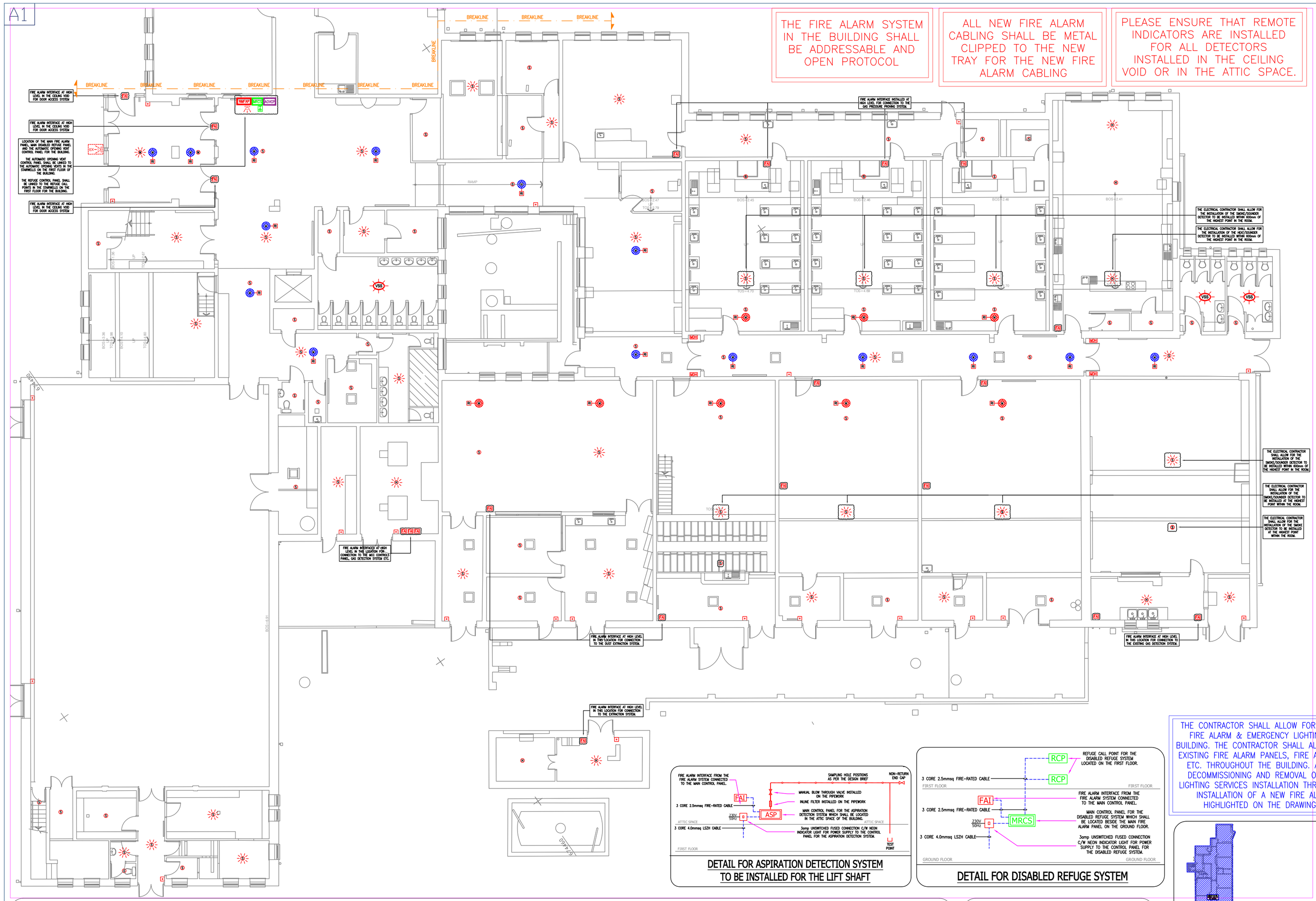
A1



THE FIRE ALARM SYSTEM IN THE BUILDING SHALL BE ADDRESSABLE AND OPEN PROTOCOL

ALL NEW FIRE ALARM CABLING SHALL BE METAL CLIPPED TO THE NEW TRAY FOR THE NEW FIRE ALARM CABLING

PLEASE ENSURE THAT REMOTE INDICATORS ARE INSTALLED FOR ALL DETECTORS INSTALLED IN THE CEILING VOID OR IN THE ATTIC SPACE.

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PARTICULAR SPECIFICATIONS.
2. THE CONTRACTOR SHALL CO-ORDINATE FULLY WITH ALL OTHER TRADES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF ALL SERVICES AND WORKS REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL CO-ORDINATE FULLY WITH ALL OTHER TRADES BEFORE COMMENCING WORK.
3. EXTRA COSTS INCURRED DUE TO THE CO-ORDINATION EXERCISE NOT BEING COMPLETED WILL NOT BE ACCEPTED BY THE ENGINEER.
4. DO NOT SCALE THIS DRAWING. ALL DIMENSIONS TO BE TAKEN ON SITE. ALL DIMENSIONS IN mm, UNLESS STATED OTHERWISE
5. EXACT LOCATIONS OF ALL SERVICES TO BE AGREED ON SITE. FINAL LOCATIONS OF ALL SERVICES TO BE CO-ORDINATED ON SITE WITH EXISTING LOOSE AND FIXED FURNITURE LAYOUTS IN THE ROOM.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORKS AND BUILDERS WORKS AS IDENTIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS.
7. THE MAJORITY OF THE EXISTING ELECTRICAL INSTALLATION IN THE BUILDING SHALL BE DECOMMISSIONED AND REMOVED AND REPLACED WITH NEW ELECTRICAL INSTALLATIONS. THE CONTRACTOR SHALL ALLOW FOR DECOMMISSIONING THE FOLLOWING ITEMS IN THE BUILDING AS INDICATED ON THE DRAWINGS:
   - THE EXISTING EMERGENCY LIGHTING SERVICES INSTALLATION THROUGHOUT THE BUILDING SHALL BE DECOMMISSIONED AND REMOVED INCLUDING ALL EMERGENCY LIGHT FITTINGS, CABLING, CONTAINMENT, ETC.
   - THE EXISTING FIRE ALARM SERVICES INSTALLATION THROUGHOUT THE BUILDING SHALL BE DECOMMISSIONED AND REMOVED INCLUDING ALL SMOKE DETECTORS, HEAT DETECTORS, PANELS, ETC.
8. THE CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY SUITABLE FINAL ROUTES FOR ALL CONTAINMENT AND TRAY THROUGHOUT THE BUILDING FOR THE NEW ELECTRICAL SERVICES AND CABLING. NEW MAIN RUNS OF ELECTRICAL TRUNKING/TRAY SHALL BE INSTALLED IN THE AREAS AS INDICATED ON THE DRAWINGS BUT THIS IS INDICATIVE ONLY AND IF THE CONTRACTOR FINDS A MORE CONVENIENT ROUTE FOR ELECTRICAL CONTAINMENT ON SITE THEN THAT WILL BE ACCEPTABLE.

PROTECTIVE SERVICES NOTES:

9. THE CONTRACTOR SHALL ALLOW FOR DECOMMISSIONING AND REMOVING THE EXISTING FIRE ALARM SYSTEM AND COMPONENTS THROUGHOUT BUILDING. THE EXISTING FIRE ALARM SYSTEM INSTALLATION THROUGHOUT THE BUILDING INCLUDING ALL DEVICES, CABLING, CONTAINMENT, ETC. SHALL BE DECOMMISSIONED AND REMOVED THROUGHOUT THE BUILDING.
10. THE CONTRACTOR SHALL ALLOW FOR THE SUPPLY AND INSTALLATION OF A NEW ADDRESSABLE FIRE ALARM SYSTEM THROUGHOUT THE BUILDING AS INDICATED ON THE DRAWINGS. THIS INCLUDES ALL FIRE ALARM PANELS, FIRE ALARM DEVICES, FIRE ALARM CABLING, ETC. THE NEW FIRE ALARM SYSTEM SHALL BE AN OPEN PROTOCOL SYSTEM.
11. THE NEW FIRE ALARM SYSTEM TO BE INSTALLED THROUGHOUT THE BUILDING SHALL BE AN INDEPENDENT ADDRESSABLE FIRE ALARM SYSTEM AS INDICATED. THE NEW MAIN FIRE ALARM PANEL SHALL BE ANALOGUE ADDRESSABLE, NETWORK REPORTING TO A CENTRAL TERMINAL REPORTING ON DEVICE BY DEVICES BASIS WITH FULL TEXT.
12. THE FIRE ALARM SYSTEM SHALL BE DESIGNED, INSTALLED AND COMMISSIONED ACCORDING TO AN 'L1' SYSTEM IN ACCORDANCE WITH I.S. 3218:2024.
13. ALL NEW FIRE ALARM CABLING SHALL BE PH120 CLASSIFIED ENHANCED FIRE-RESISTANT CABLING IN ACCORDANCE WITH BS5839-1; BS7629-1; BS6387 C, W & Z; IS EN 50200 AND BS8424-2.
14. THE CONTRACTOR'S FIRE ALARM SPECIALIST IS RESPONSIBLE FOR THE FINAL FIRE ALARM SYSTEM FULLY COMPLYING WITH IS3218:2024.
15. ALL FIRE ALARM PANELS SHALL HAVE A BACK UP BATTERY SUPPLY CAPABLE OF 72 HOUR BACKUP.
16. ALL 220V SPUR OUTLETS FOR FIRE ALARM PANELS TO BE PERMANENTLY LABELED "FIRE ALARM DO NOT SWITCH OFF".
17. THE NUMBER OF FIRE ALARM CIRCUITS SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH SPECIFICATION OF FIRE ALARM EQUIPMENT MANUFACTURER.
18. THE CONTRACTOR SHALL ALLOW FOR INSTALLING VISUAL AID DEVICE (VAD) DEVICES IN THE UNIVERSAL TOILETS AS INDICATED ON THE DRAWINGS.
19. LOOP ISOLATORS TO BE PLACED TO MINIMISE THE LOSS OF THE LOOP IN THE EVENT OF A FAULT/SHORT CIRCUIT.
20. THE CONTRACTOR SHALL ALLOW FOR INSTALLING ALL FIRE ALARM INTERFACES AS INDICATED THROUGHOUT THE BUILDING. WHERE INTERFACING MODULES ARE REQUIRED TO CONNECT TO OTHER ITEMS OF PLANT, THESE WILL BE INSTALLED ON THE LOCAL ADDRESS LOOP OR SUPPLIED VIA A DEDICATED INTERFACE PANEL.
21. END OF LINE DEVICES (EOL) TO BE FITTED ADJACENT TO LAST SOUNDER ON CONVENTIONAL SOUNDER CIRCUITS. THE NO. OF EOL DEVICES OF FIRE ALARM CIRCUITS SHALL BE DETERMINED BY CONTRACTOR TO ASSURE A COMPLETE SATISFACTORY OPERATING SYSTEM IN ACCORDANCE WITH THE SPECIFICATION.
22. FIRE ALARM DETECTION HEADS SHALL INCLUDE A CONDITION INDICATION LIGHT.
23. ALL MANUAL CALL POINTS SHALL BE OF THE FULLY RESETTABLE TYPE VIA KEY OPERATION. THE USE OF BREAKABLE GLASS IN THE CALL UNITS IS NOT PERMITTED. ALL MANUAL CALL POINTS TO BE PROVIDED WITH CLEAR PLASTIC TAMPER COVERS.
24. ALLOW FOR INSTALLING REMOTE INDICATORS ON ALL SMOKE DETECTORS TO BE INSTALLED IN ATTIC SPACES OR CEILING SPACES, THE REMOTE INDICATORS SHALL BE INSTALLED BELOW THE CEILING.
25. FIRE ALARM DETECTION HEADS SHALL INCLUDE A CONDITION INDICATION LIGHT.
26. ALL MANUAL CALL POINTS SHALL BE OF THE FULLY RESETTABLE TYPE VIA KEY OPERATION. THE USE OF BREAKABLE GLASS IN THE CALL UNITS IS NOT PERMITTED. ALL MANUAL CALL POINTS TO BE PROVIDED WITH CLEAR PLASTIC TAMPER COVERS.
27. THE CONTRACTOR SHALL ALLOW FOR INSTALLING ALL FIRE ALARM INTERFACES AS INDICATED THROUGHOUT THE BUILDING. THIS WILL INCLUDED FOR LINKING THE INTERFACE TO THE FOLLOWING ITEMS:
   - ASPIRATION SYSTEM
   - MCC CONTROLS PANEL
   - GAS DETECTION PANEL
   - GAS PRESSURE PROVING PANEL
   - DISABLED REFUGE SYSTEM
   - DOOR ACCESS SYSTEMS
28. THE CONTRACTOR SHALL ALLOW FOR THE SUPPLY AND INSTALLATION OF A NEW ASPIRATION SMOKE DETECTION SYSTEM AT THE TOP OF THE LIFT SHAFT AS INDICATED ON THE DRAWINGS. THE ASPIRATION SMOKE DETECTION SYSTEM SHALL COMPLY WITH I.S. EN 54-20, BS 5839, ISO 7240-20 AND I.S. 3218:2013+A1:2019.
29. THE MAIN ASPIRATION PANEL FOR THE SYSTEM WILL BE LOCATED OUTSIDE THE LIFT SHAFT AT HIGH LEVEL ON THE FIRST FLOOR OF THE BUILDING IN THE LOCATION AS INDICATED ON THE DRAWINGS.
30. THE ASPIRATION SMOKE DETECTION SYSTEM SHALL BE INSTALLED WITH 5 ALARM LEVELS (3 PRE-ALARMS AND 2 ALARM).
31. THE NOISE LEVELS OF THE ASPIRATION SMOKE DETECTION SYSTEM SHALL COMPLY WITH ISO 11690-1.
32. THE SAMPLING PIPE FOR THE ASPIRATION SMOKE DETECTION SYSTEM SHALL BE INSTALLED IN RED ABS PIPE AND SHALL BE INSTALLED AT THE TOP OF THE LIFT SHAFT. PIPEWORK SHALL COMPLY WITH I.S. EN 54-20 AND EN 61386.
33. TEST POINTS SHALL BE INSTALLED AT THE END OF LINE ON THE PIPEWORK. THE CONTRACTOR SHALL ALLOW FOR TEST POINT TO BE LOCATED IN THE CORRIDOR OF THE EXTENSION AT HIGH LEVEL. TEST POINT WILL NEED TO BE ACCESSIBLE.

DISABLED REFUGE SERVICES NOTES:

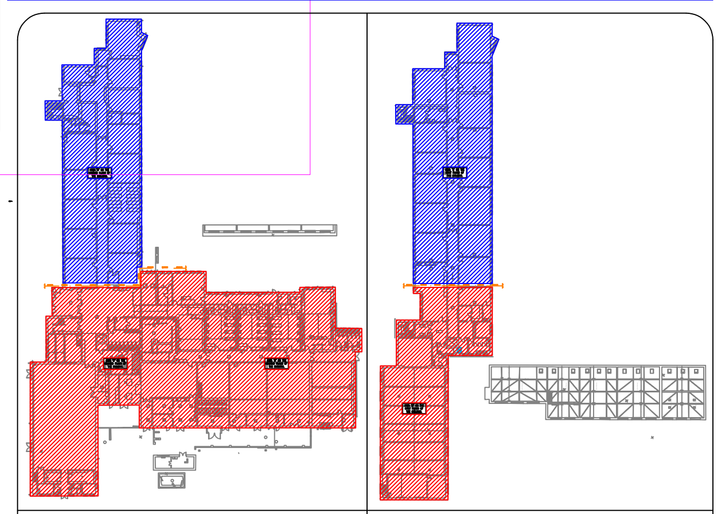
34. THE CONTRACTOR SHALL ALLOW FOR THE SUPPLY AND INSTALLATION OF A NEW DISABLED REFUGE SYSTEM IN THE BUILDING. THE SYSTEM SHALL BE FULLY COMPLIANT WITH BS5588 PART 11, BS9999:2008 AND BS5839-9:2011. SEE SPECIFICATION FOR FURTHER DETAILS REGARDING THE MAIN REFUGE PANEL FOR THE BUILDING.
35. THE DISABLED REFUGE PANEL SHALL HAVE 24 HOUR BACK UP CAPACITY IN QUIESCENT MODE THEN 60 MINUTES IN FULL POWER AND SHALL BE FULLY MONITORED.
36. THE MAIN REFUGE PANEL SHALL HAVE A SEPARATE STATUS DISPLAY, WHICH INDICATES MAINS SUPPLY HEALTHY, BATTERY HIGH & LOW, CHARGER FAULT, FUSE FAULT, COMMON FAULT, HANDSET FAULT AND HAVE A LAMP TEST BUTTON. THE MAIN PANEL FOR THE BUILDING SHALL BE LOCATED IN THE SECURITY ROOM OF THE BUILDING BESIDE THE NEW MAIN FIRE ALARM PANEL. REFER TO DRAWING 68(E001) FOR LOCATION OF THE NEW MAIN FIRE ALARM PANEL.
37. A REMOTE LAMP BUZZER SHALL BE INSTALLED BESIDE THE MAIN REFUGE PANEL IN THE SECURITY ROOM OF THE BUILDING. SEE SPECIFICATION FOR FURTHER INFORMATION REGARDING THE REMOTE LAMP BUZZER.
38. THE CONTRACTOR SHALL ALLOW FOR THE INSTALLATION OF A REMOTE CALL UNIT/SWITCH IN THE LOCATION AS INDICATED ON THE DRAWINGS. THE CALL UNIT SHALL HAVE THE FUNCTIONALITY TO PRESS BUTTON TO INITIATE CALL, HANDS FREE AT THE REFUGE POINT OR BY THE USER AT THE CONTROL PANEL. SEE SPECIFICATION FOR FURTHER INFORMATION REGARDING THE REMOTE CALL UNIT/SWITCH.
39. THE CONTRACTOR SHALL ALLOW FOR THE INSTALLATION OF A REMOTE CALL UNIT/SWITCH IN THE LOCATIONS OF THE BUILDING AS INDICATED ON THE DRAWING. THE CALL UNIT SHALL HAVE THE FUNCTIONALITY TO PRESS BUTTON TO INITIATE CALL, HANDS FREE AT THE REFUGE POINT OR BY THE USER AT THE CONTROL PANEL. SEE SPECIFICATION FOR FURTHER INFORMATION REGARDING THE REMOTE CALL UNIT/SWITCH. THE CONTRACTOR SHALL REFER TO THE DRAWINGS FOR THE LOCATIONS OF THE CALL POINTS IN THE BUILDING.
40. 40. THE MAIN PANEL FOR THE DISABLED REFUGE SYSTEM FOR THE BUILDING SHALL BE LOCATED IN THE MAIN ENTRANCE LOBBY OF THE BUILDING AS INDICATED ON THE DRAWINGS. REFER TO DRAWINGS FOR LOCATIONS OF THE DISABLED REFUGE CALL POINTS IN THE BUILDING.

REV	DATE	PREPARED BY/PROJECT ENGINEER	QUALITY CHECK BY:
T1	22.07.26	R. WHYTE	M. GORMLEY

DETAIL FOR ASPIRATION DETECTION SYSTEM TO BE INSTALLED FOR THE LIFT SHAFT

DETAIL FOR DISABLED REFUGE SYSTEM

THE CONTRACTOR SHALL ALLOW FOR DECOMMISSIONING AND REMOVING THE EXISTING FIRE ALARM & EMERGENCY LIGHTING SYSTEM INSTALLATIONS THROUGHOUT THE BUILDING. THE CONTRACTOR SHALL ALLOW FOR DECOMMISSIONING AND REMOVING ALL EXISTING FIRE ALARM PANELS, FIRE ALARM DEVICES, CABLING, EMERGENCY LIGHTING, ETC. THROUGHOUT THE BUILDING. ALLOW FOR ALL NECESSARY WORKS FOR THE DECOMMISSIONING AND REMOVAL OF THE EXISTING FIRE ALARM & EMERGENCY LIGHTING SERVICES INSTALLATION THROUGHOUT THE BUILDING AND THE SUPPLY AND INSTALLATION OF A NEW FIRE ALARM & EMERGENCY LIGHTING SYSTEMS AS HIGHLIGHTED ON THE DRAWINGS AND SPECIFICATIONS IN REPLACEMENT.



'AREA A' OF THE GROUND & FIRST FLOOR OF THE BUILDING.

'AREA A' OF THE GROUND & FIRST FLOOR OF THE BUILDING.

KEY PLAN FOR THE BUILDING (SCALE 1:500)

PROTECTIVE SERVICES SYMBOLS

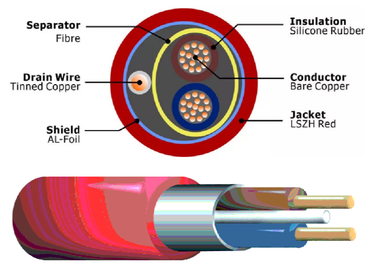
H	OPTICAL HEAT DETECTOR INSTALLED ON THE CEILING
S	OPTICAL SMOKE DETECTOR INSTALLED ON THE CEILING
M	OPTICAL MULTI DETECTOR INSTALLED ON THE CEILING
S	COMBINED SMOKE DETECTOR WITH SOUNDER INSTALLED ON THE CEILING
H	COMBINED HEAT DETECTOR WITH SOUNDER INSTALLED ON THE CEILING
M	COMBINED MULTI DETECTOR WITH SOUNDER INSTALLED ON THE CEILING
	MANUAL CALL POINT (MOUNTED AT 1100mm TO THE CENTRE A.F.F.L.)
FAI	FIRE ALARM INTERFACE
VSS	COMBINED SMOKE DETECTOR, SOUNDER AND VISUAL AID DEVICE (VAD UNIT). UNIT SHALL BE MOUNTED ON THE CEILING.
MDH	INTERNAL MAGNETIC DOOR/HOLD OPEN DEVICE CONTACTS C/W 1AMP POWER SUPPLY UNIT LINKED BACK TO THE FIRE ALARM C/W MANUAL SWITCH OVER RIDE FACILITY ON EACH DEVICE.
	FIRE ALARM CABLING INSTALLED THROUGHOUT THE BUILDING. CABLING TO BE PH120.
NMFAP	NEW MAIN FIRE ALARM PANEL FIRE ALARM SYSTEM IN THE BUILDING. MAXIMUM MOUNTING HEIGHT OF THE PANEL SHALL BE 1800mm TO THE TOP OF THE PANEL.
MRCS	NEW DISABLED REFUGE CONTROL PANEL IN THE BUILDING. MAXIMUM MOUNTING HEIGHT OF THE PANEL SHALL BE 1800mm TO THE TOP OF THE PANEL.
RCP	DISABLED REFUGE CALL POINT. CALL POINT SHALL BE WIRED TO THE MAIN CONTROL PANEL FOR THE DISABLED REFUGE SYSTEM AT THE MAIN ENTRANCE OF THE BUILDING.
	NEW INDICATOR LAMP FOR THE MAIN DISABLED REFUGE PANEL IN THE BUILDING
FAI-DA	FIRE ALARM INTERFACE FOR CONTROLLERS FOR DOOR ACCESS SYSTEMS
ASP	ASPIRATION PANEL IN THE CEILING ON THE FIRST FLOOR OF THE BUILDING FOR FIRE PROTECTION IN THE LIFT SHAFT.
	FIRE ALARM ASPIRATION PIPEWORK
M	MULTI SENSOR DETECTOR INSTALLED IN CEILING VOID. REMOTE INDICATOR LIGHT SHALL BE INSTALLED BELOW THE CEILING DIRECTLY BELOW THE DETECTOR TO HIGHLIGHT IF DETECTOR IS IN ACTIVATION.
S	SMOKE DETECTOR INSTALLED IN CEILING VOID ALONG ESCAPE ROUTES. REMOTE INDICATOR LIGHT SHALL BE INSTALLED BELOW THE CEILING DIRECTLY BELOW THE DETECTOR TO HIGHLIGHT IF DETECTOR IS IN ACTIVATION.
RI	REMOTE LED INDICATION LIGHT FOR DETECTORS IN CEILING VOID OR ATTIC SPACE. REMOTE DETECTOR MOUNTING ON THE CEILING BELOW.
EX	EXTERNAL FIRE ALARM BELL AND BEACON (MOUNTED AT 3200mm A.F.F.L. EXTERNALLY)
	INTERNAL FIRE ALARM FLASHING BEACON (MOUNTED AT HIGH LEVEL ON WALL) (MOUNTED AT 2600mm A.F.F.L.)

THE FIRE ALARM SYSTEM IN THE BUILDING SHALL BE A CATEGORY 'L1' SYSTEM

FIRE ALARM CABLING (PH120)

ALL FIRE ALARM CABLING SHALL BE 'PH120 ENHANCED' FIRE ALARM CABLING. FIRE ALARM CABLING SHALL ADHERE TO THE FOLLOWING:

- PH120 ENCHANCED
- SHALL HAVE A 2-HOUR FIRE RESISTANCE
- RED SHEATH
- LPCB APPROVED
- BASEC APPROVED
- BS 8519 'CATHAGORY 2' CONTROL CABLE
- BS 5266-1 'ENHANCED' FIRE RESISTING CABLE
- BS 5839-1, 6, 8 & 9 'ENHANCED' FIRE RESISTING CABLE
- BS 8432-2 (120 MINUTES)
- BS EN 50200 (PH 120)
- BS 60332-1-2
- BS EN 60754-1
- BS EN 61034-2
- BS EN 50200 PH30, PH60, PH120
- BS 8434-2 FLAME, IMPACT & WATER TEST FOR 'ENHANCED'



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Drawing Title
NEW PROTECTIVE SERVICES INSTALLATION TO BE INSTALLED IN 'AREA B' ON THE GROUND FLOOR OF THE BUILDING.

Architect

Drawing No:
68(E002)

Job No.	Drawn by:	Scale:	Rev.
26-053	R.W	1:125 on A1	T1