

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

- FC FULL CORD

- POWER**
- DB DISTRIBUTION BOARD
 - SFC SWITCHED FUSED CONNECTION UNIT
 - UFC UNSWITCHED FUSED CONNECTION UNIT
 - TWS TWIN SWITCHED 13A SOCKET OUTLET
 - SSO SHAVER SOCKET OUTLET
 - LAMP SOCKET
 - USO UNSWITCHED SINGLE SOCKET OUTLET
 - CC COOKER CONTROL (DOUBLE POLE SWITCH)
 - CU COOKER CONNECTION UNIT
 - EF EXTRACT FAN
 - BB BACK BOX ONLY
 - ISOLATOR WITH ATTRIBUTES FOR RATING & NO. OF POLES
 - DP DOUBLE POLE SWITCH
 - TFI TRIPLE POLE ENGRAVED FAN ISOLATOR
- FIRE**
- SD SMOKE DETECTOR C/W SOUNDER BEACON
 - HD HEAT DETECTOR C/W SOUNDER BEACON
 - MHS MULTI HEAT/SMOKE DETECTOR C/W SOUNDER & FLASHING BEACON
 - CMDC CARBON MONOXIDE DETECTOR
 - MCP MANUAL CALL POINT
 - FAP 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**
- KEP DOOR ENTRY KEYPAD
 - IAP INTRUDER ALARM PANEL
 - DBS DOOR BELL SOUNDER
 - INT INTERCOM
 - DR DOOR RELEASE MECHANISM/BUTTON
 - DTM DUAL TECHNOLOGY MOTION DETECTOR
 - DC DOOR CONTACT
 - PA PANIC ALARM
- COMMUNICATIONS**
- #* OUTLET (* = NO. OF GANGS)
 - DP DISTRIBUTION POINT
 - DR DISTRIBUTION RACK
 - AMP TV AMPLIFIER
- COMMUNICATIONS OUTLET**
- # = 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

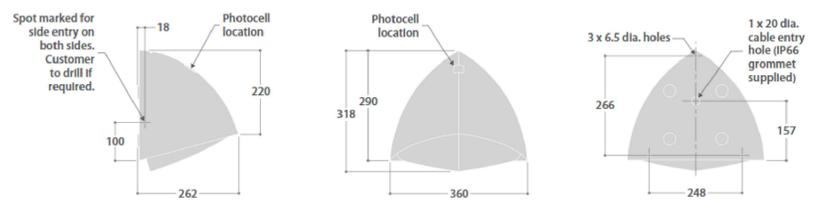
- USB = 13A TWIN SWITCHED SOCKET WITH 2 NUMBER USB PORTS
- SKY = SINGLE OUTLET WITH TWIN F-TYPE SATELLITE CONNECTIONS
- TV/FM = SINGLE OUTLET WITH FM AND TV OUTLET
- QUAD = 4-GANG COMBINATION PLATE CARRIES 2X 2-GANG, 13A DP SWITCHED SOCKETS, PLUS A QUAD TV, FM/DAB, SATELLITE OUTLET, SINGLE TV (IEC FEMALE) 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.



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:

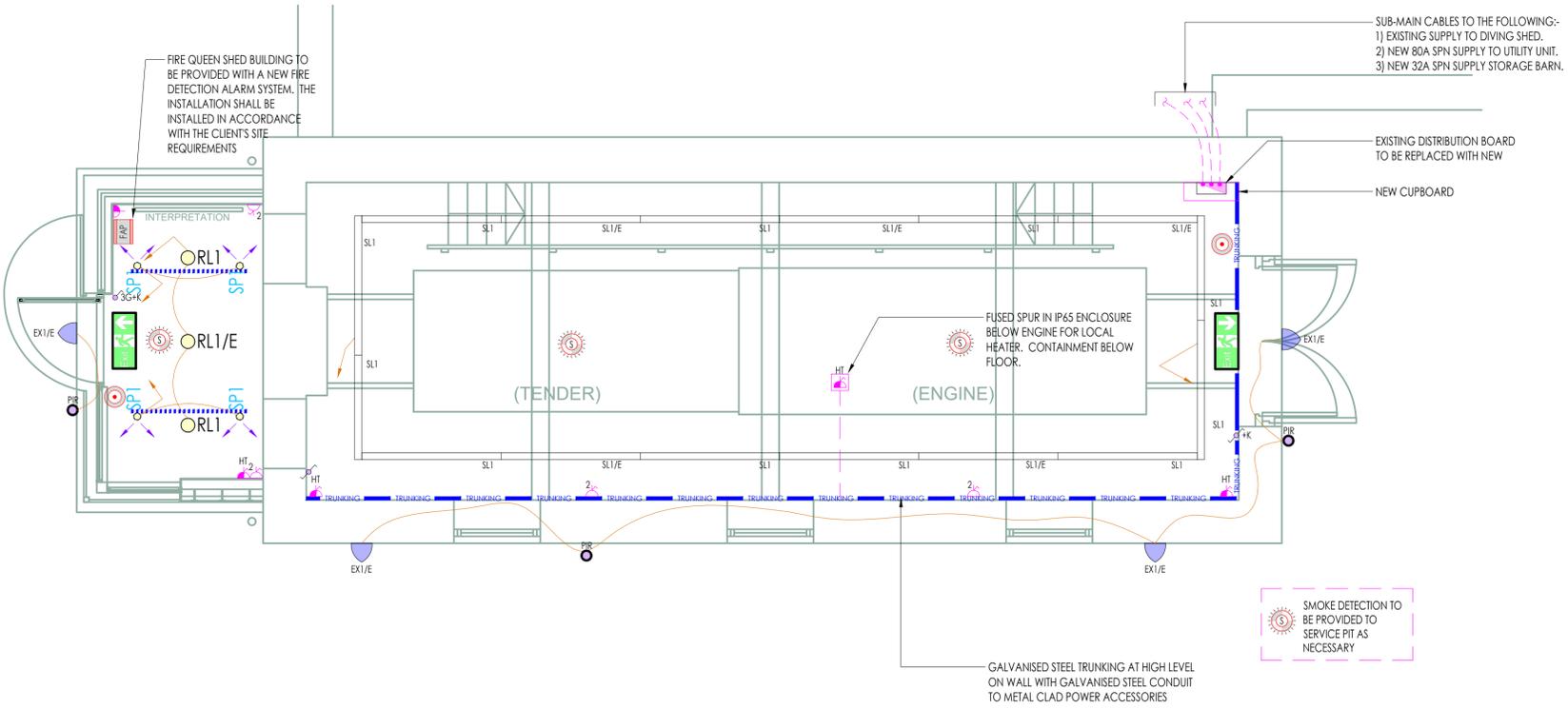
- BUILDING MOUNTED – 3m

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



LUMINAIRE SCHEDULE - INDICATIVE INFORMATION SUBJECT TO DETAILED DESIGN										
REF	MANUFACTURER	MODEL / FAMILY	SIZE (mm) [LxWxH] 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	AMES120 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:
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