C U Phosco
Type	P65520 (1)
Lamp(s)	400W SON-T
Lamp Flux (klm)	56.50
File Name	p65520-400wson-t.cib
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	347.0, 18.0, 0.0
No. in Project	2

Luminaire C Data

Supplier	
Type	NERI ALTAIR 025A21535ST 0°
Lamp(s)	NAV-T150 SUPER
LampFlux(klm)/Colour	17.50 2000/0
File Name	XX025A215XXXX-025A21535ST 0.LDT
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	186.5, 2.6, 0.0
No. in Project	3

Luminaire D Data



Supplier	D W Windsor
Type	DO5 - P 150 S - A S (5/35 OLS)
Lamp(s)	150W SON-T+
Lamp Flux (klm)	17.50
File Name	DO5 P 150S ASv1.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	287.8, 66.0, 2.1
No. in Project	2

Luminaire E Data



Supplier	WRTL
Type	2695 SNN/1E
Lamp(s)	1 SON-T 150W
Lamp Flux (klm)	17.50
File Name	INR5084.LDT
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	384.0, 98.0, 3.0
No. in Project	1

Luminaire F Data



Supplier	Urbis-Schreder
Type	AXIA 2.2 5166 - 48 NVSL219CT 890mA N W 230V Integrated lenses
Lamp(s)	48NVSL219CT 890mA_NW
LampFlux(klm)/Colour	16.86 NW 4000K/70
File Name	AXIA 2.2 5166 48 NVSL219CT 890mA NW 134W 384212 Integrated lenses - 230V 2...
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	991.0, 211.4, 0.0
No. in Project	4

Luminaires

Luminaire G Data

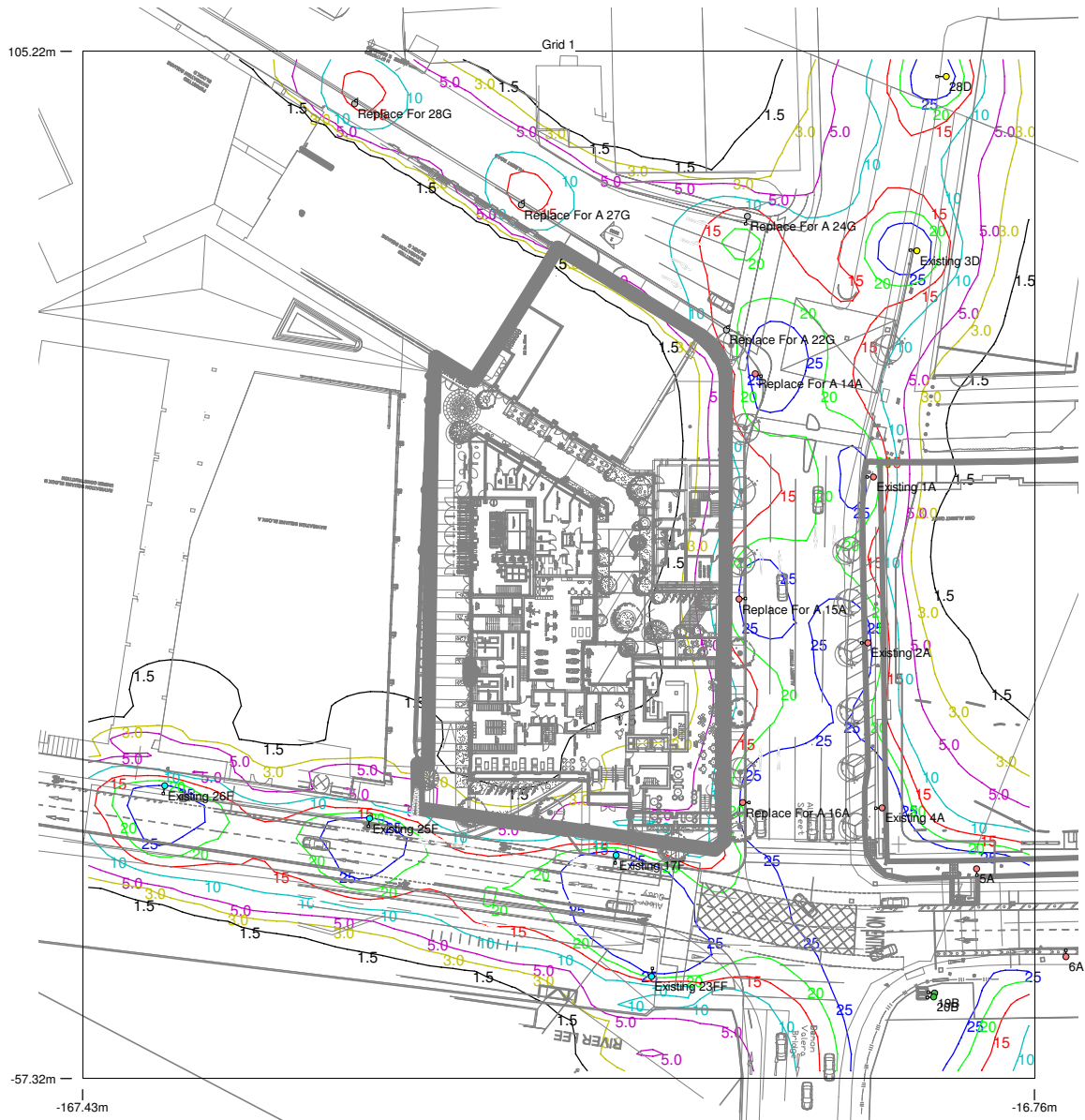
Supplier	Urbis Schreider Axia 2
Type	AXIA 2.1 5233 Integrated lenses Rear louvers 24 OSLO SQUARE
Lamp(s)	24 OSLO SQUARE GIANT@890mA WW 830 230V 00-36-981
LampFlux(klm)/Colour	8.39 WW 3000K/80
File Name	AXIA 2.1 5233 24 OSLO SQUARE GIANT 890mA WW 830 68W 434752 Integrated L...
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	441.5, 7.4, 1.2
No. in Project	4

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
Existing 1	A	-42.27	37.90	10.00	181.00	5.00	0.00	1.00			
Existing 2	A	-43.13	11.65	10.00	180.00	0.00	0.00	1.00			
Existing 3	D	-35.39	73.65	10.00	175.00	0.00	0.00	1.00			
Existing 4	A	-40.89	-14.45	10.00	183.00	0.00	0.00	1.00			
5	A	-25.95	-24.07	10.00	273.00	0.00	0.00	1.00			
6	A	-11.84	-38.02	10.00	90.00	0.00	0.00	1.00			
7	A	18.30	-37.05	10.00	89.00	0.00	0.00	1.00			
8	A	3.94	-23.64	10.00	270.00	0.00	0.00	1.00			
9	A	35.33	-22.02	10.00	273.00	0.00	0.00	1.00			
10	A	47.87	-36.05	10.00	91.00	0.00	0.00	1.00			
11	C	61.87	-9.10	10.00	355.00	0.00	0.00	1.00			
12	C	86.81	-21.20	10.00	270.00	0.00	0.00	1.00			
13	C	86.81	-40.17	10.00	87.00	0.00	0.00	1.00			
Replace For A 14	A	-61.01	54.19	10.00	339.00	5.00	0.00	1.00			
Replace For A 15	A	-63.56	18.56	10.00	5.00	0.00	0.00	1.00			
Replace For A 16	A	-62.98	-13.59	10.00	358.00	0.00	0.00	1.00			
Existing 17	F	-83.01	-21.97	9.50	263.00	0.00	0.00	1.25			
19	B	-32.63	-43.73	17.30	172.00	0.00	0.00	1.00			
20	B	-32.74	-44.36	17.30	185.00	0.00	0.00	1.00			
21	E	62.12	-43.12	10.00	15.00	0.00	0.00	1.00			
Replace For A 22	G	-65.55	61.12	10.00	58.00	0.00	0.00	0.50			
Existing 23F	F	-77.40	-41.11	9.50	83.00	6.00	0.00	1.25			
Replace For A 24	G	-62.24	79.13	9.00	257.00	0.00	0.00	1.25			
Existing 25	F	-122.00	-16.12	9.50	260.00	0.00	0.00	1.25			
Existing 26	F	-154.43	-10.97	9.50	259.00	0.00	0.00	1.25			
Replace For A 27	G	-98.02	80.93	9.00	60.00	0.00	0.00	0.50			
28	D	-30.74	101.24	10.00	180.00	0.00	0.00	1.50			
Replace For 28	G	-124.39	96.94	9.00	60.00	0.00	0.00	0.50			

Horizontal Illuminance (lux)

Grid 1

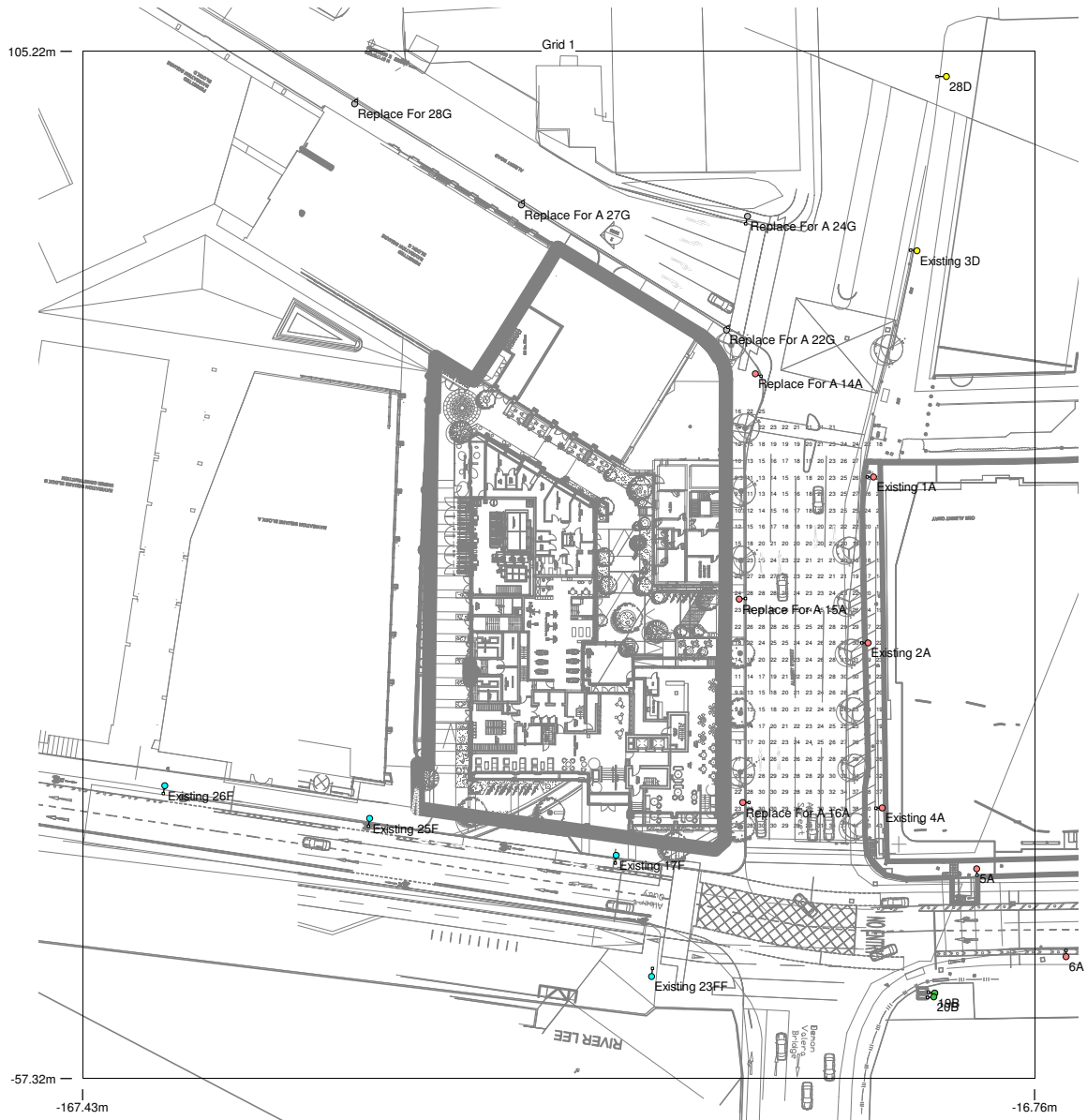


Results

Eav	23.00
Emin	9.18
Emax	43.21
Emin/Emax	0.21
Emin/Eav	0.40

Horizontal Illuminance (lux)

Grid 1

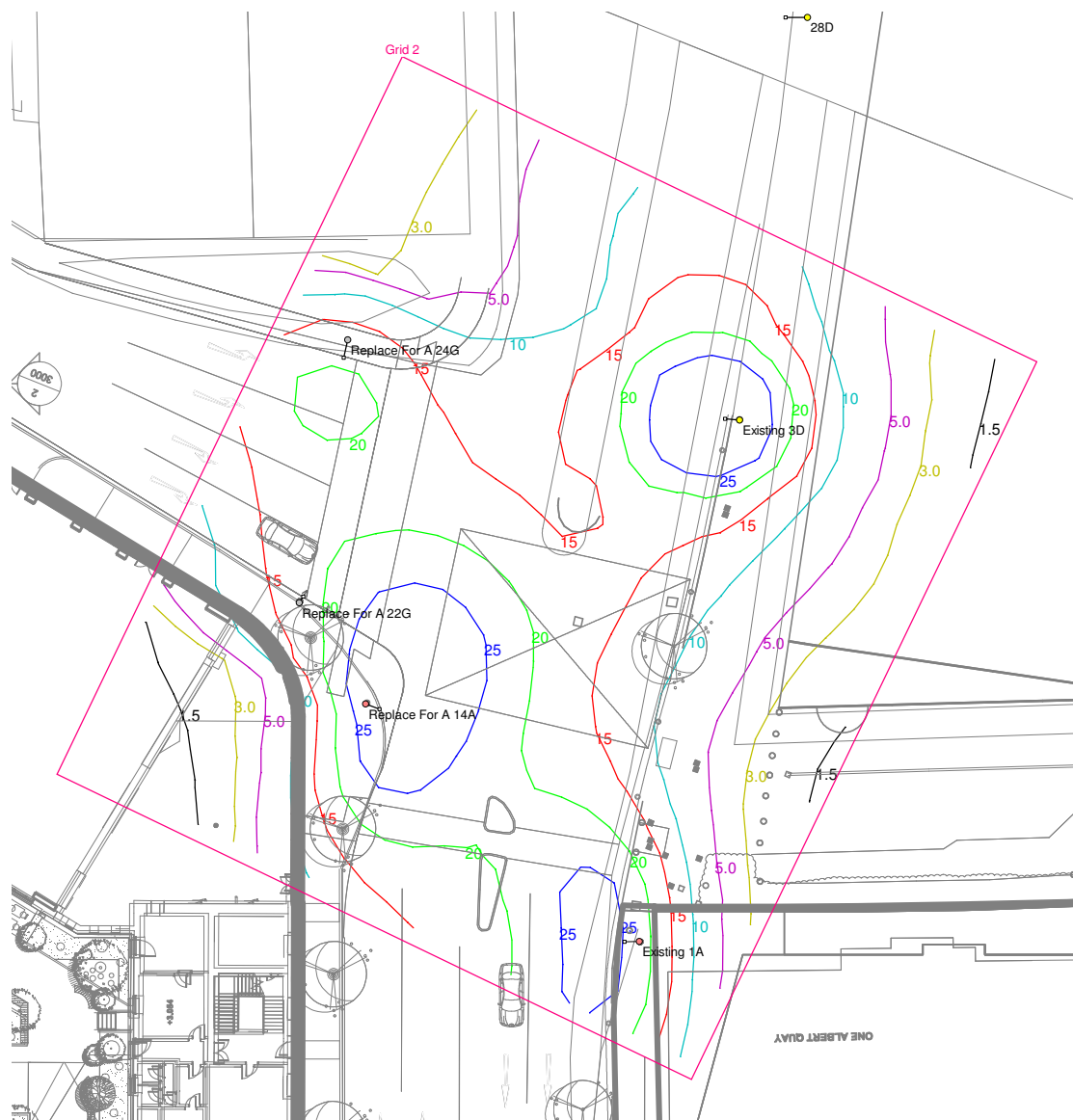


Results

Eav	23.00
Emin	9.18
Emax	43.21
Emin/Emax	0.21
Emin/Eav	0.40

Horizontal Illuminance (lux)

Grid 2

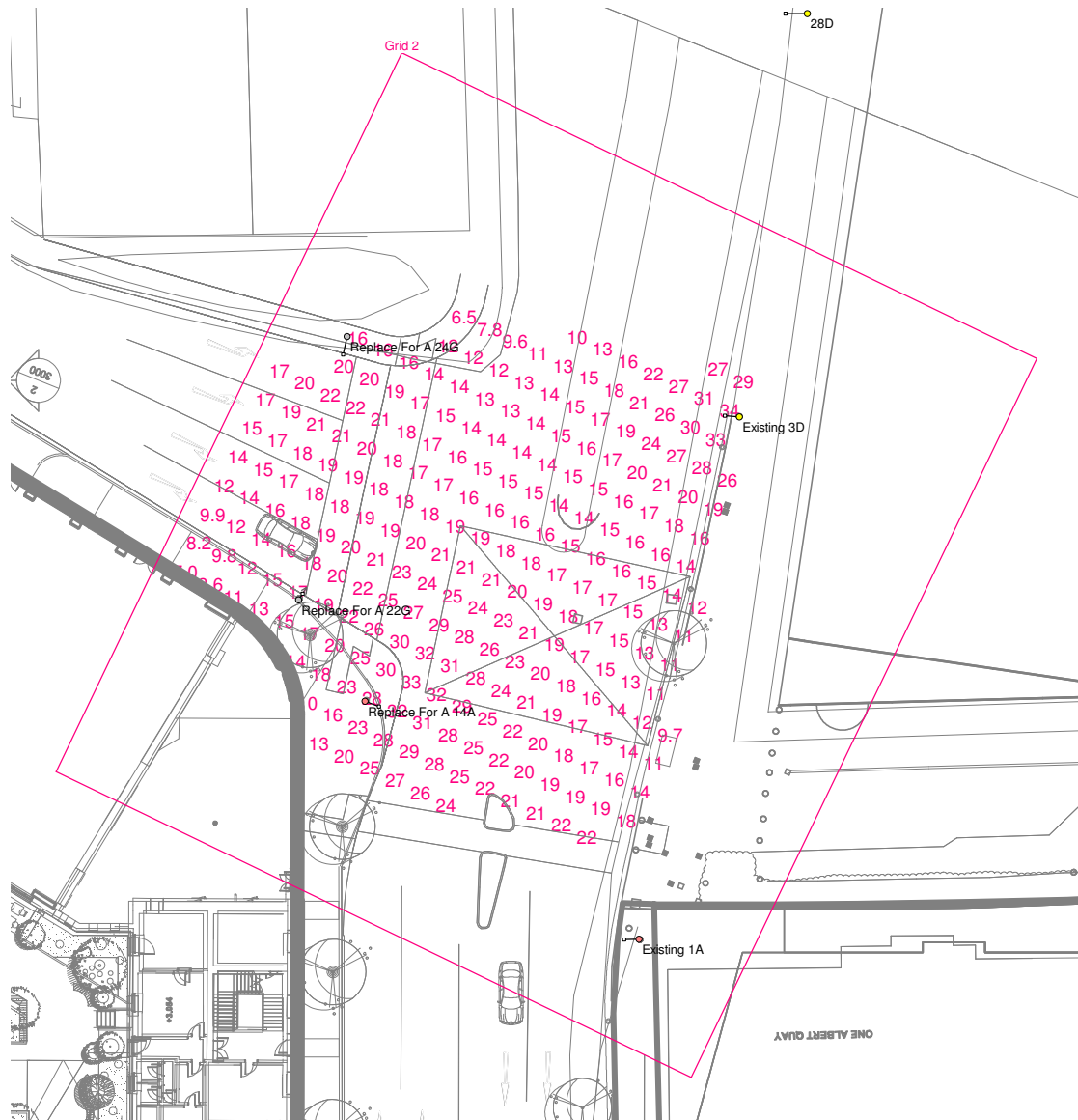


Results

Eav	18.64
Emin	6.54
E _{max}	33.98
Emin/E _{max}	0.19
Emin/Eav	0.35

Horizontal Illuminance (lux)

Grid 2

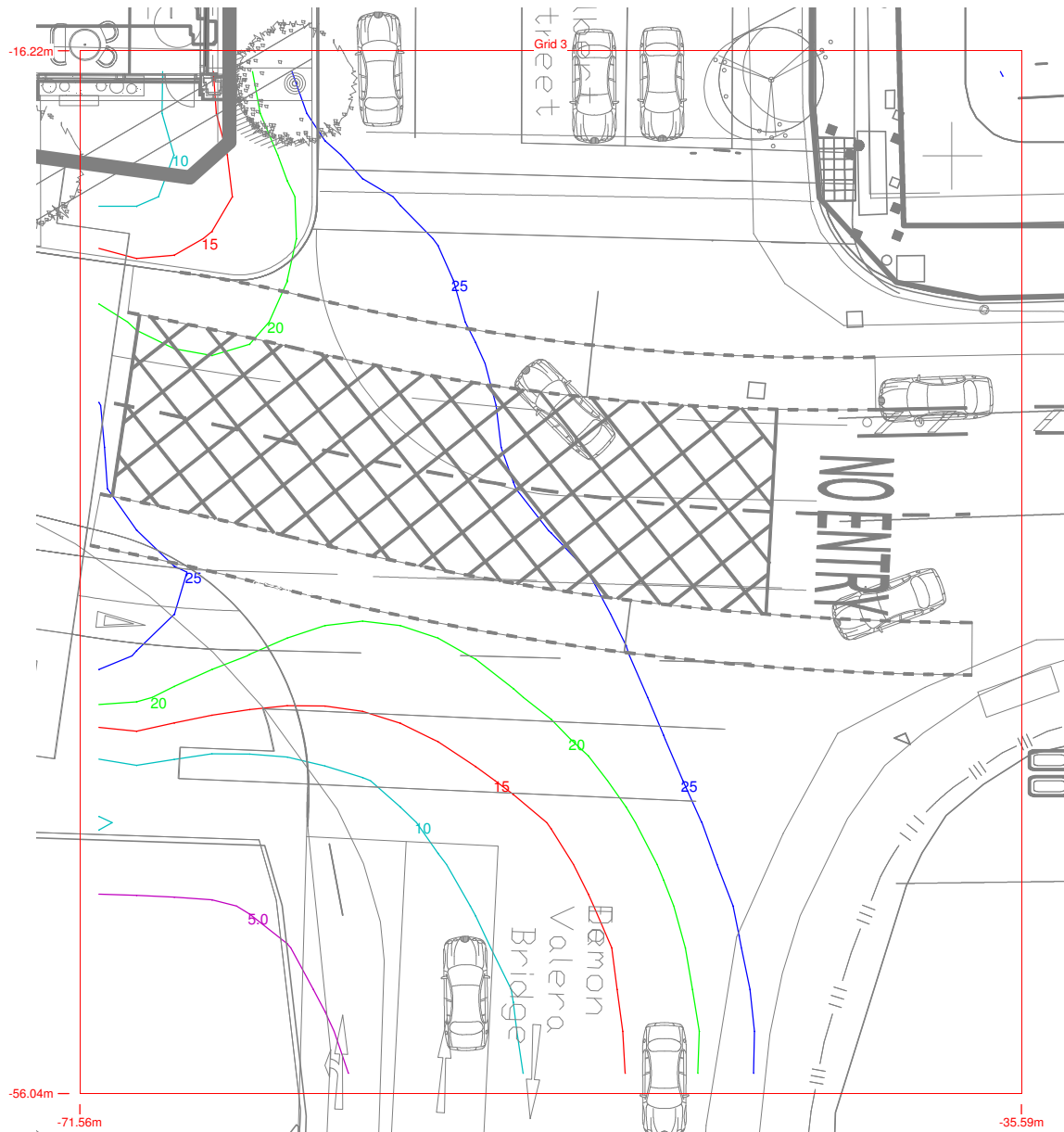


Results

Eav	18.64
Emin	6.54
Emax	33.98
Emin/Emax	0.19
Emin/Eav	0.35

Horizontal Illuminance (lux)

Grid 3

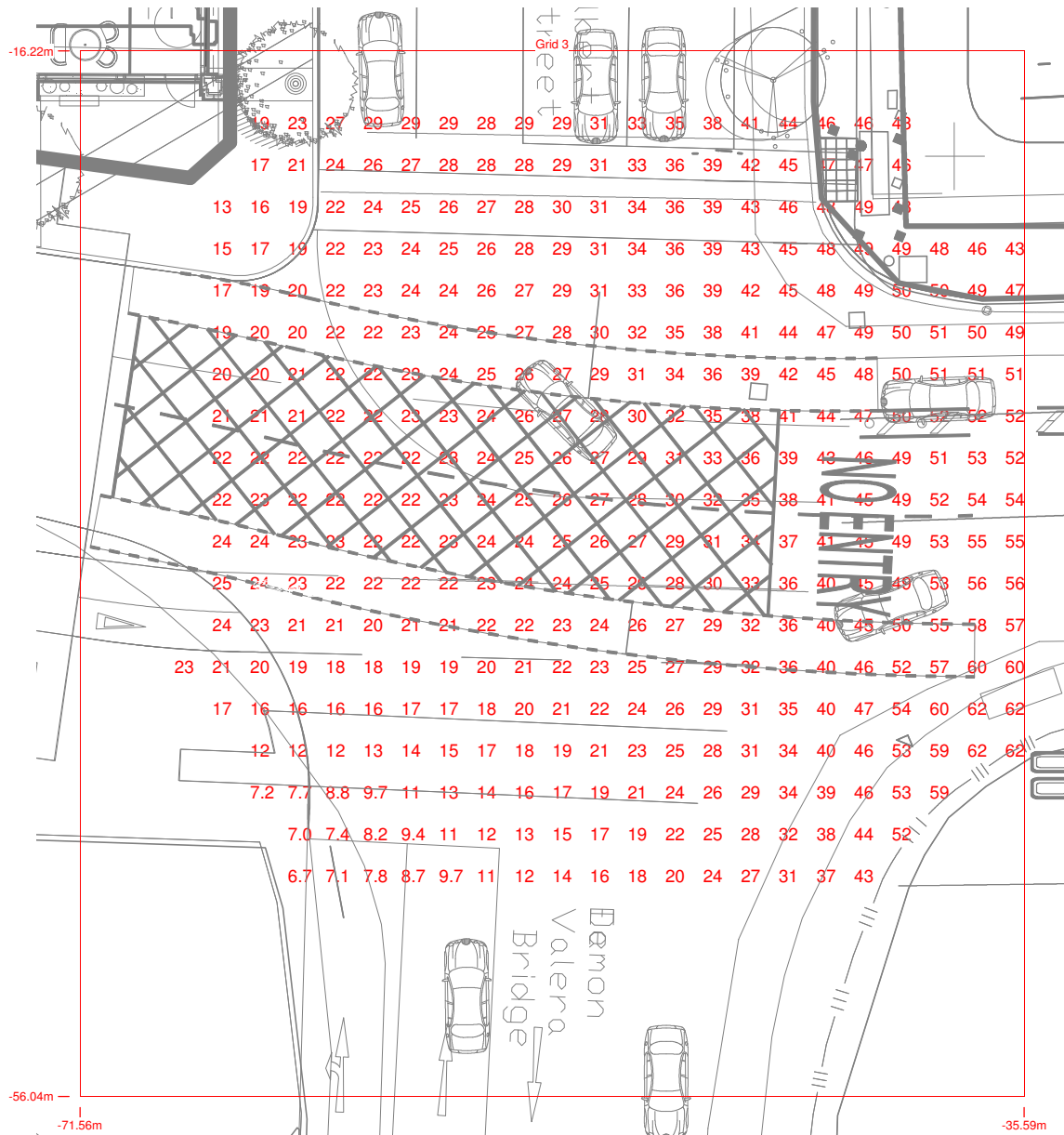


Results

Eav	30.93
Emin	6.73
Emax	62.33
Emin/Emax	0.11
Emin/Eav	0.22

Horizontal Illuminance (lux)

Grid 3

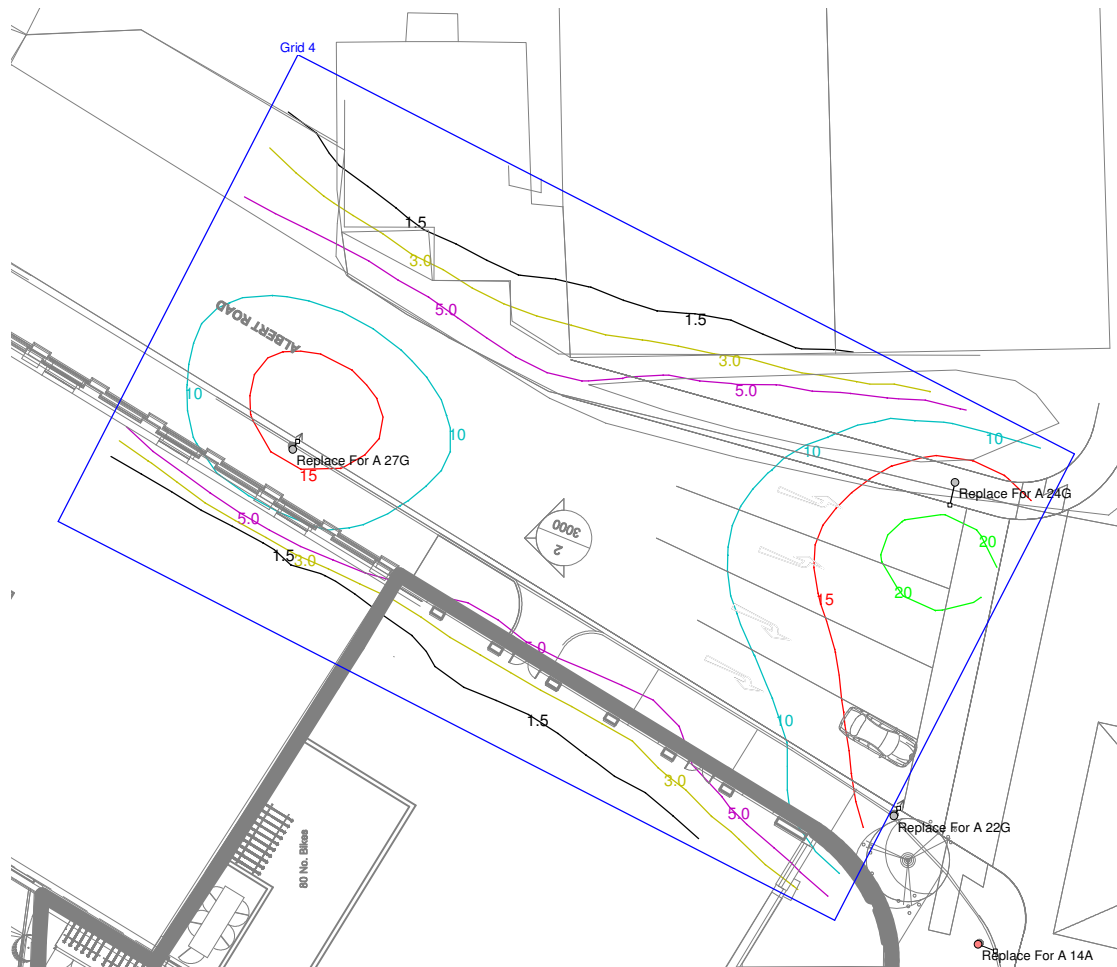


Results

Eav	30.93
Emin	6.73
Emax	62.33
Emin/Emax	0.11
Emin/Eav	0.22

Horizontal Illuminance (lux)

Grid 4

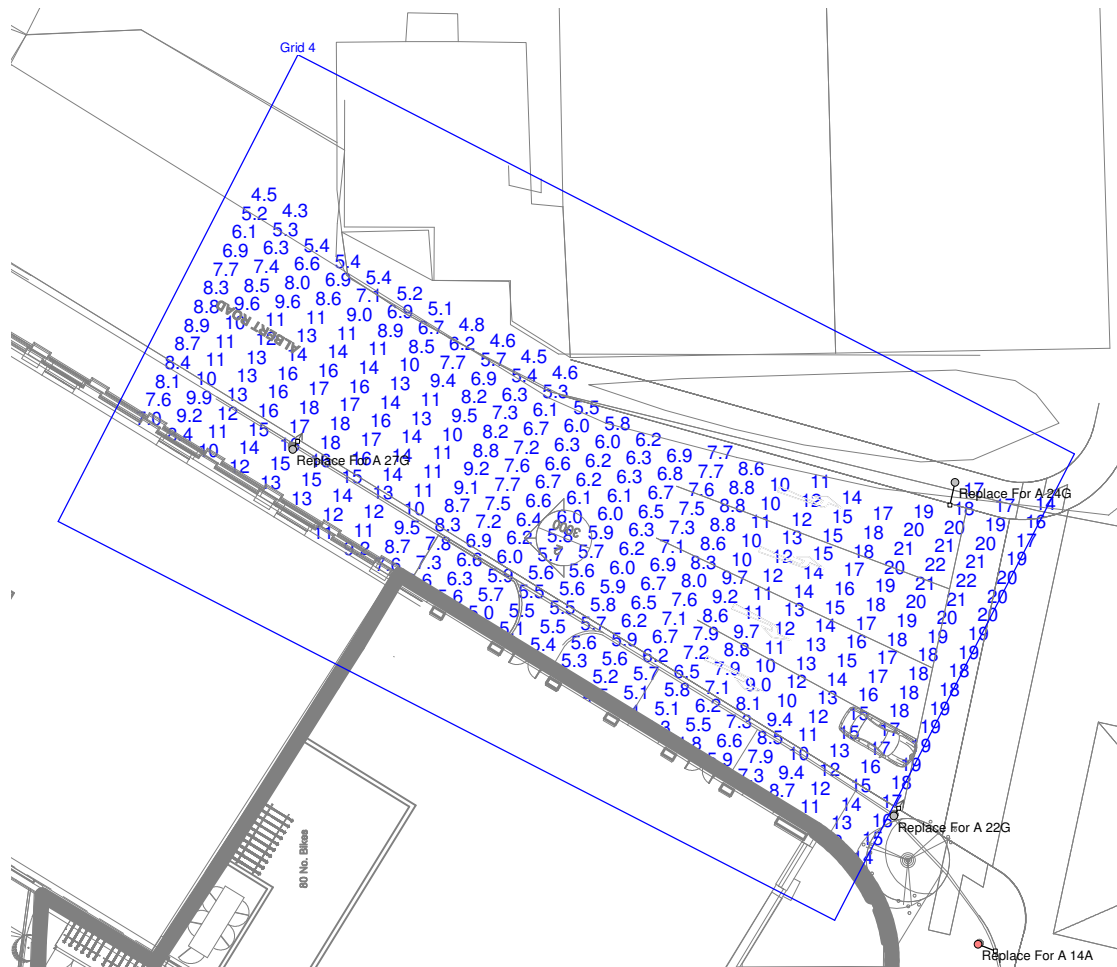


Results

Eav	10.78
Emin	4.28
Emax	21.99
Emin/Emax	0.19
Emin/Eav	0.40

Horizontal Illuminance (lux)

Grid 4

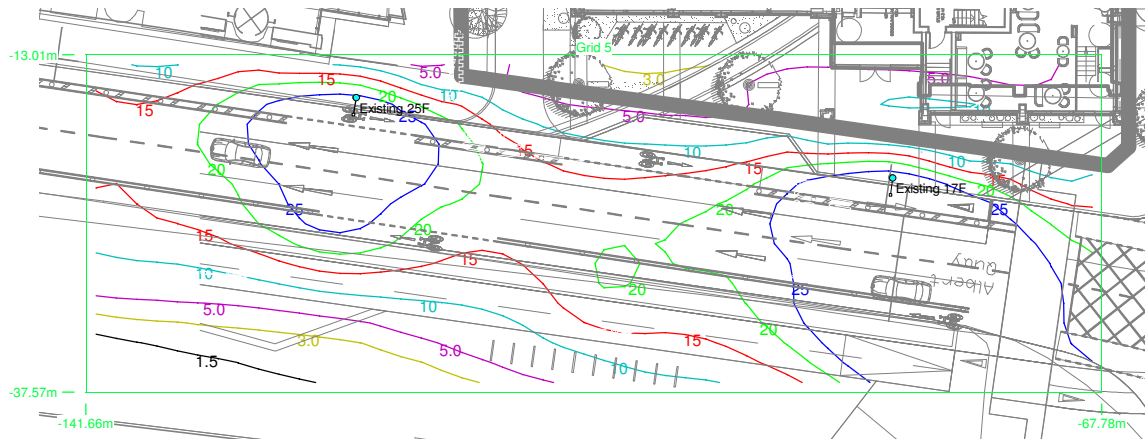


Results

Eav	10.78
Emin	4.28
Emax	21.99
Emin/Emax	0.19
Emin/Eav	0.40

Horizontal Illuminance (lux)

Grid 5

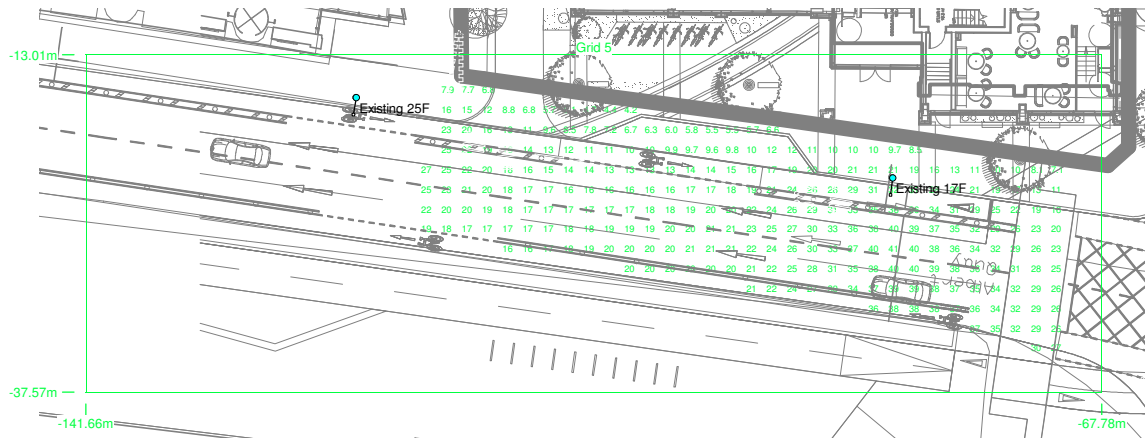


Results

Eav	21.56
Emin	4.24
E _{max}	41.37
Emin/E _{max}	0.10
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 5



Results

Eav	21.56
Emin	4.24
Emax	41.37
Emin/Emax	0.10
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 1

