

DRAWING NOTES

1. THIS SERVICES DRAWING IS TO BE READ IN CONJUNCTION WITH QODA'S, THE ARCHITECTURAL & STRUCTURAL ENGINEER'S SPECIFICATION / DRAWINGS.

LIGHTING NOTES LIGHTING LAYOUTS

THE LIGHTING HAS BEEN DESIGNED TO MINIMISE LIGHT SPILL AND THE IMPACT ON THE LOCAL ECOLOGY, ENSURING LIGHT SPILE AND ENTRANCES OF THE BAT ACCESS SHAFTS IS KEPT BELOW THE RECOMMENDED VALUES IN BELOW GUIDANCE:

ILP GN01 - THE REDUCTION OF OBTRUSIVE LIGHT
ILP GN08 - BATS AND ARTIFICIAL LIGHTING AT NIGHT

IN THIS SITE SCENARIO, ILLUMINANCE VALUES ARE RECOMMENDED TO BE KEPT AS LOW AS POSSIBLE WITH MAXIMUM VALUES OF 0.2 LUX ON THE HORIZONTAL FLOOR ACCESS SHAFT AND 0.4 LUX ON THE

VERTICAL ACCESS SHAFT.

THE MOUNTING LOCATIONS AND HEIGHTS OF THE LUMINAIRES HAVE BEEN CAREFULLY CONSIDERED TO ENSURE LIGHT SPILL IS CONTROLLED AS MUCH AS POSSIBLE.

COLOUR TEMPERATURE

THE LANDSCAPE LUMINAIRES ARE PROPOSED TO BE 2700K.

LUMINAIRES THE BELOW SPECIFIED LUMINAIRES HAVE AN UPWARD LIGHT RATIO

OF LESS THAT 5%, AS RECOMMENDED FOR AND E3 ENVIRONMENTAL ZONE WITHIN 'ILP GN01'.

EXTERNAL CANOPY LUMINAIRE - EX1 MANUFACTURER MODEL DESCRIPTION IGUZZINI LASERBLADE INOUT LINEAR DOWNLIGHT TYPICAL OUTPUT 2700K 1898lm MOUNTING HEIGHT CANOPY MOUNTED EXTERNAL BOLLARD LUMINAIRE - EX3 MANUFACTURER SELUX MODEL INULA DESCRIPTION BOLLARD TYPICAL OUTPUT 2700K 900lm

MOUNTING HEIGHT 800mm

EXTERNAL CANOPY LUMINAIRE - EX7 MANUFACTURER LED LINEAR MODEL DESCRIPTION XOOLIGHT LINEAR LINE OF LIGHT TYPICAL OUTPUT 2700K 690lm

MOUNTING HEIGHT CANOPY MOUNTED



IN ADDITION TO THE ABOVE, THE FOLLWING LUMINAIRES HAVE BEEN SPECIFIED FOR FEATURE LIGHTING. CAREFUL CONSIDERATION HAS BEEN GIVEN TO THEIR LOCATIONS, OPTICAL CONTROL AND OUTPUTS

TO MINIMISE UPWARD GN01'.	LIGHT WASTE, AS RECOMMEND)ed in 'ii
EXTERNAL UPLIGHT LUN	MINAIRE - EX2	
MANUFACTURER MODEL DESCRIPTION TYPICAL OUTPUT MOUNTING HEIGHT	IGUZZINI iPro SPOTLIGHT 2700K 494lm MOUNTED ON TOP OF CANOPY LIGHTING FACADE	
EXTERNAL UPLIGHT LUN	MINAIRE - EX4	
MANUFACTURER MODEL DESCRIPTION TYPICAL OUTPUT MOUNTING HEIGHT	IGUZZINI LIGHT UP BLADE UPLIGHT 2700K 31.2lm IN GROUND	«
EXTERNAL CANOPY LUN	/INAIRE - EX5	
MANUFACTURER MODEL DESCRIPTION	COLLINGWOOD GLO45X30 UPLIGHT	

SWITCHING, CONTROL AND HOURS OF OPERATION EXTERNAL LIGHTING TO BE CONTROLLED VIA TIME CLOCK AND PIR SENSORS.

CALCULATION AND ASSUMPTIONS

TYPICAL OUTPUT 2700K 610lm MOUNTING HEIGHT IN GROUND

A MODEL OF THE SITE WAS CREATED IN LIGHTING CALCULATION SOFTWARE AND THE PROPOSED EXTERNAL LIGHTING APPLIED. A MAINTENANCE FACTOR OF 1 WAS APPLIED TO THE CALCULATION TO ENSURE A WORST CASE SCENARIO WAS CALCULATED.

HORIZONTAL ILLUMINANCE

A HORIZONTAL CALCULATION PLANE WAS LOCATED AT FLOOR LEVEL ACROSS THE SITE, THE RESULTS OF WHICH HAVE BEEN SHOWN IN THE FORM OF ISOLINES ON THE ADJACENT DRAWING. ISOLUX KEY

 0.2 LUX
 0.5 LUX
1 LUX
 5 LUX
 10 LUX

A LOCAL HORIZONTAL CALCULATION PLANE WAS ALSO LOCATED AT THE SITE OF THE FLOOR ACCESS SHAFT, AS NOTED ON THE ADJACENT DRAWING, THE RESULTS OF WHICH CAN BE SEEN BELOW:

HORIZONTAL FLOOR ACCESS SHAFT MAXIMUM ILLUMINANCE - 0.1 LUX (MAX 0.2 LUX RECOMMENDED)

VERTICAL ILLUMINANCE

A LOCAL VERTICAL CALCULATION PLANE WAS ALSO LOCATED AT THE SITE OF THE VERTICAL ACCESS SHAFT, AS NOTED ON THE ADJACENT DRAWING, THE RESULTS OF WHICH CAN BE SEEN BELOW: VERTICAL ACCESS SHAFT MAXIMUM ILLUMINANCE - 0.22 LUX (MAX 0.4 LUX RECOMMENDED)

DO NOT SCALE								
P4	PLANNING ISSUE	13.10.2023						
P3	PLANNING ISSUE	02.10.2023						
P2	PLANNING ISSUE	29.09.2023						
P1	PLANNING ISSUE	27.09.2023						
Rev	Description	Date						
OODA Mechanical Engineering QODA Net Zero QODA Net Zero QODA Light www.qodaconsulting.com enquiries@qodaconsulting.com								
Clier	nt:							
Alfred Gillet Trust								
Project:								

Alfred Gillet Trust Museum

Drawing Title: Electrical Services Electrical External Lighting

Isolux Contour Plan

Desi	gned		Drawn:		Checked:		Scale:	Paper Size:	
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