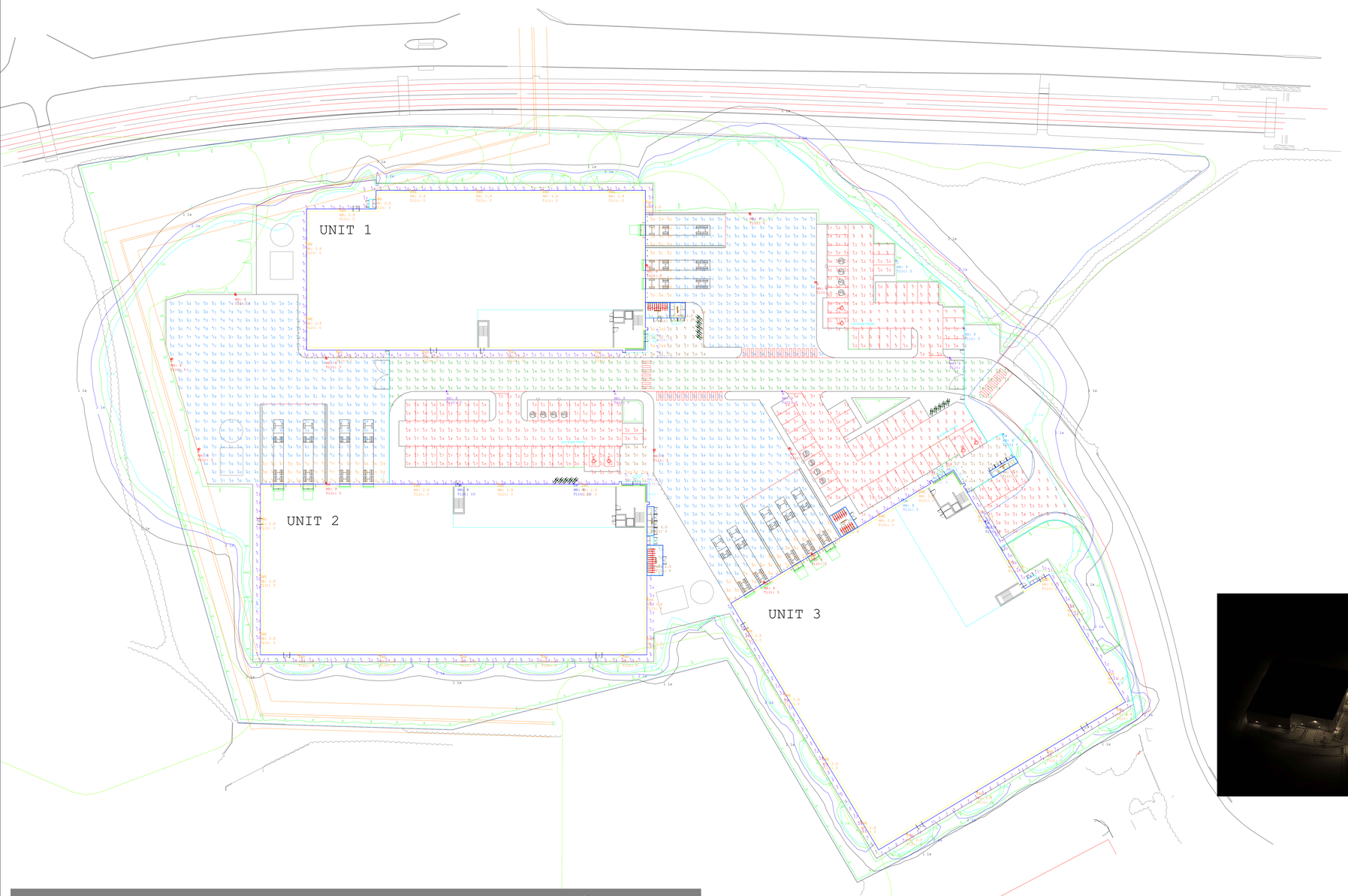


Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Watts	Mounting Height	[MANUFAC]
	4	A	Single	100w LED 2700k Mini Martin 24 LED with L22 Optic column mounted	0.900	100	8	VIDULO by Lighting Project Solutions
	8	B	Single	280w LED 2700k Stork 64 LED with L35 Optic column mounted	0.900	280	8	VIDULO by Lighting Project Solutions
	4	BW	Single	280w LED 2700k Stork 64 LED with L35 Optic wall mounted	0.900	280	8	VIDULO by Lighting Project Solutions
	2	C	Single	20w LED 2700k Mini Martin 24 LED with L35 Optic column mounted	0.900	20	8	VIDULO by Lighting Project Solutions
	2	CW	Single	20w LED 2700k Mini Martin 24 LED with L35 Optic wall mounted	0.900	20	8	VIDULO by Lighting Project Solutions
	3	DW	Single	80w LED 2700k Mini Martin 24 LED with L35 Optic wall mounted	0.900	80	8	VIDULO by Lighting Project Solutions
	41	EWE	Single	8w LED 2700k Finn Emergency Bulkhead with Pathway Optic	0.900	7.8	2.8	Lighting Project Solutions
	6	F	Single	19w LED 3000k ACF1X5 Anti Corrosive Batten	0.900	18.9	2.5	Lighting Project Solutions
	6	G	Single	20w LED 2700k Quay 1m Bollard	0.900	16.8	1	Lighting Project Solutions

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Min/Avg	Min/Max	Description
Access Road	Illuminance	Lux	27	59	11	0.40	0.19	
Unit 1 Bin Store	Illuminance	Lux	69	74	64	0.93	0.86	
Unit 1 Building Perimeter	Illuminance	Lux	18	75	2	0.11	0.03	
Unit 1 Car Park	Illuminance	Lux	12	54	4	0.33	0.07	
Unit 1 Cycle Store	Illuminance	Lux	55	95	35	0.64	0.37	
Unit 1 Entrance Area	Illuminance	Lux	15	51	4	0.26	0.08	
Unit 1 Loading Bay	Illuminance	Lux	50	69	28	0.56	0.41	
Unit 1 Main Entrance	Illuminance	Lux	89	189	24	0.27	0.13	
Unit 1 Service Yard	Illuminance	Lux	50	88	19	0.38	0.22	
Unit 2 Bin Store	Illuminance	Lux	72	125	43	0.60	0.34	
Unit 2 Building Perimeter	Illuminance	Lux	13	37	1	0.08	0.03	
Unit 2 Car Park	Illuminance	Lux	15	40	10	0.66	0.25	
Unit 2 Cycle Store	Illuminance	Lux	44	78	17	0.39	0.22	
Unit 2 Entrance Area	Illuminance	Lux	37	50	28	0.75	0.56	
Unit 2 Loading Bays	Illuminance	Lux	53	78	25	0.47	0.32	
Unit 2 Main Entrance	Illuminance	Lux	85	183	30	0.35	0.16	
Unit 2 Service Yard	Illuminance	Lux	53	81	22	0.41	0.27	
Unit 3 Additional Parking	Illuminance	Lux	15	37	4	0.26	0.11	
Unit 3 Bin Store	Illuminance	Lux	71	124	42	0.59	0.34	
Unit 3 Building Perimeter	Illuminance	Lux	11	40	1	0.09	0.03	
Unit 3 Car Park	Illuminance	Lux	16	216	5	0.31	0.02	
Unit 3 Cycle Store	Illuminance	Lux	54	99	30	0.56	0.30	
Unit 3 Entrance Area	Illuminance	Lux	12	31	5	0.42	0.16	
Unit 3 Loading Bays	Illuminance	Lux	71	98	30	0.43	0.31	
Unit 3 Main Entrance	Illuminance	Lux	142	191	58	0.41	0.30	
Unit 3 Service Yard	Illuminance	Lux	52	100	23	0.44	0.23	

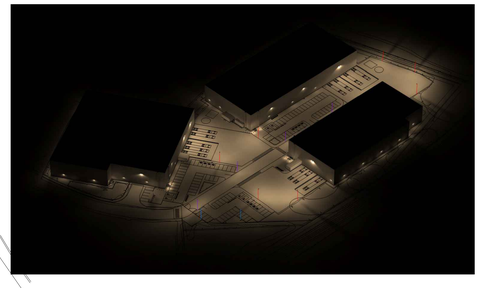

REF A, C, CW, DW

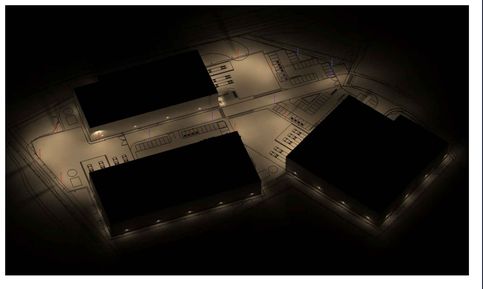

REF B, BW


REF EWE


REF F


REF G





Project Number 2511024DNA Project Title - Concord Business Park Manchester Date 17/11/2025

Lighting Project Solutions
The Outdoor Lighting Specialists

BREEAM®

Derbsby Approved (3700K)	Luminaire Image	Qty	Luminaire	Light Source	Watts (W)	Luminaire Lumens (lm)	Lm/W	LOR	Total Lumens	ULOR	Upward Lumens	Light Engine: Colour Temperature (K)	L Value	B Value	Rated Life (Hrs)	CRI	ILP GN01 - Table 1 & Table 7: Beam Angle	Sky Glow Effect	Glare Effect	- Bollards Only - Source Intensity cd/1000 lm (80° to >90°)	- Bollards Only - % of luminaire lumens (90° - 180°)	CO² Calculation For A Year: ** ART Hour Per Day	CO² (Tonnes)	Kw/Hour
		4	Mini Martin	MRSTE - 100w LED L22 24LED	100.0	12245	122.45	100%	48980	0.0%	0	2700	L90	B10	100,000	>70	66°	Minimum	Some	0	n/a	12	0.16	1752.00
		12	Stork	SRE - 280 LED L35 64LED	280.0	32350	114.82	100%	385800	0.0%	0	2700	L90	B10	100,000	>70	<68°	Minimum	Some	585	n/a	12	3.02	14716.80
		4	Mini Martin	MRSTE - 20w LED L35 24LED	20.0	2827	141.35	100%	11308	0.0%	0	2700	L90	B10	100,000	>70	66°	Minimum	Some	0	n/a	12	0.07	350.40
		3	Mini Martin	MRSTE - 80w LED L35 24LED	80.0	9928	124.10	100%	29784	0.0%	0	2700	L90	B10	100,000	>70	68°	Minimum	Some	0	n/a	12	0.22	1051.20
		41	Finn	FINN - 8w LED PW	8.0	866	108.25	100%	35506	0.0%	0	2700	L80	B10	100,000	>70	62.5°	Minimum	Some	100	n/a	12	0.29	1436.64
		6	Anti Corrosive Batten	19w LED ACF5X5	18.9	2777	146.93	100%	16662	0.0%	0	3000	0	0	100,000	>70	0.00	0.00	0.00	0	0.0%	12	0.10	496.69
		6	Quay	QUAY - 20w LED	16.8	1531	91.13	100%	9186	13.3%	1222	2700	L70	B--	36,000	>70	50°	Minimum	Some	183	8.6%	12	0.09	441.50

BREEAM Summary

GN01 - 2021

** Environmental Zone to be confirmed by assessor **

Environmental Zone	E3

Upward Light Ratio (ULR) - Table 6	Target	Achieved	Status
	5.0%	0.2%	Pass

Note - Not a BREEAM requirement for Cut-Off Lanterns (See POL6 Assessment Criteria above)

Table 4 - Source Intensity (Candelas)

Pre Curfew - A_4 >0.5	36,000		Pass
Post Curfew - A_4 >0.5	1,000		Pass

Table 5 - Light Trespass into Windows (Lux)

Pre Curfew	10		Pass
Post Curfew	2		Pass

Total Installation Lumens	537226
Total Upward Light	0.2%
Total CO2 Per Year (Tonnes)	4
Total Electric Consumption (Kw)	5
Total Electric Consumption Per Year (Kwh)	20245
Average Luminaire Lumens Per Circuit Watt	116

Compliance Status Summary		
Pol 04	Reduction Of Night Time Light Pollution	Pass
Ene 03	Energy Efficient External Lighting	Pass
Hea 01	Internal And External Lighting Levels	Pass

Note - HEA01 in this report only applies to exterior lighting
** ART = (Average Run Time)

Date 17/11/2025