

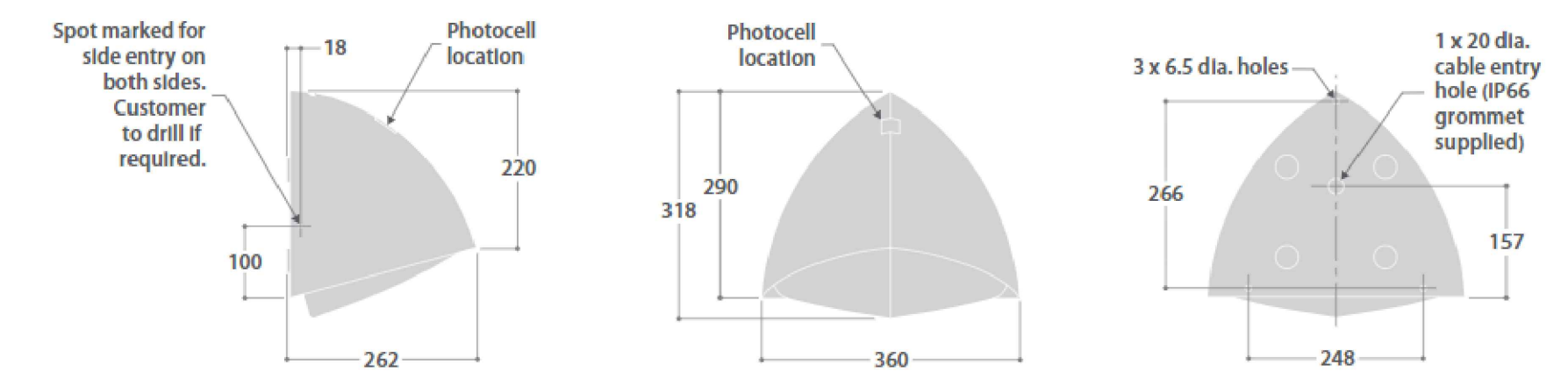
ELECTRICAL LEGEND

LIGHTING (SWITCHING ARRANGEMENTS TO BE VERIFIED ON SITE BY CONTRACTOR)

#G 1 WAY, SWITCH (# = NO. OF GANGS)
#G 2 WAY, SWITCH (# = NO. OF GANGS)
D = DIMMER SWITCH

WHERE SWITCHES ARE GROUPED TOGETHER, THESE SHALL BE INSTALLED IN A MULTI-GANG PLATE

☎ PULL CORD



PROPOSED LUMINAIRES

EX1 - 8W WIDE DISTRIBUTION

High performance wall mounted bulkhead manufactured from strong die-cast LM2 aluminium full polyester powder coated graphite with silver option (RAL9006) and wide distribution. High impact resistant UV stabilised prismatic polycarbonate or borosilicate glass front refractor options, IP66. LED light engine providing 67,000 hour life, 4000K CRI 80+ LUX Guard LED PCB protection. Single or twin back-to-back 60mm dia. pole mounting options. Control gear and LED circuit boards replaceable for future maintenance. Manufactured in the United Kingdom.

DESIGN PHILOSOPHY

THE EXTERNAL LIGHTING SCHEME HAS BEEN DESIGNED TO MEET THE ASPIRATIONS OF THE FOLLOWING GUIDES & CODES;

- BS EN 12464-2 Lighting of Work Places – Outdoor
- BS8300-1 External Buildings
- CIBSE LIGHTING CODES
- INSTITUTION OF LIGHTING PROFESSIONALS CODES

THE PROPOSED SCHEME IS TO PROVIDE ILLUMINATION LEVELS TO ALLOW FOR SAFE MOVEMENT OF PEOPLE. BUILDING PERIMETER ILLUMINATION LEVELS ARE TO PROVIDE SAFE AND SECURE SURROUNDINGS AND ILLUMINATION LEVELS FOR EXTERNAL CCTV SCHEME.

THE PROPOSED BUILDING IS 4.5m HIGH. IT IS PROPOSED TO KEEP ALL EXTERNAL LUMINAIRES BELOW THIS HEIGHT TO MINIMISE LIGHT POLLUTION AND GLARE. THE PROPOSED MOUNTING HEIGHTS ARE TAKEN FROM THE ROAD/PATH SURFACE. PROPOSED MOUNTING HEIGHTS ARE;

- BUILDING MOUNTED – 3m

LIGHTING CONTROL PHILOSOPHY

THE EXTERNAL LIGHTING SCHEME WILL OPERATE AS BUILDING PERIMETER LIGHTING.

THE CONTROL OF THE LIGHTING SHALL BY PIR DETECTION ONLY. THE PIR SENSOR SHALL DETECT PERSONS APPROACHING WITHIN 20m OF THE BUILDING AND SHALL SWITCH ON THE EXTERNAL LIGHTING FOR AN ADJUSTABLE TIME PERIOD. TIME SHALL SET AT 5 MINUTES AT COMPLETION.

Symbol	Quantity	Article name	Equipment
EX1	4	Realta LED	1xRealta LED - 8W - Wide Distribution - Polycarbonate Cover - 4000K 8 W
E			3 Hour Battery Backup

- POWER**
- DISTRIBUTION BOARD
 - SWITCHED FUSED CONNECTION UNIT
 - UNSWITCHED FUSED CONNECTION UNIT
 - TWIN SWITCHED 13A, SOCKET OUTLET
 - SHAVER SOCKET OUTLET
 - LAMP SOCKET
 - UNSWITCHED SINGLE SOCKET OUTLET
 - COOKER CONTROL (DOUBLE POLE SWITCH)
 - COOKER CONNECTION UNIT
 - EXTRACT FAN
 - BACK BOX ONLY
 - ISOLATOR WITH ATTRIBUTES FOR RATING & NO. OF POLES
 - DOUBLE POLE SWITCH
 - TRIPLE POLE ENGRAVED FAN ISOLATOR
- FIRE**
- SMOKE DETECTOR C/W SOUNDER BEACON
 - HEAT DETECTOR C/W SOUNDER BEACON
 - MULTI HEAT/SMOKE DETECTOR C/W SOUNDER & FLASHING BEACON
 - CARBON MONOXIDE DETECTOR
 - MANUAL CALL POINT
 - FIRE ALARM PANEL

FIRE ALARM CATEGORY

FIRE ALARM CATEGORY HAS BEEN BASED ON A GRADE L1. THIS SHALL BE CONFIRMED WITH FIRE OFFICER AND BUILDING INSURANCE COMPANY

- SECURITY**
- DOOR ENTRY KEYPAD
 - INTRUDER ALARM PANEL
 - DOOR BELL SOUNDER
 - INTERCOM
 - DOOR RELEASE MECHANISM/BUTTON
 - DUAL TECHNOLOGY MOTION DETECTOR
 - DOOR CONTACT
 - PANIC ALARM

- COMMUNICATIONS**
- OUTLET (* = NO. OF GANGS)
 - DISTRIBUTION POINT
 - DISTRIBUTION RACK
 - TV AMPLIFIER

COMMUNICATIONS OUTLET

= TYPE/QTY:
= TYPE/QTY:
D# = RJ45 DATA
T# = RJ11 TELEPHONE
TV = TELEVISION
V = VIDEO
WIFI = WIRELESS ACCESS
A = AUDIO
TVM = MASTER TELEVISION AERIAL
AND SKY Q POINT

ELECTRICAL ACCESSORIES MOUNTING & FINISHES

USB = 13A TWIN SWITCHED SOCKET WITH 2 NUMBER USB PORTS
SKY = SINGLE OUTLET WITH TWIN F-TYPE SATELLITE CONNECTIONS
TV/FM = SINGLE OUTLET WITH FM AND TV OUTLET
QUAD = 4-GANG COMBINATION PLATE CARRIES 2X 2-GANG, 13A DP SWITCHED SOCKETS, PLUS A QUAD TV, FM/DAB, SATELLITE OUTLET, SINGLE TV (IEC FEMALE) AND AN ADDITIONAL TELEPHONE SOCKET.
W = WHITE FINISH
B = BRASS
MC = METALCLAD FINISH
BSS = BRUSHED STAINLESS STEEL FINISH
S = SURFACE MOUNTED
F = FLUSH MOUNTED
ALL ACCESSORIES ARE BRASS FLUSH MOUNTED UNLESS DENOTED OTHERWISE

- KEY**
- HT = ELECTRIC HEATER
 - WH = WATER HEATER

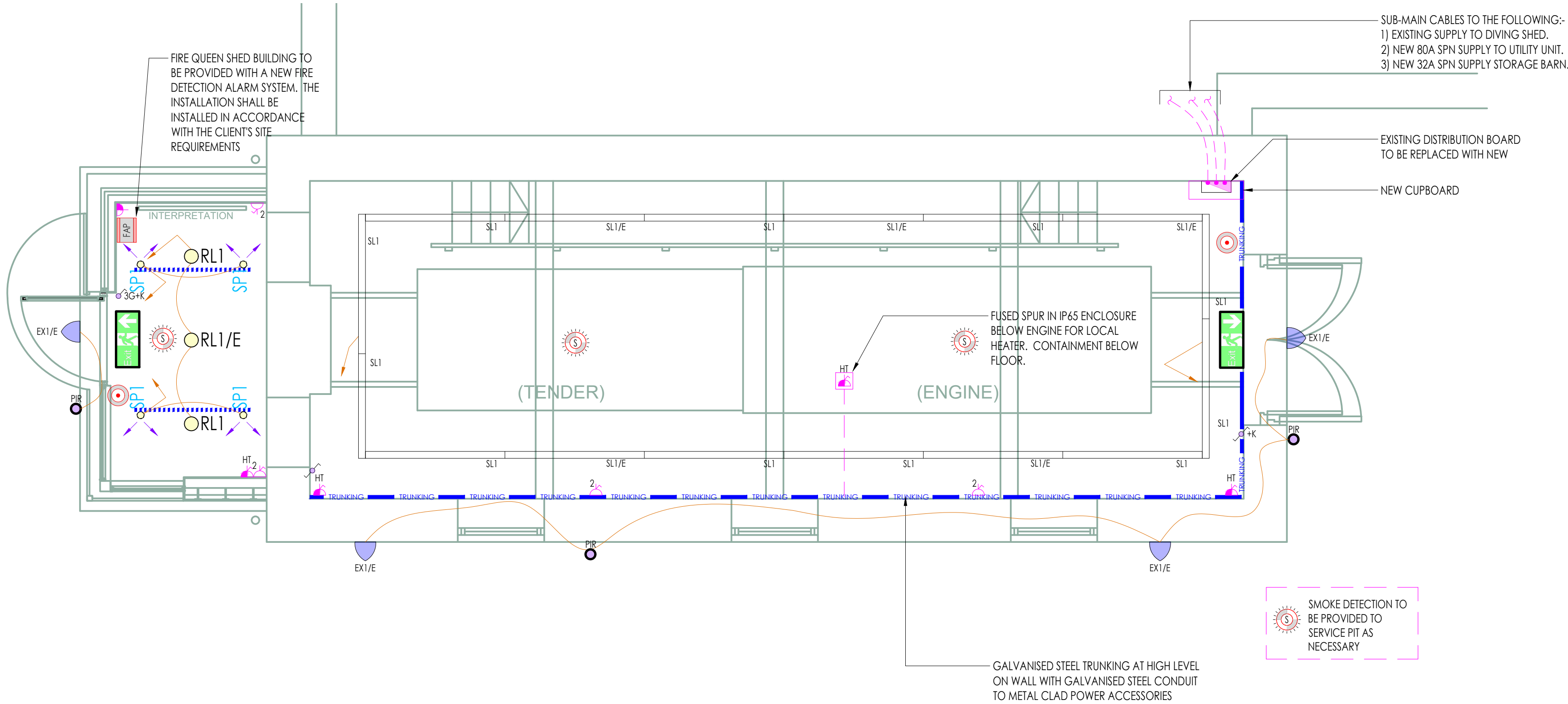
THIS DRAWING IS FOR DESIGN INTENT PURPOSES ONLY AND SHOWS INDICATIVE REQUIREMENTS. THE CONTRACTOR IS TO UNDERTAKE ALL DESIGN DEVELOPMENT AND DETAILED DESIGN.

LIGHTING DESIGN PARAMETERS

MAINS LIGHTING TO BE DESIGNED TO REQUIREMENTS OF CIBSE/BS12464 WITH APPROPRIATE LUX LEVELS NECESSARY FOR THE TYPE OF SPACE

EMERGENCY LIGHTING

EMERGENCY LIGHTING TO BE DESIGNED TO BS5266. THE EMERGENCY LIGHTING SYSTEM SHALL HAVE A KEY SWITCH TESTING FACILITY.



LUMINAIRE SCHEDULE - INDICATIVE INFORMATION SUBJECT TO DETAILED DESIGN											
REF	MANUFACTURER	MODEL / FAMILY	SIZE (mm) (L x W x H) APPROX	MOUNTING	LAMP LUMENS WATTAGE lm/W BEAM COLOUR CRI	DIFFUSER	COLOUR	WARRANTY	DIMMABLE	NOTES	
FE1	DEXTRA	EXIT SIGN	400 x 65 x 200	SURFACE	217 5.8 1.6 - 6000 >80	IP20	WHITE	5 YRS	NO	E - 3 HOUR EMERGENCY	
RL1	DEXTRA	BTEC-L13	2500 x 75H (200-2400 CUT OUT)	RECESSED	1103 9.1 121 60° 4000 >80	IP40	WHITE	5 YRS	YES	E - 3 HOUR EMERGENCY	
SL1	DEXTRA	RUNWAY SUSPENDED	96 x 65 x DESIGN LENGTH	SUSPENDED	AS PART OF DETAILED DESIGN	OPAL	GREY	5 YRS	YES	E - 3 HOUR EMERGENCY	
SP1	DEXTRA	COULIS MAXI SPOT	Ø92 X 200	TRACK	AS PART OF DETAILED DESIGN	IP20	GREY	5 YRS	YES		
AL1	DEXTRA	AMESL20 MET	320 x 320 x 110	SURFACE	AS PART OF DETAILED DESIGN	IP65	WHITE	5 YRS	YES		
LED1	LIGHT GROUP	LED STRIP IP65	LED STRIP IN ALUMINIUM PROFILE WITH DIFFUSER	IN ALU C PROFILE	800/m 8W/m 120° 2700K	IP65	WHITE	5 YRS	YES		

ALL LUMINAIRES, STYLE, COLOUR AND FINISH TO BE APPROVED BY CLIENT, ARCHITECT AND ENGINEER PRIOR TO ORDERING. E DENOTES 3 HOUR EMERGENCY VERSION. LUMINAIRES TO BE DALI DIMMING COMPATIBLE

NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ELECTRICAL SPECIFICATION & DRAWINGS.
- THE POSITION OF EXISTING & NEW ELECTRICAL SERVICES IS INDICATIVE. THE CONTRACTOR SHALL INCLUDE TO CO-ORDINATE THE INSTALLATION OF THE WATER SERVICES WITH ALL SERVICES LOCATED WITHIN THE LOCAL INFRASTRUCTURE.
- ALL EXTERNAL WORKS SHALL BE INSTALLED TO NATIONAL JOINTY UTILITIES GUIDELINES (NJUG).
- ALL WORKS TO BE UNDERTAKEN WITH CLIENT'S SITE REQUIREMENTS
- ACCESS CHAMBERS SHALL BE PROVIDED AT EACH JUNCTION AND ALONG INTERVALS TO ALLOW SUITABLE CABLE PULLING. ACCESS CHAMBERS SHALL BE PLASTIC WITHIN SOFT LANDSCAPING AREAS AND CONCRETE IN HARD LANDSCAPING AREAS.
- AT EVERY DUCT ENTRY/EXIT LOCATION, A SPARE DUCT SHALL BE INSTALLED TO MATCH THAT SERVICE TO ALLOW FOR FUTURE INSTALLATIONS.
- ALL DUCTS SHALL BE COLOURED AS DENOTED BELOW;

POWER DUCTS INCOMING/OUTGOING – BLACK
COMMS DUCTS – INCOMING – GREY
COMMS DUCTS – CLIENT – GREEN
LTG DUCTS – CLIENT – ORANGE.

- ALL DUCTS SHALL TERMINATE MIN. 100mm ABOVE FFL. DUCTS SHALL BE CLEAR OF ALL DEBRIS AND WATER ON COMPLETION. ALL DUCTS SHALL BE SEALED TO PREVENT VERMIN INGRESS. ALL DUCTS SHALL HAVE A 2# BLUE NYLON DRAW WIRE INSTALLED ON COMPLETION.
- ALL DUCTS WITH BENDS SHALL BE INSTALLED WITH SLOW BENDING RADIUS TO ALLOW FOR FUTURE INSTALLATION OF CABLES.
 - ALL EQUIPMENT SHALL BE INSTALLED TO THE RELEVANT MANUFACTURERS LITERATURE, AND THEIR RECOMMENDATIONS SHALL BE STRICTLY ADHERED TO.
 - ALL DUCTS/SERVICES SHALL BE INSTALLED IN CLEAN TRENCHES. ALL DUCTS SHALL BE LAID ON SUITABLE BEDDING MATERIAL AND COMPACTED MATERIAL TO CIVIL/STRUCTURAL ENGINEERS AND DUCT MANUFACTURERS RECOMMENDATIONS.

13	JUN'25	INFORMATION ISSUE	KJS
12	MAR'24	INFORMATION ISSUE	KJS
11	JAN'24	INFORMATION ISSUE	KJS

Purpose:
INFORMATION

Subject:
INDICATIVE ELECTRICAL SERVICES LAYOUT

Project:
PARC PADARN LLANBERIS FIRE QUEEN SHED



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