

LIGHTING & POWER DRAWINGS
GENERAL NOTES

DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER SERVICES & ARCHITECTURAL DESIGN & ELEVATION DRAWINGS, ALL FINAL MEASUREMENTS ARE TO BE MADE ON-SITE.

ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PRODUCING CO-ORDINATED WORKING DRAWINGS.

IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO PRODUCE THEIR OWN CO-ORDINATED WORKING DRAWINGS.

THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF THE EXTERNAL ELECTRICAL SERVICES INSTALLATIONS WITH THE BUILDING STRUCTURE & ALL OTHER SERVICES.

THE ELECTRICAL CONTRACTOR IS TO ENSURE THAT ALL CONTAINMENT AND CABLING RELATING TO THE ELECTRICAL SERVICES IS INSTALLED TO A GOOD ENGINEERING STANDARD, INCLUDING ITEMS INSTALLED BY THEIR SUB-CONTRACTORS AND SPECIALIST CONTRACTORS.

ALL ELECTRICAL SERVICES CABLING IS TO BE LOW SMOKE (lsf).

ALL SUPPORTS, FIXINGS, CLIPS, CONTAINMENT SYSTEMS ETC ARE INSTALLED TOO AND CONFORM WITH THE CURRENT BRITISH STANDARDS AND CODES OF PRACTICE.

ALL ITEMS RECESSED INTO CEILING TILES I.E. DOWNLIGHTS, SMOKE DETECTORS, PIR'S ETC ARE TO BE SUPPORTED WITH 595mm x 595mm PLYWOOD. ALL CEILING MOUNTED ACCESSORIES ARE TO BE TIGHT TO THE CEILING WITH NO GAPS.

NO CONTAINMENT "TRUNK ROUTES" OR ELECTRICAL SERVICES ARE TO PASS THROUGH STAIRWELLS / STAIRWELL LOBBIES, ONLY SERVICES AND CONTAINMENT SYSTEMS RELATING DIRECTLY TO THE STAIRWELL / STAIRWELL LOBBIES ARE TO BE INSTALLED IN THESE AREAS.

ALL ACCESSORIES INSTALLED WITHIN CEILING VOIDS, ROOF SPACES, SERVICE RISERS, UPS UNITS, PLANT ROOMS ETC. (JOINT BOXES, FUSE SPURS, DATA POINTS ETC). ARE TO BE METAL CLAD BACK BOXES AND FACE PLATES c/w TRAFFOLYTE LABELS INDICATING WHAT THEY SUPPLY / SERVE AND WHERE REQUIRED CIRCUIT REFERENCE.

WHERE A DEVICE WITHIN A CEILING VOID HAS BEEN SHOWN NEAR A RECESSED LIGHT FITTING IN A PLASTERBOARD / MDF CEILING, THE DEVICE IS TO BE INSTALLED IN A POSITION WHERE IT CAN EASILY BE MAINTAINED / INSPECTED ONCE THE LIGHT FITTING HAS BEEN REMOVED FROM THE CEILING.

THE ELECTRICAL CONTRACTOR IS TO ALLOW FOR INSTALLING ALL CONTAINMENT I.E BASKET, TRAY, SUITABLY SIZED CONDUITS INC. DRAWING IN CABLES FOR THE MECHANICAL SERVICES, SPECIALIST CONTRACTORS RELATED TO THE MECHANICAL & ELECTRICAL SERVICES. AND IS TO INCLUDE FOR ALL REQUIRED FIXINGS & SUPPORTS REQUIRED FOR THE PRIMARY & SECONDARY CONTAINMENT INSTALLATIONS

ALL CABLING CONTAINED IN uPVC TRUNKING, DADO TRUNKING IS TO BE SUPPORTED WITH MANUFACTURER APPROVED FIRE RATED SUPPORTS TO MINIMISE THE POSSIBILITY OF PREMATURE CABLE COLLAPSE IN THE EVENT OF FIRE. ALL CABLES RISING VERTICALLY, FACING DOWNWARDS ON CABLE BASKET / TRAY ETC. ARE TO BE SUPPORTED WITH STEEL TIE-WRAPPS, THE USE OF PLASTIC TIE-WRAPPS WILL NOT TO BE ACCEPTED.

THE ELECTRICAL CONTRACTOR IS TO CARRY OUT ALL 400V / 230V CABLE TERMINATIONS.

THE ELECTRICAL CONTRACTOR IS ALLOW FOR ALL FINAL CONNECTIONS INCLUDING BUT NOT LIMITED TO PVC COATED METALLIC FLEXIBLE COPEX CONDUIT, GROMMETS, COMPRESSION GLANDS ETC.

ALL WALL MOUNTED ACCESSORY BOXES INSTALLED IN NON-BRICK WALLS SHALL BE FITTED WITH FIRE RETARDANT PUTTY PADS WITH ACOUSTIC DAMPENING PROPERTIES. THE ELECTRICAL CONTRACTOR IS TO PROVIDE DETAILS OF THEIR PROPOSED MANUFACTURER AND PRODUCT.

THE MAIN CONTRACTOR IS TO FIRE STOP ALL PENETRATIONS THROUGH WALLS, CEILINGS, FLOOR SLABS ETC. PROVIDING DETAILS OF THEIR PROPOSED FIRE STOPPING MATERIALS WITH THE ARCHITECT.

PRIOR TO ORDERING THE ELECTRICAL CONTRACTOR IS TO CONFIRM WITH THE MANUFACTURER / SUPPLIER THAT THE REFERENCE NUMBERS LISTED ON THIS DRAWINGS ARE STILL CURRENT, MATCH THE DESCRIPTIONS IN THE LEGEND AND WILL FORM A COMPLETE AND FUNCTIONAL SYSTEM UPON INSTALLATION.

LIGHTING NOTES

ALL LIGHT FITTINGS ARE TO BE INDEPENDENTLY SUPPORTED TO THE BUILDING STRUCTURE WITH A MINIMUM 2no. SUPPORTS, THE LIGHTS CANNOT RELY ON THE CEILING, SIDE ARMS OR PLYWOOD PATRESSES ETC.

ALL LIGHTS THAT ARE RECESSED INTO CEILING TILES I.E. CIRCULAR DOWN LIGHTS ARE TO HAVE A 595mm x 595mm PLYWOOD PATTRRESS.

LIGHTS RECESSED IN FIRE RATED CEILINGS ARE TO HAVE FIRE HOODS INSTALLED, FIRE RATING TO BE THE SAME AS THE CEILING.

FIRE RATED CEILINGS & FIRE HOODS

FIRE HOODS WITH A RIGID CONSTRUCTION ARE TO BE INSTALLED ON ALL RECESSED & SEMI-RECESSED LIGHT FITTINGS WHEN INSTALLED WITHIN FIRE RATED CEILINGS THEY ARE TO BE MANUFACTURED EITHER BY TENMAT OR ASTROPLAME. UNLESS THERE IS A STRUCTURAL REASON AND THE ELECTRICAL CONTRACTOR HAS AN AGREEMENT IN WRITING BY THE CONSULTING ENGINEER FIRE RETARDANT BLANKET, LOOSE MATERIAL WILL NOT BE ACCEPTED.

ALL PENETRATIONS THROUGH FIRE RATED CEILINGS ARE TO BE FIRE STOPPED WITH A MINIMUM 30 MINUTE PROTECTION. PRIOR TO ORDERING THE ELECTRICAL CONTRACTOR IS TO PROVIDE THE DESIGN TEAM WITH MANUFACTURERS LITERATURE AND WARRANTY DETAILS.

GENERAL SYMBOLS

MC DENOTES ITEM IS TO BE METAL CLAD MK ACCESSORY.
M DENOTES ITEM IS TO BE MK MASTERSEAL ACCESSORY.
N DENOTES INTEGRAL NEON INDICATOR LIGHT REQUIRED
K DENOTES ITEM IS TO BE KEY OPERATED I.E. SOCKET, FUSE SPUR ETC.
CV DENOTES ITEM IS TO BE METAL CLAD INSTALLED WITHIN CEILING VOID.
CM DENOTES ITEM IS TO BE MOUNTED ON THE CEILING, IF POSSIBLE THE ITEM IS TO BE FLUSHED IN c/w 595mmx595mm WOODEN PATRESS.
HL DENOTES ITEM IS TO BE MOUNTED 200mm BELOW CEILING LEVEL
(PROVIDING THE CEILING IS <3000mm AFFL).
LL DENOTES ITEM IS TO BE MOUNTED 500mm AFFL.
IP DENOTES ITEM IS TO BE SUITABLY IP RATED FOR THE LOCAL ENVIRONMENT.
RCD OUTLET IS TO HAVE AN INTEGRAL ACTIVE 30mA RCCD UNIT.
CLNR OUTLET IS FOR THE CLEANERS' AND IF NOT PROTECTED BY 30mA RCBO THEN THE OUTLET IS TO HAVE AN INTEGRAL 30mA RCCD UNIT.
USB? OUTLET IS TO INCORPORATE USB SOCKET ? DENOTES NUMBER OF USB SOCKETS.
MECH SUPPLY FOR MECHANICAL EQUIPMENT / PLANT.
FAS FIRE ALARM SUPPLY, ACCESSORY I.E. FIRE ALARM INTERFACE ETC.
BMS BMS SUPPLY, ACCESSORY ECT.

ARCHITECT IS TO CONFIRM FINAL HEIGHT OF TVs, MONITORS, SCREENS ETC ALL ACCESSORIES TO BE MOUNTED BEHIND TVs, MONITORS ETC.

ALL MEASUREMENTS STATED ARE TO BE TAKEN FROM THE FINISHED SURFACE TO THE CENTRE OF THE ACCESSORY.

LIGHTING SYMBOLS

BROUGHTONS LIGHTING / WINDSOR OUTDOOR WALL LANTERN / RENOVATED BRASS FINISH c/w 9W 4000K LED LAMP
EXISTING
DEXTRA LIGHTING / ECOPAK / SURFACE MOUNTED / 23.4W 4000K LED / IP20
REF: EPK L38
REF: EPK L38 LE3 (B/E)
HACEL LIGHTING - 33W AZUMA MAXI POWER SPOT (CRI 80) C/W ANTI GLARE BAFFLE - BLUETOOTH DIMMING
REF: SP 129606-1
POINTING DOWNWARD
HACEL LIGHTING - 33W AZUMA MAXI POWER SPOT C/W WIDE FLOOD REFLECTOR (USED AS UP-LIGHT) - BLUETOOTH DIMMING
REF: SP 129606-3
POINTING UPWARD
TYPES C & D LIGHTS- THE ELECTRICAL CONTRACTOR IS TO PROVIDE THE CORRECT NUMBER OF SIGNAL BOOSTERS FOR THE BLUETOOTH DIMMING FACILITY
DEXTRA LIGHTING / BETEC SECURE / 15.4W 4000K LED/ RECESSED / IP65 / WHITE FINISH
REF: BTECSE L22
REF: BTECSE L22 LE3 (F/E)
DEXTRA LIGHTING / BETEC SECURE / 8.7W 4000K LED/ RECESSED / IP65 / WHITE FINISH
REF: BTECSE L13
REF: BTECSE L13 LE3 (G/E)
DEXTRA LIGHTING / AMENITY PLUS-SQUARE / 9.5W 4000K LED/ SURFACE / IP65 / WHITE FINISH
REF: AMS L15 W0
REF: AMS L15 LE3 (H/E)
KINGFISHER LIGHTING / STONE SERIES / 19W 4000K LED / IP67 / ASYMMETRICAL ONE-WAY / RECESSED / GRAPHITE GREY FINISH
REF: STO260-1W-840-19-16
MIRROR BALLS / 50cm DISCO BALL SET c/w FIXING EQUIPMENT & 2no. SPOTS
www.mirror-balls.co.uk
TRILUX LIGHTING / PAREDA SUM / 5W 4000K LED / IP65 / 205mm WIDE x 50mm HIGH x 72mm DEEP
REF: AMSL/110-840 1G1P ET
DEXTRA LIGHTING / EX LED EMERGENCY EXIT LIGHT / IP20 / MAINTAINED / ISO7010 SIGNS / 230V
REF: EX LED M3
DEXTRA LIGHTING / LED4S EMERGENCY LIGHT / IP20 / SURFACE / NON-MAINTAINED / 230V
REF: LED4S NM3
230V NON-MAINTAINED 3-HOUR BATTERY PACK c/w FIRE RETARDANT ENCLOSURE.
ALL CABLING IS TO BE WIRED IN FP200 - TO BE INSTALLED IN DISCREET LOCATIONS

LIGHTING SWITCHES LEGEND

CP-ELECTRONIC PIR DETECTOR CONTROLLING LIGHT FITTINGS AS INDICATED ON THE ELECTRICAL LIGHTING DRAWINGS
TO BE COMPATIBLE WITH SWITCHES, LIGHTING CONTROL MODULES ETC. c/w RIGID FIRE HOOD IN FIRE RATED CEILINGS.
F: DENOTES FLUSH PIR UNIT S: DENOTES SURFACE PIR UNIT
?L: DENOTES LIGHT CONTROL ?F: DENOTES EXTRACT FAN CONTROL
P?: DENOTES STANDARD PIR A?: DENOTES ABSENCE DETECTION PIR
IP65: DENOTES PIR IS TO BE IP65 D?: DENOTES DAYLIGHT CONTROL PIR

TO BE COMPATIBLE WITH SWITCHES, LIGHTING CONTROL MODULES ETC. c/w RIGID FIRE HOOD IN FIRE RATED CEILINGS.

MK MULTI-GANG LIGHT SWITCH c/w MK EDGE ANTIQUE BRASS
2: 2-WAY
X: INTERMEDIATE
K: DOUBLE-POLE EMERGENCY LIGHTS TEST KEY SWITCH
N: NEON LIGHT - PART OF GRID SWITCH ARRANGEMENT
F: INLINE FUSE - PART OF GRID SWITCH ARRANGEMENT
A: RE-TRACTIVE SWITCH FOR ABSENCE DETECTION LIGHTING
A/D: RE-TRACTIVE DIMMER SWITCH FOR ABSENCE DETECTION LIGHTING
S/P: SCENE PLATE
M: MASTERSEAL SWITCH
MC: METAL CLAD SWITCH
?G: NUMBER OF GANGS

SWITCHES ARE TO SUIT LIGHT FITTING BALLAST, CONTROLLER, CIRCUIT LOAD, SWITCHING ARRANGEMENT AND PIR UNITS ETC.

LIGHTING TIME CLOCK & CONTACTOR CONTROL

MEM COMMAND DEVICES ENCLOSED IN AN ENCLOSURE MOUNTED ADJACENT TO THE RELEVANT DISTRIBUTION BOARD.
7-DAY 2 CHANNEL TIME CLOCKS WITHIN A LOCKABLE METAL ENCLOSURE FOR DIN RAIL MOUNTED ACCESSORIES I.E. CONTACTORS, TIME CLOCKS OVERRIDE SWITCHES ETC. A TRAFFOLYTE LABEL IS TO BE SCREWED ONTO THE LID INDICATING WHICH DISTRIBUTION BOARD(S) THE ENCLOSURE IS RELATED TO. ADJACENT TO THE ENCLOSURE SCREWED TO WALL IS TO BE A FRAMED LINE DIAGRAM INDICATING THE PLANT / EQUIPMENT THE CONNECTORS, CONTACTORS OR TIME CLOCKS CONTROL INCLUDING CIRCUIT REFERENCES (A COPY OF THIS IS TO BE INCLUDED WITHIN THE ELECTRICAL O&M MANUAL). IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO ORDER THE CORRECT AMOUNT OF CONTACTORS, TIME CLOCKS AND BLANKS FOR EACH ENCLOSURE.

EXTERNAL WALL MOUNTED PHOTO-CELL UNIT MOUNTED ON NORTH WALL, HEIGHT TBC ON-SITE c/w SOCKET & BRACKET, STAINLESS STEEL ANTI-VANDAL CAGE & ANTI-VANDAL SCREWS
LUCY ZODIAC Ref: SS4ED

DISABLED ALARM SYMBOLS
AS PER ELECTRICAL SPECIFICATION

C-TEC DISABLED ALARM SYSTEM PULL CORD
C-TEC DISABLED ALARM SYSTEM RESET UNIT
C-TEC DISABLED ALARM SYSTEM CEILING MOUNTED INDICATOR LIGHT c/w TONE GENERATOR
C-TEC DISABLED ALARM SYSTEM PSU

CONTAINMENT LEGEND

2-COMPARTMENT BLACK uPVC TRUNKING - MOUNTED AT HIGH LEVEL.
CABLING CONTAINED IN uPVC CONDUITS - MOUNTED BEHIND EXISTING KITCHEN UNITS.
CABLING ROUTED THROUGH CEILING JOISTS.
POINT WHERE ELECTRICAL SERVICES PASSES BETWEEN FLOOR LEVELS.

FIRE ALARM SYSTEM SYMBOLS

C-TEC SMOKE DETECTOR & XENON BEACON
C-TEC HEAT DETECTOR & XENON BEACON
C-TEC SMOKE DETECTOR & XENON BEACON & SOUNDER BASE
C-TEC HEAT DETECTOR & XENON BEACON & SOUNDER BASE
C-TEC SMOKE DETECTOR LOCATED IN FALSE CEILING VOID c/w RED LED INDICATOR ON WHITE FACEPLATE ON CEILING BELOW
C-TEC CARBON MONOXIDE DETECTOR & XENON BEACON
C-TEC CEILING MOUNTED SOUNDER BASE & XENON BEACON
C-TEC SOUNDER BASE
C-TEC MANUAL CALL POINT
C-TEC FIRE ALARM PANEL c/w POWER SUPPLY, DIAL OUT FACILITY & INTEGRAL SURGE PROTECTION UNIT
C-TEC LOOP POWERED FIRE ALARM INTERFACE
C-TEC LOOP POWERED FIRE ALARM INTERFACE LINKED TO GAS VALVE c/w POWER SUPPLY UNIT
C-TEC FIRE ALARM POWER SUPPLY UNIT - MANUFACTURER ISSUE
C-TEC WALL MOUNTED DOOR DETANT LINKED TO LINKED TO FIRE ALARM
RE-TRACTIVE SWITCH TO RELEASE DOOR DETANT.

POWER SYMBOLS

MK EDGE ANTIQUE BRASS TWIN SWITCHED SOCKET OUTLET MOUNTED AT DADO HEIGHT OR 150mm ABOVE WORKTOP / DESK HEIGHT
MK EDGE ANTIQUE BRASS TWIN SWITCHED SOCKET LOW LEVEL 500mm AFFL
MK EDGE ANTIQUE BRASS SWITCHED FUSE SPUR OUTLET
MK EDGE ANTIQUE BRASS UN-SWITCHED FUSE SPUR OUTLET
DOUBLE-POLE KEY SWITCHED FUSE SPUR c/w NEON INDICATOR LIGHT (FIRE ALARM PANEL FUSE SPUR'S ARE TO BE RED)
MK EDGE ANTIQUE BRASS LOCKABLE FIRE ALARM ISOLATOR SWITCH
MK EDGE ANTIQUE BRASS SINGLE SOCKET
MK EDGE ANTIQUE BRASS UNSWITCHED SINGLE SOCKET
MK EDGE ANTIQUE BRASS SINGLE SOCKET LOW LEVEL 500mm AFFL
MK EDGE ANTIQUE BRASS ABOVE COUNTER SWITCHED FUSE SPUR CONTROLLING A LOW LEVEL SINGLE SOCKET OUTLET WITH A SUITABLY SIZED CONDUIT ROUTED BETWEEN THE SWITCH FUSE SPUR AND SOCKET OUTLET
MK EDGE ANTIQUE BRASS DATA / TELEPHONE OUTLET REFER TO RDS FOR DETAILS- ? DENOTES IF 1, 2 OR 4 GANGS REQUIRED CAT6a CABLES TO BE ROUTED FROM THE ROUTER / POWERED SWITCH POSITION TO EACH POINT.
MK EDGE ANTIQUE BRASS SINGLE DATA POINT FOR A P.O.E W-FI POINT
MK EDGE ANTIQUE BRASS LOCAL ISOLATOR 20A SWITCH / 3-POLE FAN ISOLATOR MOUNTED 100mm BELOW CEILING LEVEL
MEM ROTARY ISOLATOR (RATINGS AS INDICATED)
3KW WATER HEATER (SUPPLIED BY MECH CONTRACTOR)
MK EDGE ANTIQUE BRASS 50A COOKER HOB & OVEN CONTROL UNIT c/w 25mm CONDUIT ROUTED TO A LOW LEVEL 50A FLEX OUTLET MOUNTED 500mm AFFL
EXTRACTOR FAN INSTALLED BY MECHANICAL CONTRACTOR
TOILET FANS ARE TO BE CONTROLLED BY LIGHTING CIRCUIT WITH A RUN ON TIMER
ALL OTHER FANS ARE TO BE CONTROLLED BY FAN CONTROLLERS PROVIDED BY THE MECHANICAL CONTRACTOR
ELECTRICAL CONTRACTOR IS TO INSTALL AND TERMINATE ALL CONTROLS CABLING, CONTAINMENT & FINAL CONNECTIONS

revisions

project

NETHER ALDERLEY PARISH HALL

title

PROPOSED ELECTRICAL SYMBOLS LEGENDS

scale NTS@A1

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TENDER