BREEAM New Construction 2018 (UK)

51809 | Great Bear link 56, Deeside - Unit 3

Kingfisher Lighting
Part of the CLADDOL group of companies

	Colour Temperature (K)	Qty	Range	Light Source	Luminaire Lumens (lm)	Watts (W)	Lm/W	LOR	Total Lumens	ULOR	Upward Lumens	CRI	** Add Hour Per Day	CO^2 (Tonnes)	Rm/Year
	4000	8	Zactis	320w LED FWTP	44556	320	137.99	100%	356448	0.0%	0	>70	12	3.77	8409.60
	4000	8	Zactis	320w LED FLOO	46708	320	146.15	100%	374166	0.0%	0	>70	12	2.36	11211.80
	4000	12	Semita Urban	24w LED FL	3000	24	125.00	100%	36000	0.0%	0	>70	12	0.27	1341.84
	4000	2	Viva City PRO	180w LED FWTP	24000	180	133.00	100%	72000	0.0%	0	>70	12	0.00	2240.20
	4000	1	Viva City PRO	60w LED FWTO	8750	60	146.00	100%	8750	0.0%	0	>70	12	0.66	262.00
	4000	4	Newar Urban (Central Post Top)	158w LED 50/70	18579	158	114.17	100%	72336	0.0%	0	>70	12	0.58	2768.56
	4000	14	Quarto 2.0	14.2w LED DC	1675	14	117.96	100%	23450	0.0%	0	>70	12	0.18	670.74
	4000	2	Deco 2.0	15w LED	1860	15	124.00	100%	3720	11.3%	406	>70	12	0.03	131.48

CO^2 Calculation For A Year

Total Installation Lumens	657529.00
Total Upward Light	0.00%
Total CO^2 Per Year (Tonnes)	9.25
Total Electric Consumption (Kw)	9.23
Total Electric Consumption Per Year (Kwh)	22361.14
Average Lumiaires Lumens Per Circuit Watt	137.03

Compliance Status		
Pol 166	Reduction Of Night Time Light Pollution	Pass
Ecn 15	Energy Efficient External Lighting	Pass
Hea 01	Internal And External Lighting Levels	Pass

Note - IEAT is this report only applies to exterior lighting
* AET = (Average Run Time)

Date 15/05/2024

ONS - 2011			
Table 1 Compliance			
Environmental Zone	E3		
Sky Glow	Target	Achieved	Status
	5.00%	0.00%	Pass
Source Intensity (Candelas)			
Pre Curfew	10,000		Pass
Post Curfew	1,000		Pass
Light Trespass Into Windows (Lux)			
Pre Curfew	10		Pass
Post Curfew	2		Pass
Building Luminance (cd/m²)	10		Pass

Note - we have not been able to calculate this as no housing is shown on the drawing
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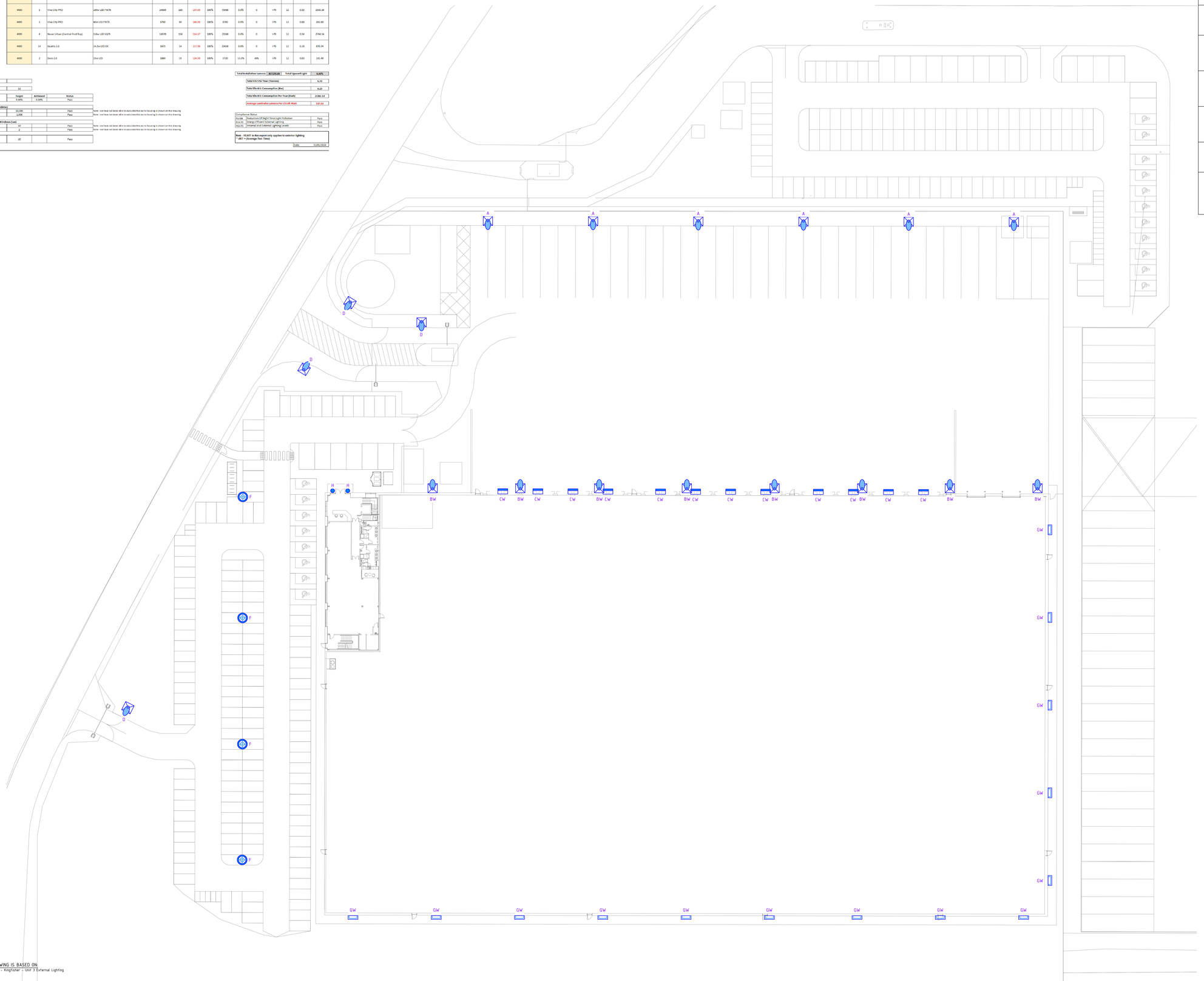
CALCULATION SUMMARY									
LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	UNIFORMITY (MIN/AVG)	DIVERSITY (MIN/MAX)	METER TYPE	DESCRIPTION
BUILDING PERIMETER	ILLUMINANCE	LUX	13.21	27	4	0.30	0.15	HORIZONTAL	
CAR PARK	ILLUMINANCE	LUX	15.20	38	5	0.33	0.13	HORIZONTAL	
HGV ACCESS ROAD	ILLUMINANCE	LUX	62.31	84	33	0.53	0.39	HORIZONTAL	
LOADING BAYS	ILLUMINANCE	LUX	70.28	93	39	0.55	0.42	HORIZONTAL	
MAIN ENTRANCE	ILLUMINANCE	LUX	127.00	148	73	0.60	0.49	HORIZONTAL	
SERVICE YARD	ILLUMINANCE	LUX	50.05	92	23	0.46	0.25	HORIZONTAL	



LUMINAIRE REF	IMAGE	DSCRIPTION
A		320W LED 4000K ZACTIS FLOOD 805mA WITH FW70 FORWARD THROW OPTIC COLUMN MOUNTED AT 10m TM65 EMBODIED CARBON = 289KG CO^2E - TM66 CIRCULAR ECONOMY SCORE = 2.9 (2.5-4.0 EXCELLENT CIRCULARITY)
BW		320W LED 4000K ZACTIS FLOOD 805mA WITH FLSO FLOOD OPTIC WALL MOUNTED AT 15m TM65 EMBODIED CARBON = 289KG CO^2E - TM66 CIRCULAR ECONOMY SCORE = 2.9 (2.5-4.0 EXCELLENT CIRCULARITY)
CW		24W LED 4000K SEMITA URBAN 920mA WITH FL FLOOD OPTIC WALL MOUNTED AT 6m TM65 EMBODIED CARBON = 44KG CO^2E - TM66 CIRCULAR ECONOMY SCORE = 2.8 (2.5-4.0 EXCELLENT CIRCULARITY)
D		180W LED 4000K VIVA-CITY PRO 880mA WITH FW70 FORWARD THROW OPTIC COLUMN MOUNTED AT 8m TM65 EMBODIED CARBON = 182KG CO^2E - TM66 CIRCULAR ECONOMY SCORE = 2.9 (2.5-4.0 EXCELLENT CIRCULARITY)
E		60W LED 4000K VIVA-CITY PRO 610mA WITH FW70 FORWARD THROW OPTIC COLUMN MOUNTED AT 8m TM65 EMBODIED CARBON = 107KG CO^2E - TM66 CIRCULAR ECONOMY SCORE = 2.9 (2.5-4.0 EXCELLENT CIRCULARITY)
F		158W LED 4000K 750mA NAVAR URBAN POST TOP CENTRE MOUNTED WITH SQTO OPTIC COLUMN MOUNTED AT 8m TM65 EMBODIED CARBON = 270KG CO^2E - TM66 CIRCULAR ECONOMY SCORE = 2.9 (2.5-4.0 EXCELLENT CIRCULARITY)
GW		14.2W LED 4000K 500mA QUARTO 2.0 WITH OC PATH OPTIC WALL MOUNTED AT 4m TM65 EMBODIED CARBON = 17KG CO^2E - TM66 CIRCULAR ECONOMY SCORE = 2.8 (2.5-4.0 EXCELLENT CIRCULARITY)
H		15W LED 4000K 500mA DECO 2.0 WITH RADIAL OPTIC TM65 EMBODIED CARBON = 97KG CO^2E - TM66 CIRCULAR ECONOMY SCORE = 1.9 (1.5 TO 2.5 DEFINITE/SUBSTANTIAL PROGRESS TO CIRCULARITY)

NOTES

1. FOR BUILDING SERVICES INFORMATION ONLY.
2. THIS DRAWING SHALL BE READ IN COLOUR.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ELECTRICAL SPECIFICATION AND ALL OTHER RELEVANT DOCUMENTS.
4. EMERGENCY LIGHTING IS TO BE AN AUTOMATIC TEST SYSTEM.
5. A MINIMUM 30% COLOUR DIFFERENTIAL BETWEEN THE ACCESSORY FRONT PLATE AND ITS MOUNTING SURFACE TO COMPLY WITH DDA REQUIREMENTS.
6. ALL LIGHT SWITCHES ARE TO BE MOUNTED AT 1100mm AFFL TO THE CENTRE UNLESS OTHERWISE STATED.
7. LIGHTING LAYOUT IS INDICATIVE ONLY AND SUBJECT TO FULLY DETAILED DESIGN + COORDINATION.
8. LIGHTING/EMG LIGHTING IS TO BE REVIEWED AGAINST THE FIRE STRATEGY REPORT AND EVACUATION PLAN TO ASSESS COMPLIANCE.
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THIS DRAWING IS BASED ON:
51809/AE/A - Kingfisher - Unit 3 External Lighting

NOT TO SCALE

Rev.	Description	Date
P02	ISSUED FOR PLANNING	02.02.24
P01	ISSUED FOR PLANNING	02.02.24

Anderson Green
building services consultants
www.andersongreen.co.uk
Nottingham 0115 973 4141
Sheffield 0114 243 3913
London 0207 831 6941
Leeds 0113 243 2672

Client: great bear Part of the CLINIGROUP

Stage: STAGE 1

Project: GREAT BEAR
LINK 56, DEESIDE
UNIT 3

Title: EXTERNAL LIGHTING

Eng: K.Reiter	QA Eng: C.Bishop
BIM Tech: S.Taylor	QA BIM: V.Denisovas

Security Classification:	Drawing Start Date:	Size:	Scale:
UNCLASSIFIED	02.02.2024	A0	1:300

Project No. - Originator - Function - Level - Form - Discipline - Drawing No.	Status:	Revision:
NT1105-AGL-24-XX-D-E-0001	S2	P02

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BREEAM New Construction 2018 (UK)

51809 | Great Bear link 56, Deeside - Unit 3

Kingfisher Lighting
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	Colour Temperature (K)	Qty	Range	Light Source	Luminaire Lumens (lm)	Watts (W)	Lm/W	LOR	Total Lumens	ULOR	Upward Lumens	CRI	** Add Hour Per Day	CO2 Calculation For A Year CO2 (Tonnes)	Rm/Year
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Date 15/05/2024

CDM5 - 2011	
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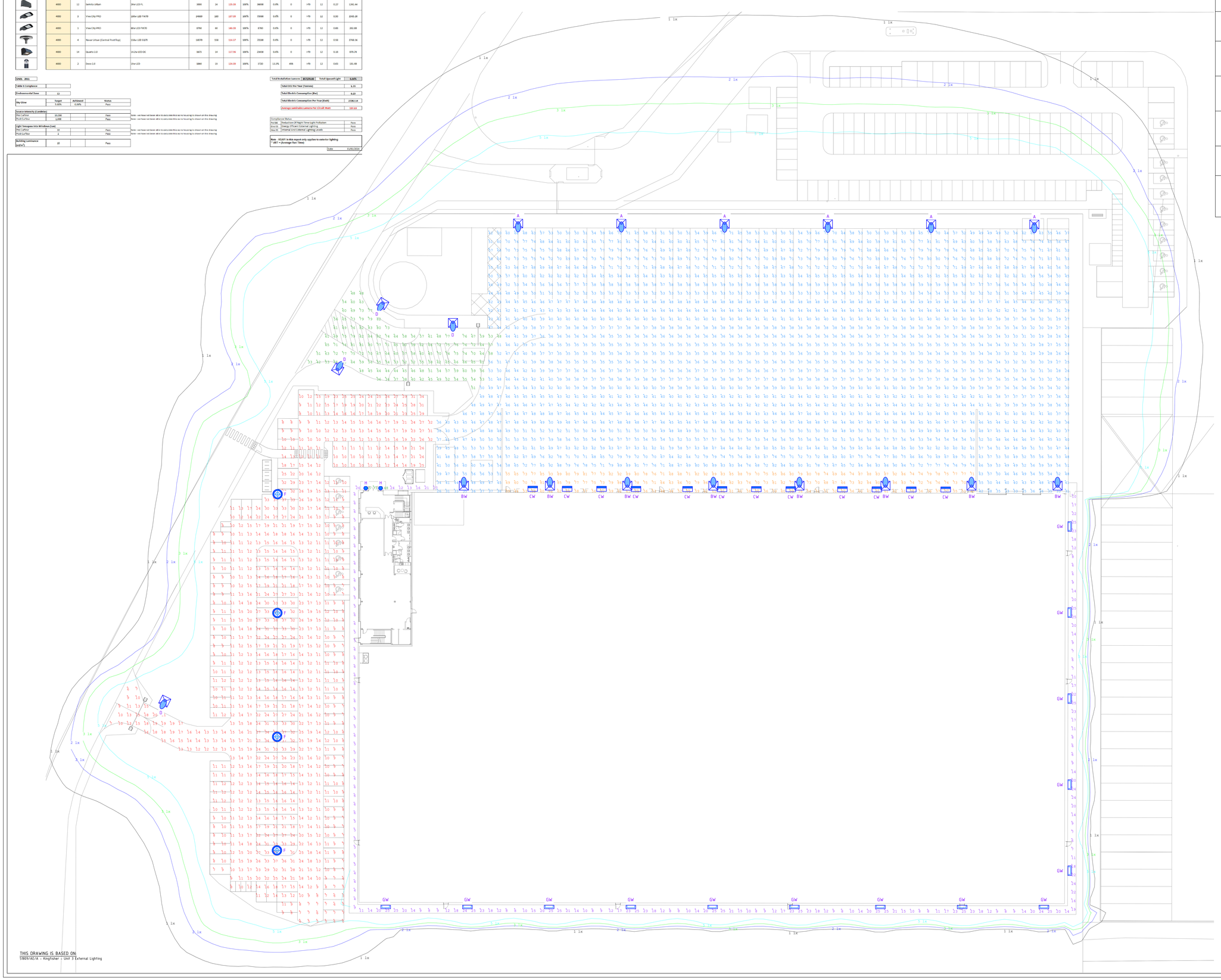

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Client: great bear — Part of the CLARION GROUP

Stage: STAGE 1

Project: GREAT BEAR
LINK 56, DEESIDE
UNIT 3

Title: EXTERNAL LIGHTING
LUX LEVELS

Eng	QA Eng
K.Reiter	C.Bishop
BIM Tech	QA BIM
S.Taylor	V.Denisovas

Security Classification	Drawing Start Date	Size	Scale
UNCLASSIFIED	02.02.2024	A0	1:300

Project No. - Originator - Function - Level - Form - Discipline - Drawing No.	Status	Revision
NT1105-AGL-24-XX-D-E-0002	S2	P02

REQUIOUTPUT.DWG - TEMPLATE - 7
TEMPLATE - 7.0