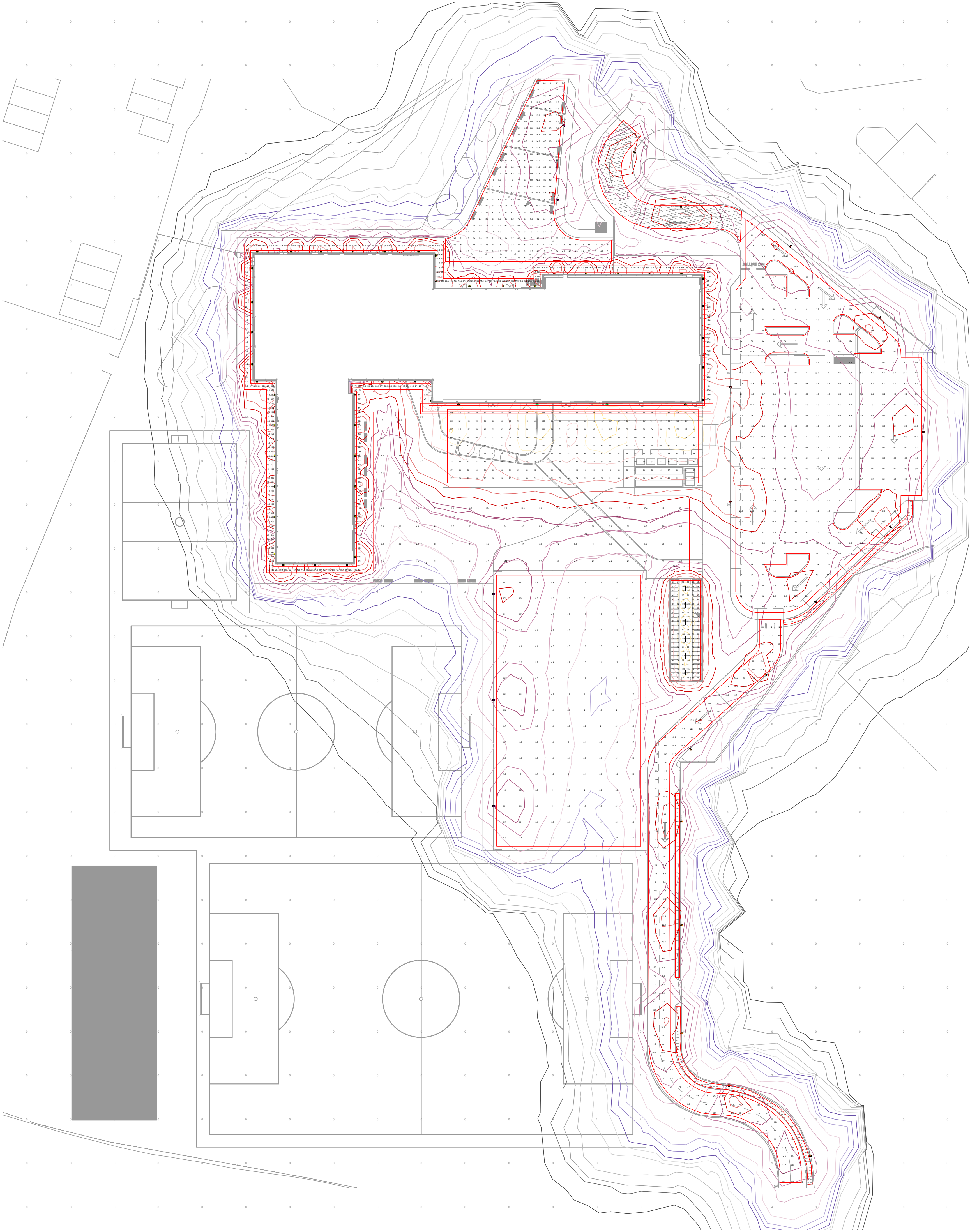


Symbol	Qty	Article number	Article name	Equipment
	44	SPXAH14K	SPECTRE WX	LED 9 W
	5	SIPAHE14K	SIROCCO PARK	LED 35 W
	9	SIPSHE14K	SIROCCO PARK	LED 35 W
	7	SIPAHE24K	SIROCCO PARK	LED 60 W
	6	ACH34K	ACL INDUSTRY	LED 27 W
	4	SEMH44KG	SELISE MAXI	LED 419 W



THIS DOCUMENT IS SUPPLIED IN STRICT CONFIDENCE AND MUST NOT BE LENT, REPRODUCED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE PRIOR WRITTEN CONSENT OF WHITECROFT LIGHTING LTD.

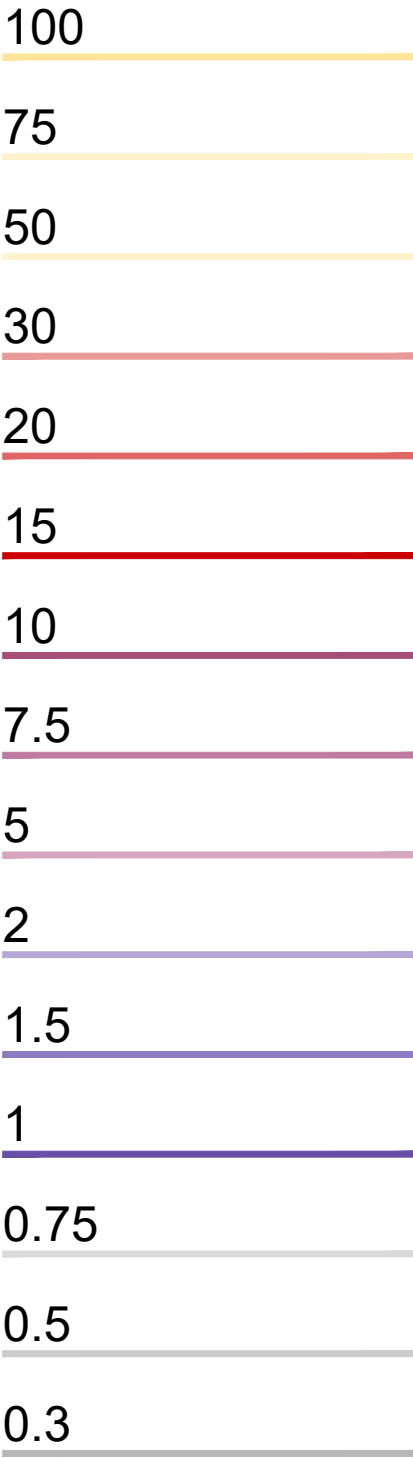
CDM 2015 - Designers Risk Assessment

The following information is provided in accordance with Regulation 9 of the Construction (Design Management) Regulations 2015:

- No unusual or significant risks have been identified.
- Installation of electrical services to lighting, contractor to prepare appropriate Risk assessment and method statements to establish safe method of works.
- Installation of lighting may involve working at height, contractor to prepare appropriate Risk assessment and method statements to establish safe method of works.
- Product specific Installation instructions should be adhered to, in order to ensure compliance with the requirements of BS EN 60598 with regards to electrical and mechanical safety of the luminaire.
- Refer to the Principal Designer for any project specific Health & Safety information.

GENERAL NOTES:

- Do not scale from this drawing.
- All dimensions are in millimeters unless otherwise noted.
- All dimensions are to be confirmed.
- This drawing does not necessarily contain all the required information required to communicate the overall design intent or construction detail - therefore drawings should be read in conjunction with all other relevant documentation and specifications.
- Any apparent errors or differences shall be brought to the attention of Whitecroft Lighting as soon as practicable.



BREEAM Pol 4 - Reduction of Night Time Light Pollution Non-Domestic Buildings

One BREEAM credit is awarded where the lighting design is consistent with the criteria below

Demonstrate compliance with B2 Guidance Notes for the Reduction of Obtrusive Light (B2G1)

Zone	Surroundings	Lighting Environment	Examples
E0	Protected	Dark	UNESCO World Heritage, SPA, Dark Sky Parks
E1	Natural	Intensely dark	Natural Parks, Areas of Outstanding Natural Beauty etc.
E2	Rural	Low distant brightness	Village or relatively dark rural landscapes
E3	Suburban	Medium distant brightness	Small town centres or suburban locations
E4	Urban	High distant brightness	Township centres with high levels of light time activity

- General action related to the B2 Guidance
- Values for each Surroundings Requirement can only be demonstrated with full detailed drawings showing relevant properties. Please see Lighting Calculations for further details.
 - No building is lit directly on a night time feature so Building Luminance requirements are not applicable.
 - This applies to each luminaire in the potentially obtrusive direction, outside of the area lit by the luminaire. The design team are to consider glare and for some applications with limited mounting heights, may be difficult to achieve.
 - External lighting (except for safety and security) should be automatically switched off between 11pm and 5am (or earlier) to gain the BREEAM credit.
 - Safety and security lighting between 11pm and 5am should meet the 'Post-Curtain' targets in Table 2.
 - High time switching control is recommended to achieve compliance post curtain.
 - Luminaire output reduced to 50% where 'Post-Curtain' feature is used.

E3 Project Environmental Zone

Reference	Part Number	Product Type	Time of operation	Range	Lumens	Qty	Light Output Ratio (%)	Upward Light Ratio (%)	Total power (W)	Total available lumens	Max. source intensity (cd/1000 sqm)	Max. source intensity (cd)	Max. source intensity (cd) Post-Curtain	Circuit Watts	Total Watts
SPX21180	SPECTRE WX 180	Pre-Curtain	LED	1110	44	10	100.0%	0.00%	0.00	25150.0	560	2360	17.5	237.5	
SIPAHE14K	SIROCCO PARK 14K	Pre-Curtain	LED	3031	5	100.0%	0.00%	0.00	25150.0	560	2360	35.3	176.5		
SIPAHE24K	SIROCCO PARK 24K	Pre-Curtain	LED	7669	7	100.0%	0.00%	0.00	25150.0	560	2360	60.5	423.5		
SIPAHE14K	SIROCCO PARK 14K	Pre-Curtain	LED	3210	9	100.0%	0.00%	0.00	40800.0	558	3387	35.3	317.7		
ACH34K	ACL INDUSTRY 34K	Pre-Curtain	LED	3685	6	100.0%	6.30%	1461.9	23180.0	262	1132	22.2	162.8		
SEMH44KG	SELISE MAXI 44KG	Pre-Curtain	LED	38009	4	100.0%	0.00%	0.00	144000.0	882	31760	419.5	1676.0		
											2320	324130			
														324130	

BREEAM Ene 01 External Lighting, BREEAM New Construction (Non-Domestic Buildings)

At least 1 BREEAM credit is awarded where the criteria below are met

2015 2016 or 2018, status is shown to the right

Minimum target indicates the minimum average for external luminaires in all areas and with any colour rendition

Target	2015	2016 or 2018
Target	10.0	1.0
Project	31.8	1.0
Pass/Fail	Pass	Pass

Environment Zone	Day time (LUX Max %)	Pre-Curtain	Post-Curtain	Building Luminance (cd/m²) (Pre-Curtain Average, L)
E0	0	0	0	0
E1	0	2	0	2500
E2	2.5	5	1	7500
E3	5.0	10	2	10000
E4	15	25	5	25000

Upward Light (cd/m²)	Source Intensity (cd)
Target	10.0
Project	31.8
Pass/Fail	Pass

R0	Initial calculations and design	11.03.2021	GR
Rev	Description	Date	By

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www.whitecroftlighting.com



Project Name:

BELLE VUE

Drawing Name:

EXTERNAL LIGHTING LAYOUT PLAN

Drawn by:	Checked by:	Date:	Scale:
GR	SR	11.03.2021	1:500 @ A1

Drawing No:

23598 - DWG - EX - 00001

Project No. Type Floor Loc. Sequence

00