

DATE: 9 August 2021
DESIGNER: Loveday Lighting Limited
PROJECT No: LL1351-002
PROJECT NAME: Severn Road, Avonmouth



Private Lighting Design

Lighting design to service yards in accordance with
BS EN 12464:2014 & BS5489-1:2020
Required Levels: Eav: 20.00 Lux, Uo: 25%

Lighting design to car parks in accordance with
BS EN 12464:2014 & BS5489-1:2020
Required Levels: Eav: 10.00 Lux, Uo: 25%

Outdoor Lighting Report

PREPARED BY: Loveday Lighting Limited
Email: aimie@lovedaylighting.com
Website: www.lovedaylighting.com



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	-36.00	-75.00	200.00	150.00	1.50	1.50
2	Grid 2	28.00	-146.00	114.00	150.00	1.50	1.50
3	Grid 3	-207.00	-260.00	270.00	150.00	1.50	1.50
4	Grid 4	-274.00	-110.00	238.00	141.00	1.50	1.50
5	Grid 5	-308.00	-280.00	132.00	170.00	1.50	1.50

Luminaires

Luminaire A Data

Supplier	
Type	BGP703 DX10
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	12.00
File Name	Luma Gen2 Mini_BGP703_DX10_12000_40LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.83
Lum. Int. Class	G3
No. in Project	17

Luminaire B Data

Supplier	
Type	BGP703 DX10 BL1
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	12.50
File Name	Luma Gen2 Mini_BGP703_DX10_BL1_12500_40LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.83
Lum. Int. Class	G3
No. in Project	10

Luminaire C Data

Supplier	
Type	BVP651 DX50
Lamp(s)	LED-HB 5.1S
Lamp Flux (klm)	44.00
File Name	Clearflood Large_BVP651_DX50_44000_51S_L90_CLO_WW.ies
Maintenance Factor	0.83
Lum. Int. Class	G3
No. in Project	11

Luminaire D Data

Supplier	
Type	BGP705 DX51
Lamp(s)	LED-HB 5.2S 830
Lamp Flux (klm)	45.00
File Name	Luma Gen2 Large_BGP705_DX51_45000_180LED_5.2S_CLO_L90_830.ies
Maintenance Factor	0.83
Lum. Int. Class	G4
No. in Project	3

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	58.41	-10.69	8.00	105.00	0.00	0.00	0.40			
2	A	22.03	-24.67	8.00	109.00	0.00	0.00	0.40			
3	A	-12.93	-29.83	8.00	21.00	0.00	0.00	0.40			
4	A	7.08	1.69	8.00	297.00	0.00	0.00	0.40			
5	A	-207.98	-141.82	8.00	202.00	0.00	0.00	0.40			
6	A	-43.77	-21.92	8.00	117.00	0.00	0.00	0.40			



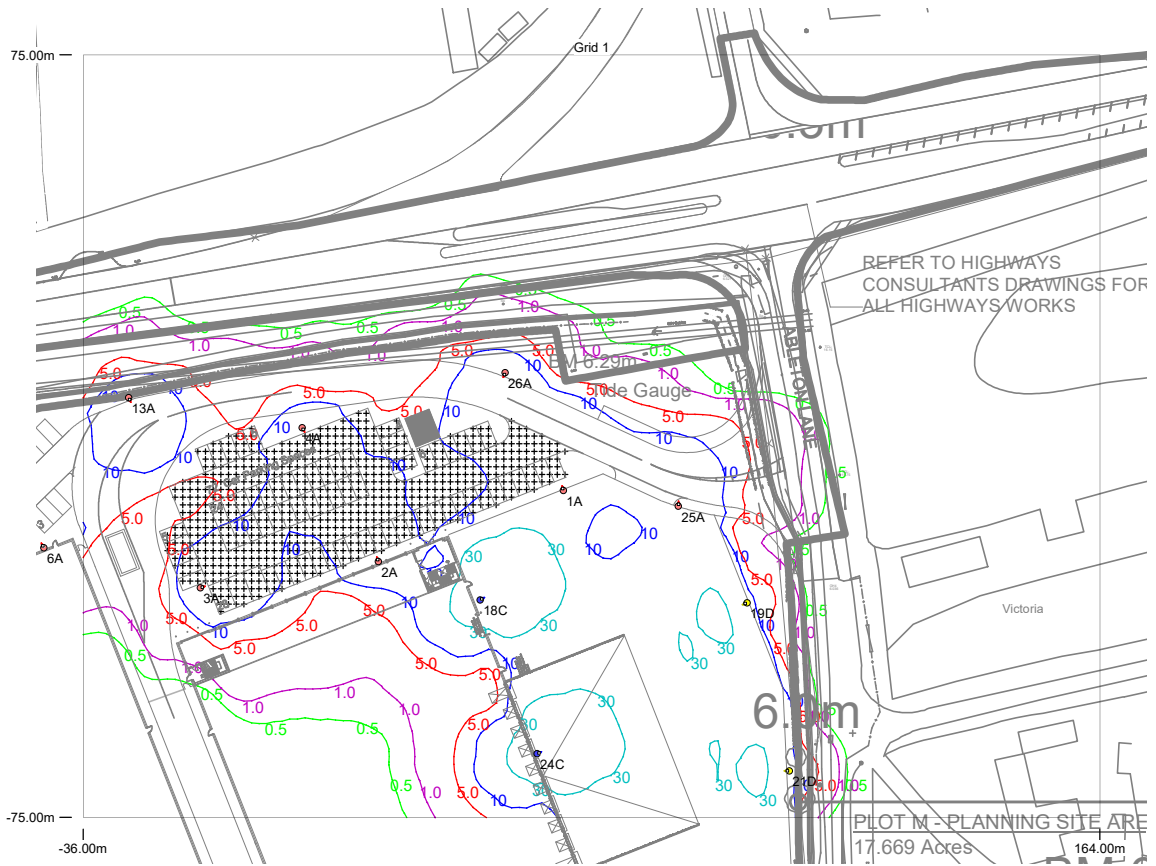
Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
7	A	-73.07	-33.50	8.00	109.00	0.00	0.00	0.40			
8	A	-103.77	-45.63	8.00	113.00	0.00	0.00	0.40			
9	A	-133.80	-57.50	8.00	109.00	0.00	0.00	0.40			
10	A	-162.41	-68.96	8.00	111.00	0.00	0.00	0.40			
11	A	-190.94	-80.01	8.00	111.00	0.00	0.00	0.40			
12	A	-209.17	-103.00	8.00	115.00	0.00	0.00	0.40			
13	A	-27.05	7.55	8.00	295.00	0.00	0.00	0.40			
14	A	-218.11	-116.80	8.00	205.00	0.00	0.00	0.40			
15	A	-193.80	-177.20	8.00	201.00	0.00	0.00	0.40			
16	B	-239.95	-140.54	8.00	21.00	0.00	0.00	0.40			
17	B	-224.27	-180.41	8.00	24.00	0.00	0.00	0.40			
18	C	42.05	-32.21	8.00	29.00	0.00	0.00	0.40			
19	D	94.58	-32.78	10.00	201.00	0.00	0.00	0.40			
20	C	65.08	-92.28	8.00	22.00	0.00	0.00	0.40			
21	D	102.88	-65.80	10.00	180.00	0.00	0.00	0.40			
22	C	78.84	-126.65	8.00	36.00	0.00	0.00	0.40			
23	D	104.76	-100.39	10.00	180.00	0.00	0.00	0.40			
24	C	53.25	-62.44	8.00	22.00	0.00	0.00	0.40			
25	A	81.06	-13.78	8.00	87.00	0.00	0.00	0.40			
26	A	46.95	12.46	8.00	250.00	0.00	0.00	0.40			
27	C	0.08	-125.25	8.00	293.00	0.00	0.00	0.40			
28	C	-28.28	-135.45	8.00	292.00	0.00	0.00	0.40			
29	C	-54.35	-145.97	8.00	294.00	0.00	0.00	0.40			
30	C	-75.77	-154.57	8.00	291.00	0.00	0.00	0.40			
31	C	-102.65	-165.18	8.00	295.00	0.00	0.00	0.40			
32	C	-136.09	-178.15	8.00	294.00	0.00	0.00	0.40			
33	C	-158.39	-187.25	8.00	291.00	0.00	0.00	0.40			
34	B	-118.17	-218.86	8.00	114.00	0.00	0.00	0.40			
35	B	-90.35	-208.24	8.00	113.00	0.00	0.00	0.40			
36	B	-61.85	-196.89	8.00	110.00	0.00	0.00	0.40			
37	B	-5.83	-174.79	8.00	112.00	0.00	0.00	0.40			
38	B	21.38	-163.94	8.00	111.00	0.00	0.00	0.40			
39	B	-149.40	-214.61	8.00	59.00	0.00	0.00	0.40			
40	B	-34.08	-186.05	8.00	111.00	0.00	0.00	0.40			
41	B	-175.73	-203.71	8.00	68.00	0.00	0.00	0.40			



Horizontal Illuminance (lux)

Grid 1

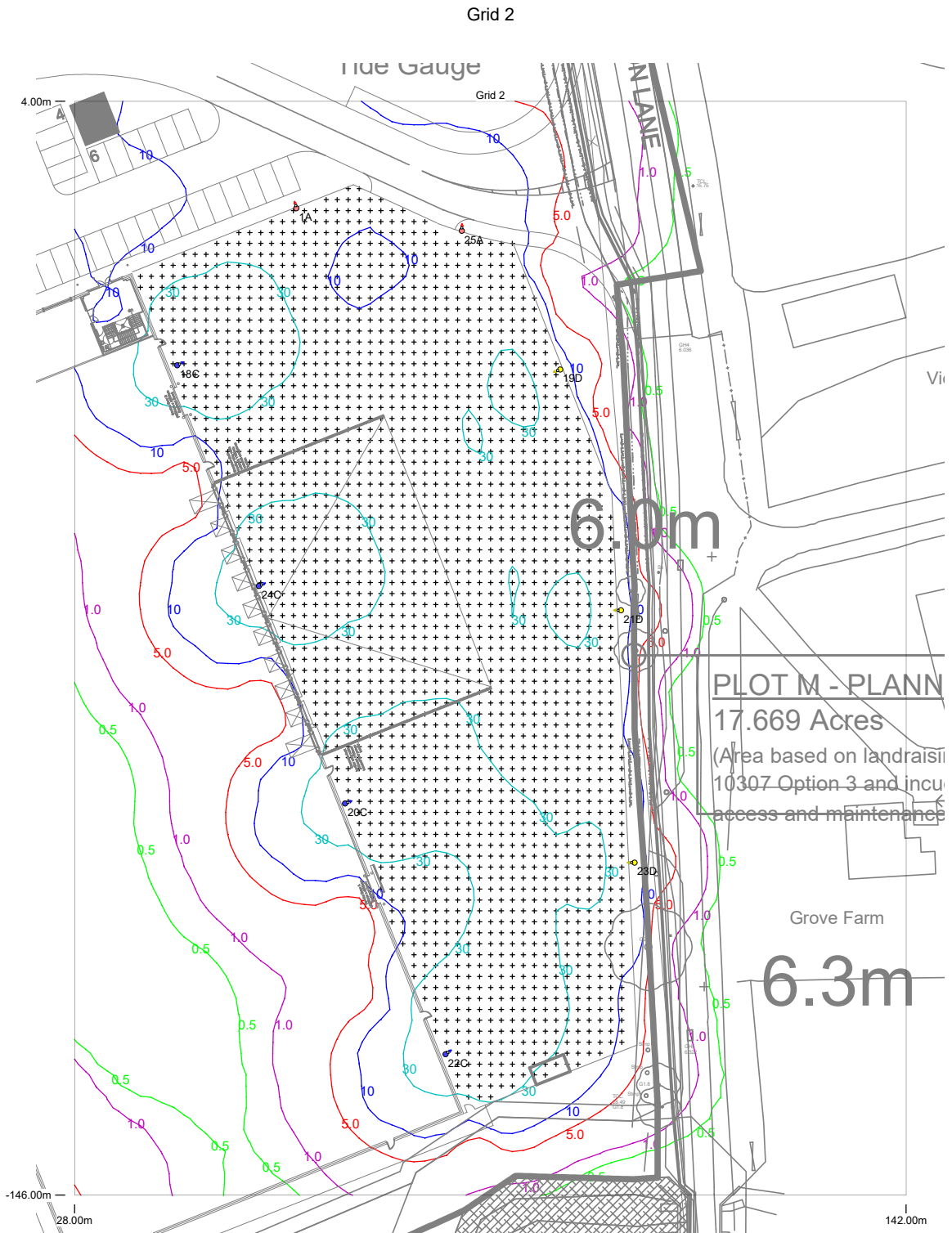


Results

Eav	12.51
Emin	3.69
Emax	29.63
Emin/Emax	0.12
Emin/Eav	0.29



Horizontal Illuminance (lux)



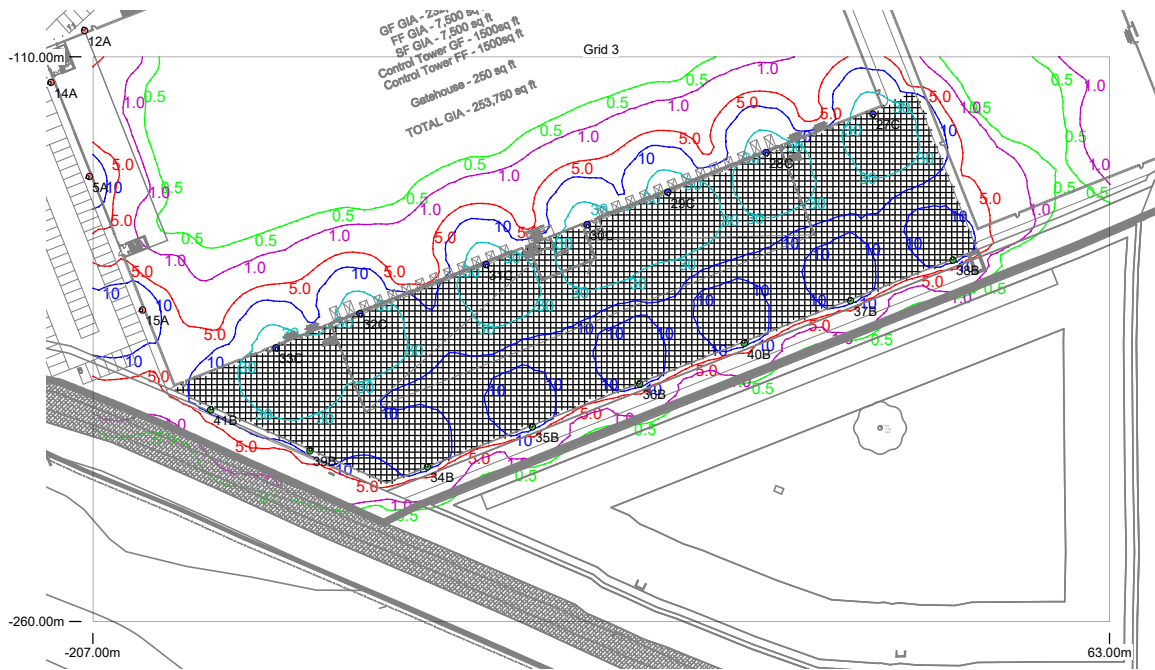
Results

Eav	28.86
Emin	7.46
Emax	84.69
Emin/Emax	0.09
Emin/Eav	0.26



Horizontal Illuminance (lux)

Grid 3



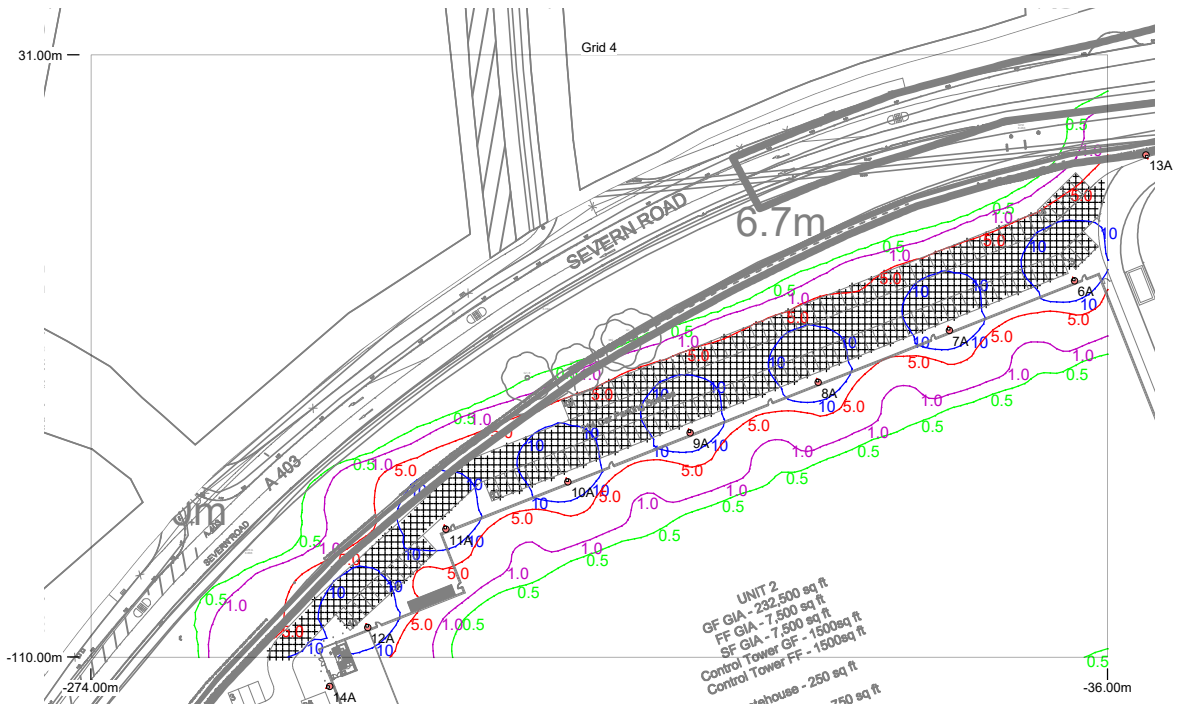
Results

Eav	23.60
Emin	5.80
Emax	87.56
Emin/Emax	0.07
Emin/Eav	0.25



Horizontal Illuminance (lux)

Grid 4



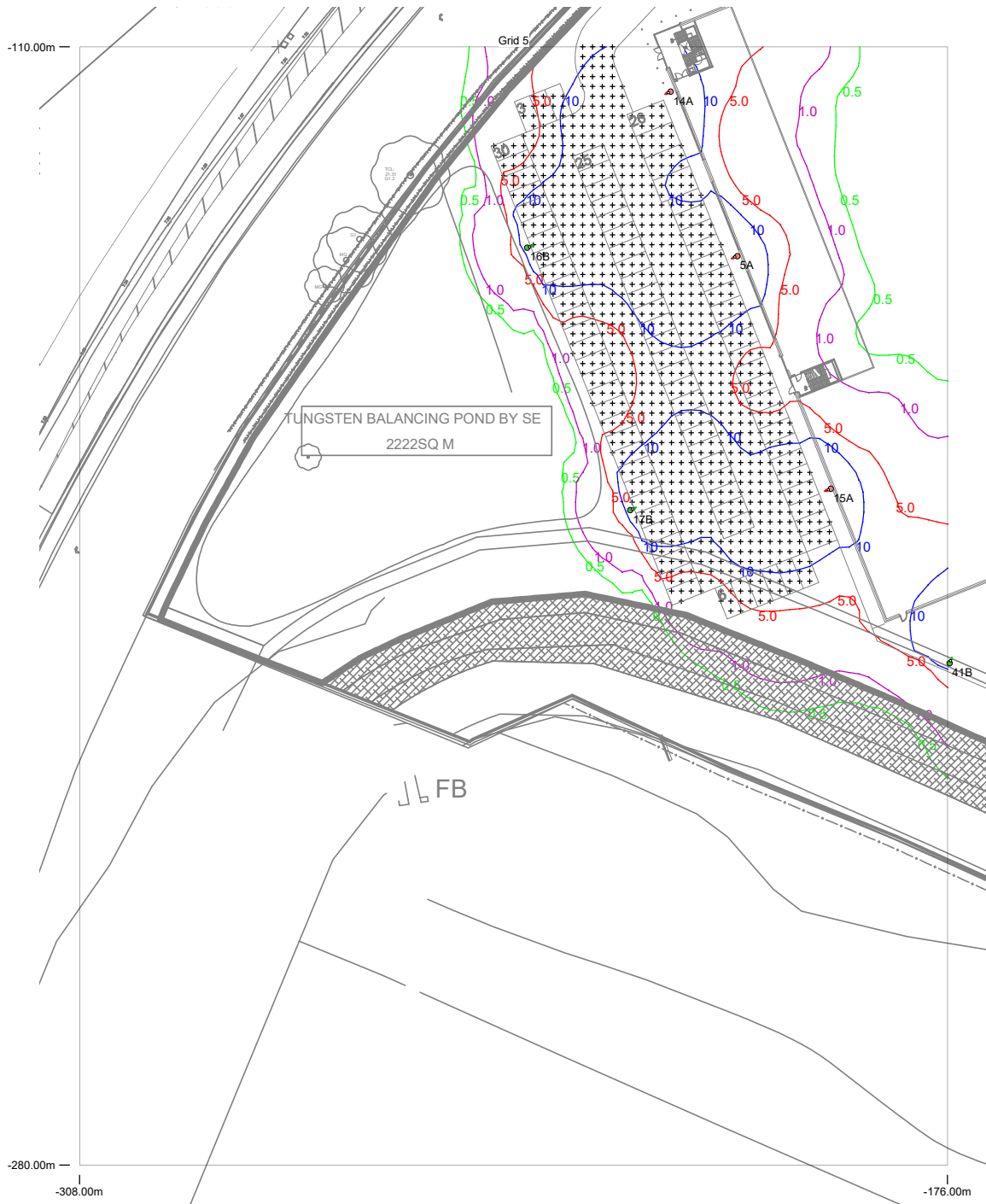
Results

Eav	10.45
Emin	2.78
Emax	23.89
Emin/Emax	0.12
Emin/Eav	0.27



Horizontal Illuminance (lux)

Grid 5



Results

Eav	11.52
Emin	2.82
Emax	23.77
Emin/Emax	0.12
Emin/Eav	0.25