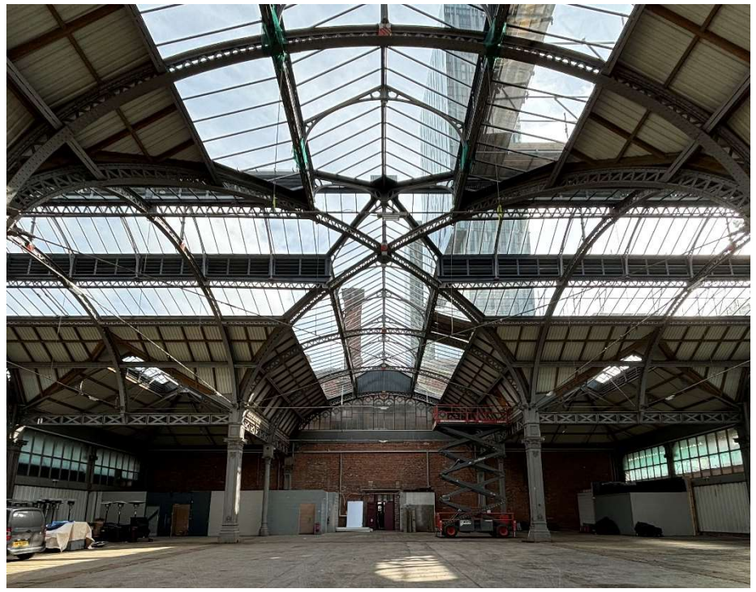


Upper Campfield

Liverpool Road, Manchester, M3 4NN

Listed Building Consent ref: 138346/LO/2023

Condition 04

Issue 01 - 14/02/2025

PROJECT 3 architects

Listed Building Consent

Condition 04

Prior to the commencement of works to install any relevant (internal and external) mechanical and electrical (M & E) installations (including CCTV and lighting) attached to any listed fabric, detailed plans, method statement and specification showing the location, profile, fixing, sections and suitable samples, where necessary shall be submitted for approval in writing by the City Council, as Local Planning Authority. This shall include details of the removal, alterations and repair of the historic fabric of the building.

The development shall then be carried out in accordance with the details approved and thereafter be retained as approved throughout the life of the development. Should the M & E no longer be required, they should be removed and the elevations should be made good following a scheme previously approved in writing by the City Council, as Local Planning Authority.

Information provided:

01 Solution Mechanical drawings,

02 Hayvern Electric drawings,

03 Hart lighting schedule, UC_sL

04 TJM AC kit hanging proposals

05 Gripple wire hanging

06 Lindapter flange clamps to existing beams

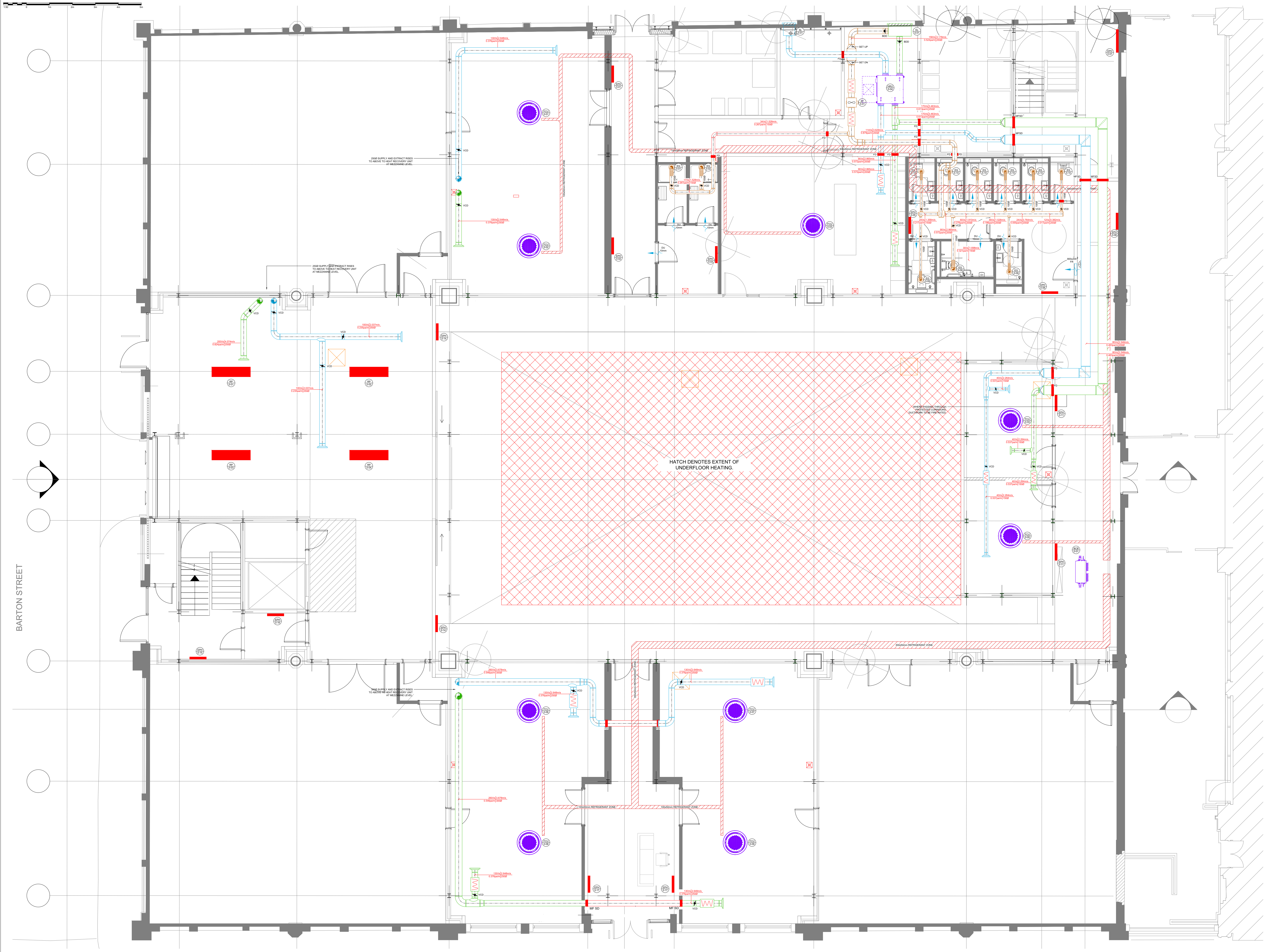
07 Destratification fan clamp fitting

08 Photos of mock-up installations

09 Exterior light and CCTV fitting

01 Solution Mechanical drawings

SE4719-SOL-XX-00-DR-M-0001 (Ground Floor HVAC Layout) - P8
SE4719-SOL-XX-01-DR-M-0002 (First Floor HVAC Layout) - P10
SE4719-SOL-XX-00-DR-M-0003 (Ground Floor Domestic Services Layout) - P6
SE4719-SOL-XX-01-DR-M-0004 (First Floor Domestic Services Layout) - P6
SE4719-SOL-XX-00-DR-M-0005 (Ground Floor Above Ground Drainage Layout) - P3
SE4719-SOL-XX-01-DR-M-0006 (First Floor Above Ground Drainage Layout) - P4
SE4719-SOL-XX-02-DR-M-0007 (Second Floor HVAC Layout) - P5
SE4719-SOL-XX-02-DR-M-0008 (Second Floor Plant Room Layout) - P5



VENTILATION NOTES:

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4. ALL FIXINGS, SUPPORTS & GUIDES ARE TO BE APPROVED BY THE MAIN CONTRACTOR, PRIOR TO INSTALLATION AS PER THE MANUFACTURED GUIDANCE.
5. ALL DUCTWORK SHALL BE MANUFACTURED, INSTALLED, TESTED & COMMISSIONED IN STRICT ACCORDANCE WITH DW144, DW143, DW151, DW171, DW/TM2, DW/TM3, TR/17 & CIBSE COMMISSIONING CODES.
6. ACCESS DOORS SHALL BE PROVIDED ADJACENT ALL FIRE DAMPERS, VOLUME CONTROL DAMPERS AND HEATER BATTERIES, EITHER SIDE OF AIR TURNS & AT LEAST 4M INTERVALS ON DUCT ROUTES.
7. ALL DUCT RUNS & DIFFUSER POSITIONS MUST BE CHECKED & SET OUT AGAINST FULLY DETAILED CEILING AND FLOOR LAYOUTS, STRUCTURAL ENGINEERING & ELECTRICAL SERVICE DRAWINGS. ALL DIMENSIONS MUST BE CHECKED OUT ON SITE PRIOR TO THE INSTALLATION BEING EXECUTED.
8. ALL SUPPLY AIR (AND EXTRACT WHERE ON A HEAT RECOVERY SYSTEM) DUCTWORK WITHIN RISERS AND PLANT SPACES AND CEILING VOIDS TO BE INSULATED. INTAKE AND EXHAUST DUCTWORK TO BE INSULATED AND VAPOUR SEALED AGAINST CONDENSATION WHERE LOCATED IN HEATED / INTERNAL SPACES.
9. ALL BRANCH CONNECTIONS SHALL BE PROVIDED WITH VCDS TO FACILITATE BALANCING IN ACCORDANCE WITH ALL RELEVANT CIBSE CODES AND GOOD PRACTICES.
10. ALL LOUVRES AND ROOF COWLS SHALL BE FITTED WITH BIRD MESH AND INSECT SCREENS UNLESS OTHERWISE SPECIFIED.
11. FIRE DAMPERS TO BE COMPLETE WITH BUILT-IN FRAMES FOR FIXING TO THE BUILDING STRUCTURE AS REQUIRED, IN ACCORDANCE WITH THE CURRENT ARCHITECTS FIRE STRATEGY DRAWINGS.
12. ALL DOOR TRANSFER GRILLES AND DOOR UNDERCUTS TO BE PROVIDED AS NECESSARY FOR VENTILATION RETURN AIR PATH. THE CONTRACTOR WILL NEED TO TAKE IN CONSIDERATION OF ACOUSTIC AND FIRE STRATEGY REPORT TO SATISFY ALL REQUIREMENTS.
13. ALL DUCTWORK TO BE OF GALVANISED STEEL CONSTRUCTION.
14. FLEXIBLE VENTILATION DUCTWORK SHALL ONLY BE USED FOR THE FINAL CONNECTIONS TO GRILLES. ALL EXCESS FLEXIBLE DUCTWORK SHALL BE CUT BACK TO A MINIMUM OF 500mm WHEN MAKING FINAL CONNECTIONS.
15. ALL FANS AND VENTILATION UNITS SHALL BE INSTALLED WITHIN ACCESSIBLE LOCATIONS WITH DUE REGARD TO THE MANUFACTURER'S MAINTENANCE SPACE RECOMMENDATIONS.
16. AS PER DW144 ALL PLENUM BOXES AND AIR TERMINALS SHALL BE INDEPENDENTLY SUPPORTED DIRECT TO SOFFIT.
17. ALL ROOF EQUIPMENT TO BE INSTALLED ON BIGFOOT SYSTEM ISOLATED FROM ROOF STRUCTURE.

HVAC LEGEND:

- SQUARE DIFFUSER
- EGGCRATE GRILLE
- SWIRL GRILLE
- CIRCULAR SWIRL GRILLE
- CIRCULAR AIR VALVE
- LINEAR DIFFUSER
- BELLMOUTH
- SPIRAL DUCTWORK
- RECTANGULAR DUCTWORK
- EXTERNAL LOUVRE
- DOOR UNDERCUT
- FIRE DAMPER
- DTB / RTA & DTLL / RTHL
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- AC CONTROLLER
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- ACCESS HATCH
- IN LINE FAN
- HEAT RECOVERY UNIT
- FAN COIL UNIT
- AC CASSETTE
- WALL MOUNTED FAN COIL
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- ELECTRIC HEATER BATTERY
- PANEL HEATER / RADIATOR
- PIPEWORK CONTAINMENT
- BUILDERSWORK PENETRATION

LINETYPES:

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- SECONDARY SUPPLY
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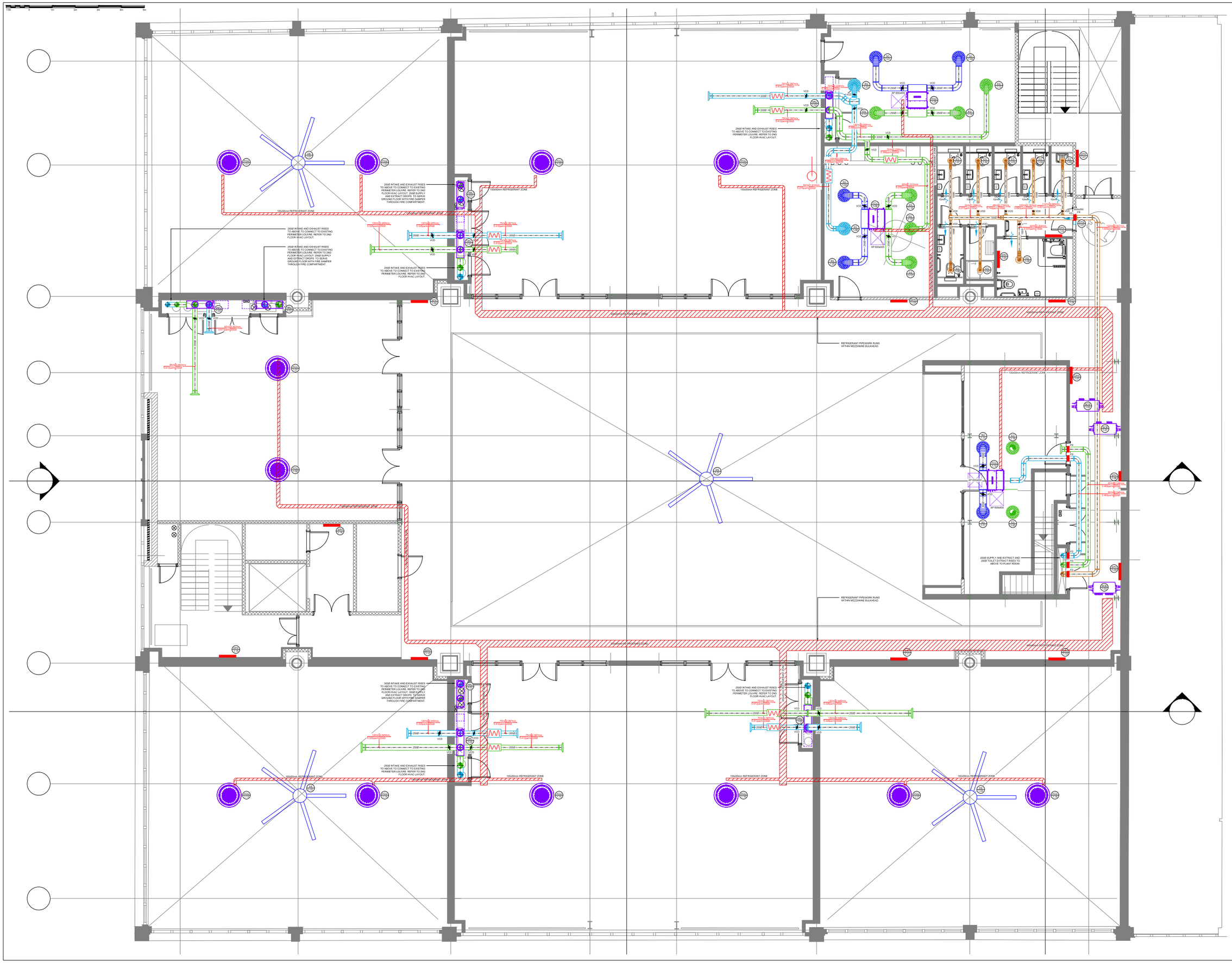
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P7	ISSUED FOR COMMENT/APPROVAL	22.01.2025
P6	ISSUED FOR COMMENT/APPROVAL	05.01.2025
P5	ISSUED FOR COMMENT/APPROVAL	27.10.2024
P4	ISSUED FOR COMMENT/APPROVAL	08.10.2024
P3	ISSUED FOR COMMENT/APPROVAL	30.07.2024
P2	ISSUED FOR COMMENT/APPROVAL	27.07.2024
P1	ISSUED FOR COMMENT/APPROVAL	21.07.2024

DRAWING STATUS

PRELIMINARY

Solution
environmental services
Pure Office, Brooks Drive,
Cheadle Royal Business Park, Cheadle, SK8 3TD
Tel: 0161 532 9460
www.solution-es.co.uk

PROJECT MANAGER: AM
DESIGN: AB
SCALE @A0: 1:50
DRAWN BY: AB
DATE: 21.07.2024
PROJECT: SE4719
UPPER CAMPFIELD MARKET
MANCHESTER
DRAWING TITLE: HVAC SERVICES
GROUND FLOOR LAYOUT
DRAWING NO.: SE4719-SOL-XX-00-DR-M-0001
REV: P8



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- PANEL HEATER / RADIATOR
- PIPEWORK CONTAINMENT
- BUILDER/WORK PENETRATION

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- SECONDARY SUPPLY
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REV	DESCRIPTION	DATE
P10	ISSUED FOR COMMENT/APPROVAL	28.01.2025
P9	ISSUED FOR COMMENT/APPROVAL	24.01.2025
P8	ISSUED FOR COMMENT/APPROVAL	22.01.2025
P7	ISSUED FOR COMMENT/APPROVAL	09.01.2025
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P5	ISSUED FOR COMMENT/APPROVAL	08.10.2024
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DRAWING STATUS

PRELIMINARY

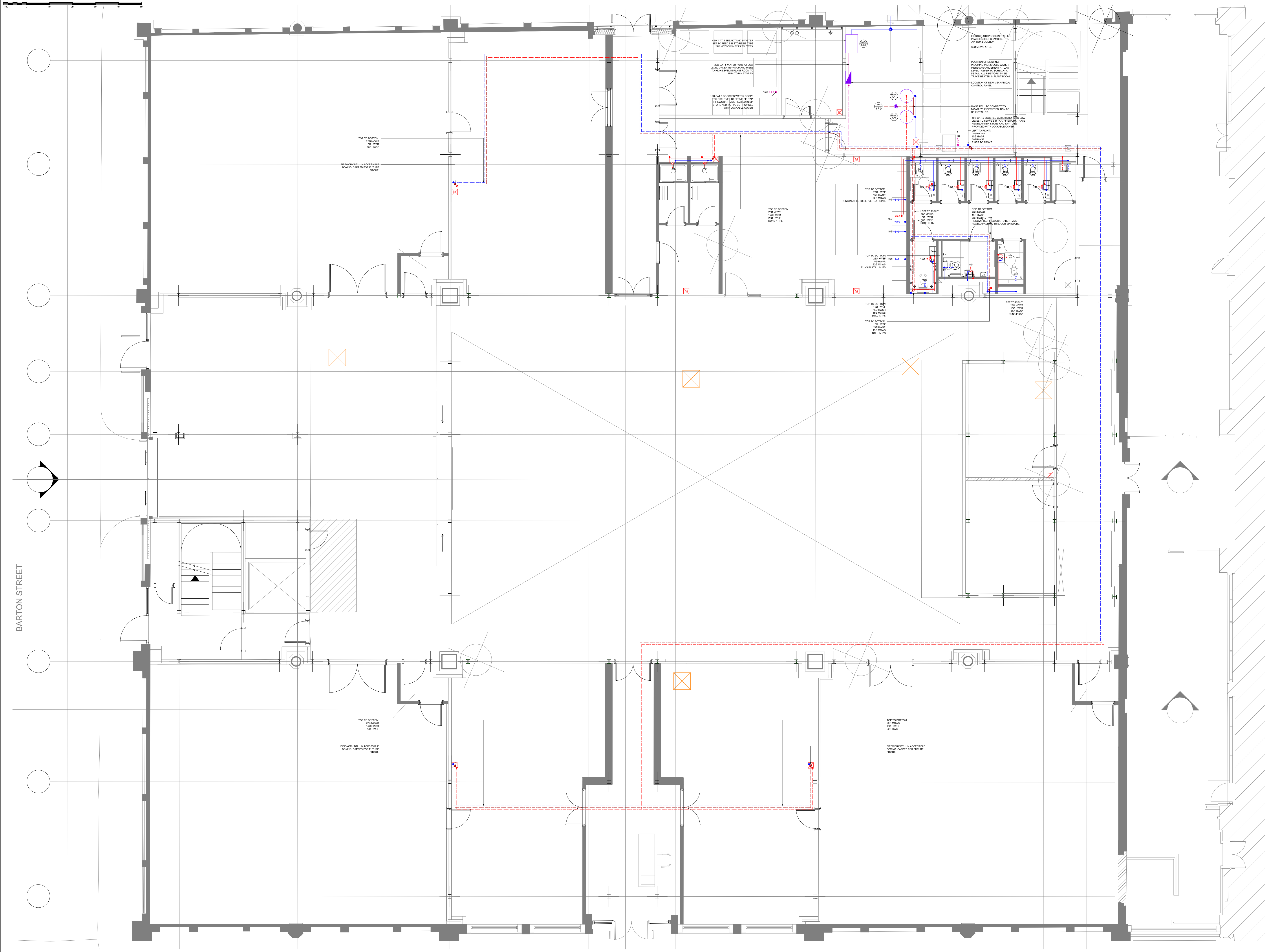
Solution
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PROJECT MANAGER: AM	DESIGN: AB
SCALE @A0: 1:50	DRAWN BY: AB
DATE: 21.07.2024	

PROJECT
SE4719
UPPER CAMPFIELD MARKET
MANCHESTER

DRAWING TITLE
HVAC SERVICES
FIRST FLOOR LAYOUT

DRAWING NO	REV
SE4719-SOL-XX-01-DR-M-0002	P10



DOMESTIC WATER SERVICES NOTES:

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5. THE WATER SERVICES SHALL BE INSTALLED IN FULL COMPLIANCE WITH THE WATER SUPPLY (WATER FITTINGS) REGULATIONS 1999 BSEN806.
6. ALL VERTICAL AND HORIZONTAL PIPEWORK TO BE SUPPORTED BY THE MANUFACTURERS RECOMMENDED SUPPORTS. SUPPORTS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS PRINTED INSTRUCTIONS.
7. PIPEWORK SYSTEMS TO INCLUDE FOR ALL NECESSARY VALVES, COMMISSIONING SETS, VENTING, DRAIN POINTS, GAUGES AND CONTROL POINTS AS REQUIRED FOR FULL OPERATION AND MAINTENANCE OF THE SYSTEM.
8. ALL PIPEWORK EXPANSION EQUIPMENT TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, INCLUDING PROVISION FOR PIPEWORK GUIDANCE WHERE BELLOWS ARE USED.
9. ALL PIPEWORK WITHIN THE CEILING VOID AND ALL PIPE DROPS SHALL BE INSULATED AS PER THE SPECIFICATION.
10. ALL EXTERNAL PIPEWORK INCLUDING PIPEWORK IN UNHEATED SPACES TO BE TRACE HEATED FOR FROST PROTECTION.
11. WHERE REASONABLE PRACTICABLE, DCWS SHALL BE ROUTED TO AVOID DEAD LEGS AND TERMINATE AT A HIGH FREQUENCY OUTLET.
12. ALL ISOLATION VALVES LOCATED IN CEILING VOIDS & AT HIGH LEVEL ETC. SHALL BE EXTENDED HANDLE BALL VALVES.
13. WHERE PIPEWORK PASSES THROUGH WALLS, PIPE SLEEVES SHALL BE PROVIDED COMPLETE WITH PLASTIC COVER PLATES.
14. ALL DHWS RETURN LEGS SHALL BE KEPT TO THE MINIMUM PRACTICABLE LENGTH.
15. FINAL CONNECTIONS TO FITTINGS TO BE COMPLETE WITH LOCAL 1/4 TURN SERVICE ISOLATING VALVE AND FLOW RESTRICTOR UNLESS NOTED OTHERWISE.
16. TMV3 BLENDING VALVES TO BE INSULATED ON ALL WASH HAND BASINS AND SINKS UNLESS NOTED OTHERWISE.
17. PIPEWORK AT LOW LEVEL SERVING WHB'S TO BE CONCEALED WITHIN PARTITIONING WHERE POSSIBLE.

DWS LEGEND:

- COLD WATER CONNECTION
- HOT WATER CONNECTION
- TMV OUTLET
- WATER HEATER
- IV — ISOLATION VALVE
- TMV — THERMOSTATIC MIXING VALVE
- SV — SOLENOID VALVE
- NRV — NON-RETURN VALVE
- STR — STRAINER
- PRV — PRESSURE REDUCING VALVE
- DC — DRAIN COCK
- WATER METER
- DTB / RTA
- DTLL / RTHL
- PIPE BREAK

LINETYPES:

- MAINS COLD WATER (MCWS)
- HOT WATER FLOW (HWSF)
- HOT WATER RETURN (HWSR)
- LOW LEVEL
- HIGH LEVEL
- CEILING VOID
- EXISTING
- STRIP-OUT

REV	DESCRIPTION	DATE
P6	ISSUED FOR COMMENT/APPROVAL	24.01.2025
P5	ISSUED FOR COMMENT/APPROVAL	22.01.2025
P4	ISSUED FOR COMMENT/APPROVAL	05.01.2025
P3	ISSUED FOR COMMENT/APPROVAL	27.10.2024
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PRELIMINARY

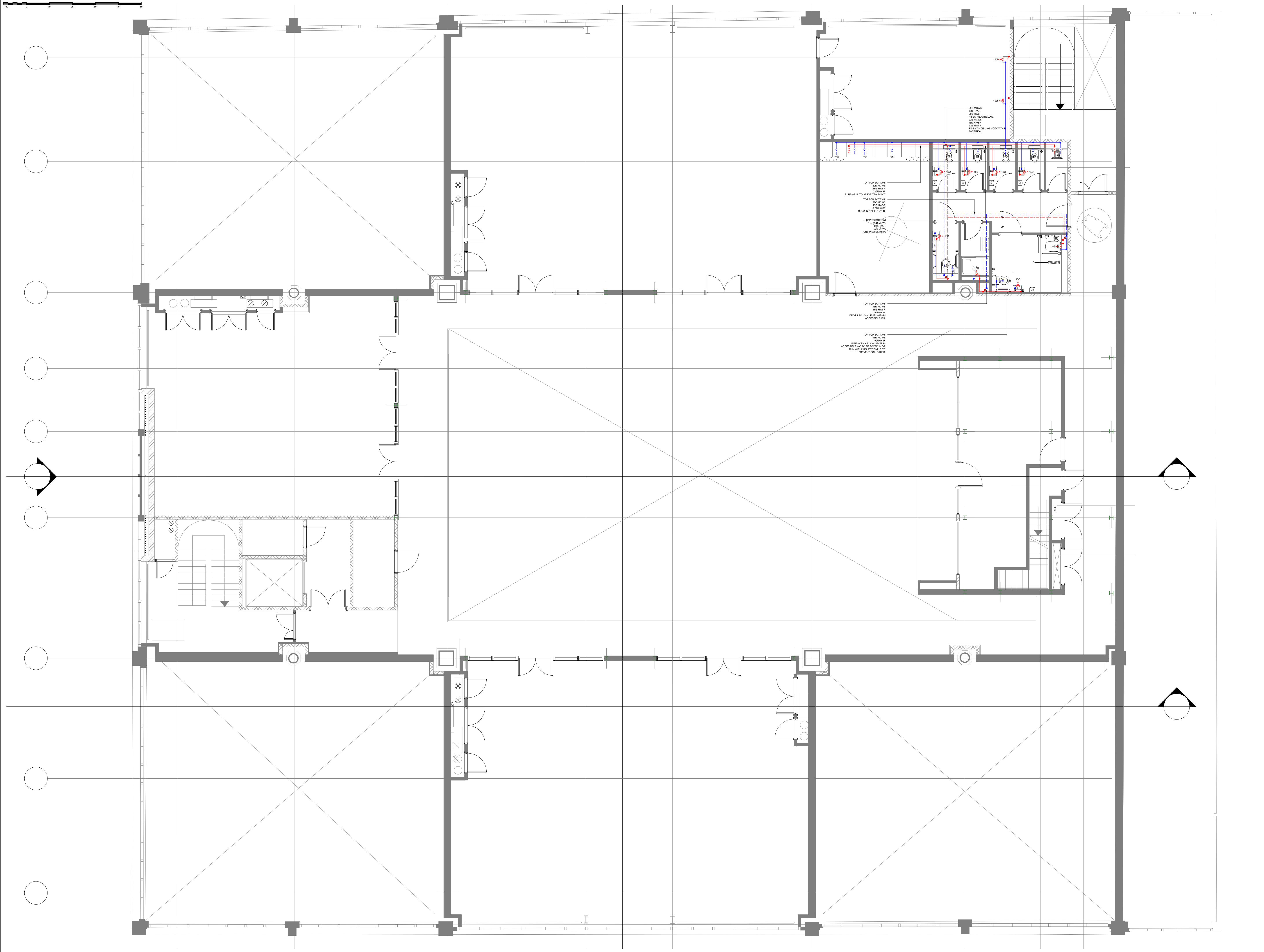
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PROJECT MANAGER: AM
DESIGN: AB
SCALE @A0: 1:50
DRAWN BY: AB
DATE: 21.07.2024

PROJECT: SE4719 UPPER CAMPFIELD MARKET MANCHESTER

DRAWING TITLE: DOMESTIC HOT AND COLD WATER GROUND FLOOR LAYOUT

DRAWING NO.: SE4719-SOL-XX-00-DR-M-0003
REV: P6



DOMESTIC WATER SERVICES NOTES:

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P5	ISSUED FOR COMMENT/APPROVAL	22.01.2025
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P3	ISSUED FOR COMMENT/APPROVAL	27.10.2024
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DRAWING STATUS

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PROJECT
SE4719
UPPER CAMPFIELD MARKET
MANCHESTER

DRAWING TITLE
DOMESTIC HOT AND COLD WATER
FIRST FLOOR LAYOUT

DRAWING NO.	REV
SE4719-SOL-XX-01-DR-M-0004	P6

1:50 0 1m 2m 3m 4m 5m

BARTON STREET

RE CAP END FOR FUTURE KITCHEN CONNECTION

WASTE FLOAT TERMINATES TO NEW STACK. NEW STACK BOXED IN AND TERMINATES WITH AAV ABOVE SPILLOVER LEVEL APPROX 1200mm AFFL.

WASTE UPSTAND C/W HEPVO TRAP FOR FCU CONDENSATE DRAINAGE.

50Ø WASTE FLOAT RUNS AT LL TO POSITION OF NEW STACK.

WASTE FLOAT TERMINATES TO NEW STACK. NEW STACK BOXED IN AND TERMINATES WITH AAV ABOVE SPILLOVER LEVEL APPROX 1200mm AFFL.

OVERFLOW AND WARNING PIPE FROM CAT 5 BOOSTER SET TO DISCHARGE OVER VISIBLE 100Ø HEADER WITH FUNNEL

WASTE UPSTAND C/W HEPVO TRAP FOR FCU CONDENSATE DRAINAGE.

50Ø WASTE FLOAT AT LL RUNS TO STACK.

BOXING IN REQ'D HEIGHT TO ACCOMODATE PIPEWORK. TBC

110Ø RUNS AT HL TO STACK.

110Ø RUNS AT LL TO STACK.

110Ø LEVEL 110Ø HEADER FOR OVERFLOWS AND PRESSURE RELIEF PIPEWORK.

40Ø WASTE UPSTAND WITH TUNDISH FOR TEMPERATURE AND PRESSURE RELIEF VALVES FROM WATER HEATERS.

WASTE DROPS FROM ABOVE TO HL

110Ø WASTE AT HL RUNS TO STACK.

WASTE FLOAT AT LL. AAV PROVIDED AT END OF RUN.

WASTE DROPS FROM ABOVE TO HL

50Ø WASTE AT HL RUNS TO COMMON DRAIN.

WASTE DROPS FROM ABOVE TO HL

AAV PROVIDED AT END OF RUN IN PS.

WASTE FLOAT AT LL.

HIGH LEVEL WASTE FROM FLOOR ABOVE INTO HEADER

WASTE UPSTAND C/W HEPVO TRAP FOR FCU CONDENSATE DRAINAGE.

NEW STACK BOXED IN AND TERMINATES WITH AAV ABOVE SPILLOVER LEVEL APPROX 1200mm AFFL.

WASTE UPSTAND C/W HEPVO TRAP FOR FCU CONDENSATE DRAINAGE.

CONDENSATE DRAINGE DFA AND RUN2 AT HL TO STACK.

NEW STACK BOXED IN AND TERMINATES WITH AAV ABOVE SPILLOVER LEVEL APPROX 1200mm AFFL.

WASTE UPSTAND C/W HEPVO TRAP FOR FCU CONDENSATE DRAINAGE.

ABOVE GROUND DRAINAGE NOTES:

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4. ALL ABOVE GROUND DRAINAGE TO COMPLY WITH EN12056 IN ALL RESPECTS AND TO THE SATISFACTION OF THE LOCAL AUTHORITY BUILDING CONTROL, ENVIRONMENTAL INSPECTOR AND THE SERVICES ENGINEER.
5. ALL DRAINAGE PIPEWORK ABOVE 40mm DIA SHALL BE PROVIDED WITH FIRE COLLARS BY OTHERS' WHENEVER THE PIPEWORK PASSES THROUGH FIRE RATED STRUCTURES. THE FIRE COLLAR SHALL BE SELECTED TO MATCH THE FIRE RATING OF THE STRUCTURE THROUGH WHICH THE PIPE PASSES.
6. ALL VERTICAL AND HORIZONTAL PIPEWORK TO BE SUPPORTED BY THE MANUFACTURERS RECOMMENDED SUPPORTS. SUPPORTS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS PRINTED INSTRUCTIONS.
7. RODDING ACCESS POINTS SHALL BE PROVIDED APPROXIMATELY 1.0m ABOVE FINISHED FLOOR LEVEL AND WHERE CHANGES OF DIRECTION TAKE PLACE.
8. THE ABOVE GROUND DRAINAGE WILL BE TESTED BEFORE BEING ENCLOSED WITHIN PIPE BOXING ETC.
9. REFER TO ARCHITECTS INFORMATION FOR SANITARYWARE SCHEDULES.
10. CEILING MOUNTED WASTE PIPE RUNS TO BE LAID TO FALL 1:80. BOIL PIPES TO BE 1:40.
11. DILUTION TRAPS TO BE INSTALLED IN FUME CUPBOARDS.
12. PIPES WHICH DO NOT VENTILATE TO ATMOSPHERE TO HAVE AIR ADMITTANCE VALVES AND RODDING EYES.
13. W.C. FLOAT RODDING EYES SHOULD BE TURNED UP ABOVE THE W.C. FLOOR LEVELS OR IPS ACCESS.
14. 32mmØ CONNECTIONS TO WHBs.
15. 40mmØ CONNECTIONS TO SINKS.
16. 50mmØ CONNECTIONS TO CLEANERS SINKS.
17. 110mmØ CONNECTIONS TO WCs.
18. 28mmØ COPPER DRAIN TO WATER BOILER.

ADD LEGEND:

- WASTE CONNECTION
- SOIL CONNECTION
- WASTE PUMP
- RE RODDING EYE
- PIPE BREAK

LINETYPES:

- SOIL / WASTE
- LOW LEVEL
- HIGH LEVEL
- CEILING VOID
- EXISTING
- REMOVED

REV	DESCRIPTION	DATE
P3	ISSUED FOR COMMENT/APPROVAL	24.04.2025
P2	ISSUED FOR COMMENT/APPROVAL	08.10.2024
P1	ISSUED FOR COMMENT/APPROVAL	21.07.2024

DRAWING STATUS: PRELIMINARY

Solution environmental services
Pure Office, Brooks Drive,
Cheadle Royal Business Park, Cheadle, SK8 3TD
Tel: 0161 532 9460
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PROJECT MANAGER: AM	DESIGN: AB
SCALE @A0: 1:50	DRAWN BY: AB
DATE: 21.07.2024	

PROJECT: SE4719
UPPER CAMPFIELD MARKET
MANCHESTER

DRAWING TITLE: ABOVE GROUND FOUL DRAINAGE GROUND FLOOR LAYOUT

DRAWING NO.: SE4719-SOL-XX-00-DR-M-0005 | REV: P3

1:50 0 1m 2m 3m 4m 5m

4500

4000

500

110ø WASTE DROPS TO BELOW AND RUNS AT HIGH LEVEL TO CONNECT TO SVP.

110ø WASTE DROPS TO BELOW AND RUNS AT HIGH LEVEL TO CONNECT TO SVP. TERMINATES WITH AAV.

WASTE UP/D AND C/W HEPVO TRAP FOR FCU CONDENSATE DRAINAGE

SHOWER WASTE DTB.

110ø VENT PIPE RUNS TO CONNECT TO COMMON VENT.

SHOWER WASTE UNDER RISER CONNECTS TO SOIL STACK.

SOIL WASTE DROPS TO BELOW TO CONNECT TO HEADER DRAIN AT HIGH LEVEL IN RAISED FLOOR AND RUN TO SVP LOCATION. AAV PROVIDED TO LOCATION.

110ø SOIL WASTE DROPS TO HIGH LEVEL ON FLOOR BELOW TO CONNECT TO SVP. TERMINATES WITH AAV.

110ø VENT PIPE RUNS TO EXISTING EXTERNAL LOUVRE. FINAL LOCATION TBC.

2 NO. CONDENSATE DRAINS FROM CONDENSER UNIT TERRACE **FROM ABOVE AND RUN TO STACK.** REFER TO PLANT ROOM LAYOUT.

CONDENSATE DTB TO CONNECT TO STACK AT GROUND FLOOR LEVEL.

CONDENSATE DTB TO CONNECT TO STACK AT GROUND FLOOR LEVEL.

ABOVE GROUND DRAINAGE NOTES:

1. BEFORE COMMENCEMENT OF WORK ASSOCIATED WITH THIS DRAWING REFER TO THE APPROPRIATE METHOD STATEMENTS AND RISK ASSESSMENTS.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT PROJECT DOCUMENTATION.
3. DO NOT SCALE FROM THIS DRAWING USE FIGURED DIMENSIONS ONLY UNLESS OTHERWISE STATED. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS OR METERS. ALL DIMENSIONS TO BE CHECKED ON SITE BY INSTALLERS PRIOR TO COMMENCEMENT OF WORKS.
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5. ALL DRAINAGE PIPEWORK ABOVE 40mm DIA SHALL BE PROVIDED WITH FIRE COLLARS BY OTHERS' WHEREVER THE PIPEWORK PASSES THROUGH FIRE RATED STRUCTURES. THE FIRE COLLARS SHALL BE SUITABLE FOR MAINTAINING THE FIRE RATING OF THE STRUCTURE THROUGH WHICH THE PIPE PASSES.
6. ALL VERTICAL AND HORIZONTAL PIPEWORK TO BE SUPPORTED BY THE MANUFACTURERS RECOMMENDED SUPPORTS. SUPPORTS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS PRINTED INSTRUCTIONS.
7. RODDING ACCESS POINTS SHALL BE PROVIDED APPROXIMATELY 1.0m ABOVE FINISHED FLOOR LEVEL AND WHERE CHANGES OF DIRECTION TAKE PLACE.
8. THE ABOVE GROUND DRAINAGE WILL BE TESTED BEFORE BEING ENCLOSED WITHIN PIPE BOXING ETC.
9. REFER TO ARCHITECTS INFORMATION FOR SANITARYWARE SCHEDULES.
10. CEILING MOUNTED WASTE PIPE RUNS TO BE LAID TO FALL 1:80. SOIL PIPES TO BE 1:40.
11. DILUTION TRAPS TO BE INSTALLED IN FUME CUPBOARDS.
12. PIPES WHICH DO NOT VENTILATE TO ATMOSPHERE TO HAVE AIR ADMITTANCE VALVES AND RODDING EYES.
13. W.C. FLOAT RODDING EYES SHOULD BE TURNED UP ABOVE THE W.C. FLOOR LEVELS OR IPS ACCESS.
14. 32mmØ CONNECTIONS TO WHBs.
15. 40mmØ CONNECTIONS TO SINKS.
16. 50mmØ CONNECTIONS TO CLEANERS SINKS.
17. 110mmØ CONNECTIONS TO WCs.
18. 28mmØ COPPER DRAIN TO WATER BOILER.

KEY LEGEND:

- WASTE CONNECTION
- SOIL CONNECTION
- WASTE PUMP
- RE RODDING EYE
- PIPE BREAK

LINETYPES:

- SOIL / WASTE
- LOW LEVEL
- HIGH LEVEL
- CEILING VOID
- EXISTING
- REMOVED

REV	DESCRIPTION	DATE
P6	ISSUED FOR COMMENT/APPROVAL	24.01.2025
P4	ISSUED FOR COMMENT/APPROVAL	27.10.2024
P3	ISSUED FOR COMMENT/APPROVAL	08.10.2024
P2	ISSUED FOR COMMENT/APPROVAL	31.07.2024
P1	ISSUED FOR COMMENT/APPROVAL	21.07.2024

DRAWING STATUS

PRELIMINARY

Solution environmental services

Pure Office, Brooks Drive,
Cheadle Royal Business Park, Cheadle, SK8 3TD
Tel: 0161 532 9460
www.solution-es.co.uk

PROJECT MANAGER: AM	DESIGN: AB
SCALE @A0: 1:50	DRAWN BY: AB
DATE:	21.07.2024

PROJECT

SE4719
UPPER CAMPFIELD MARKET
MANCHESTER

DRAWING TITLE

ABOVE GROUND FOUL DRAINAGE
FIRST FLOOR LAYOUT

DRAWING NO.	REV
SE4719-SOL-XX-01-DR-M-0006	P5

1:50 0 1m 2m 3m 4m 5m

2500 SUPPLY AND EXTRACT RISES FROM BELOW TO CONNECT TO EXISTING PERIMETER LOUVRE.

EXHAUST DUCTWORK CONNECTS TO EXISTING PERIMETER LOUVRE WITH NEW PLENUM BOX.

2500 SUPPLY AND EXTRACT RISES FROM BELOW TO CONNECT TO EXISTING PERIMETER LOUVRE.

DUCTWORK SETS ACROSS AT HIGH LEVEL FOLLOWING PITCH OF ROOF.

3000

INTAKE DUCTWORK CONNECTS TO NEW PLENUM BOX.

2500 SUPPLY AND EXTRACT RISES FROM BELOW TO CONNECT TO EXISTING PERIMETER LOUVRE.

2500 SUPPLY AND EXTRACT RISES FROM BELOW TO CONNECT TO EXISTING PERIMETER LOUVRE.

2500 SUPPLY AND EXTRACT RISES FROM BELOW TO CONNECT TO EXISTING PERIMETER LOUVRE.

DUCTWORK SETS ACROSS AT HIGH LEVEL FOLLOWING PITCH OF ROOF.

DUCTWORK SETS ACROSS AT HIGH LEVEL FOLLOWING PITCH OF ROOF.

REFER TO PLANT ROOM DRAWING M0000

INTAKE DUCTWORK CONNECTS TO EXISTING PERIMETER LOUVRE.

EXHAUST DUCTWORK CONNECTS TO EXISTING PERIMETER LOUVRE.

3000 SUPPLY AND EXTRACT RISES FROM BELOW TO CONNECT TO EXISTING PERIMETER LOUVRE.

2500 SUPPLY AND EXTRACT RISES FROM BELOW TO CONNECT TO EXISTING PERIMETER LOUVRE.

3000

3000

2500 SUPPLY AND EXTRACT RISES FROM BELOW TO CONNECT TO EXISTING PERIMETER LOUVRE.

DUCTWORK SETS ACROSS AT HIGH LEVEL FOLLOWING PITCH OF ROOF.

DUCTWORK SETS ACROSS AT HIGH LEVEL FOLLOWING PITCH OF ROOF.

VENTILATION NOTES:

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4. ALL FIXINGS, SUPPORTS & GUIDES ARE TO BE APPROVED BY THE MAIN CONTRACTOR, PRIOR TO INSTALLATION AS PER MANUFACTURERS RECOMMENDATIONS.
5. ALL DUCTWORK SHALL BE MANUFACTURED, INSTALLED, TESTED & COMMISSIONED IN STRICT ACCORDANCE WITH DW144, DW143, DW151, DW171, DW/TM, DW/TM3, TR/17 & CIBSE COMMISSIONING CODES.
6. ACCESS DOORS SHALL BE PROVIDED ADJACENT ALL FIRE DAMPERS, VOLUME CONTROL DAMPERS AND HEATER BATTERIES AND AT ALL CHANGES IN DUCTWORK TURNS & AT LEAST 4M INTERVALS ON DUCT ROUTES.
7. ALL DUCT RUNS & DIFFUSER POSITIONS MUST BE CHECKED & SET OUT AGAINST FULLY DETAILED CEILING AND FLOOR LAYOUTS, STRUCTURAL ENGINEERING & ELECTRICAL SERVICES DRAWINGS BEFORE ANY DUCTWORK IS ORDERED OUT ON SITE PRIOR TO THE INSTALLATION BEING EXECUTED.
8. ALL SUPPLY AIR (AND EXTRACT WHERE ON A HEAT RECOVERY SYSTEM) DUCTWORK WITHIN RISERS AND PLANT SPACES AND CEILING VOIDS TO BE INSULATED. INTAKE AND EXHAUST DUCTWORK TO BE INSULATED AND VAPOUR SEALED AGAINST CONDENSATION WHERE LOCATED IN UNHEATED SPACES OR OUTSIDE.
9. ALL BRANCH CONNECTIONS SHALL BE PROVIDED WITH VCDS TO FACILITATE BALANCING IN ACCORDANCE WITH ALL RELEVANT CIBSE CODES AND GOOD PRACTICES.
10. ALL LOUVRES AND ROOF COWLS SHALL BE FITTED WITH BIRD MESH AND INSECT SCREENS UNLESS NOTED OTHERWISE SPECIFIED
11. FIRE DAMPERS TO BE COMPLETE WITH BUILT-IN FRAMES FOR FIXING TO THE BUILDING STRUCTURE AS REQUIRED. IN ACCORDANCE WITH THE CURRENT ARCHITECTS FIRE STRATEGY REPORT.
12. ALL DOOR TRANSFER GRILLES AND DOOR UNDERCUTS TO BE PROVIDED AS NECESSARY FOR VENTILATION RETURN AIR PATH. THE CONTRACTOR WILL NEED TO TAKE IN CONSIDERATION OF ACOUSTIC AND FIRE STRATEGY REPORT TO SATISFY ALL REQUIREMENTS.
13. ALL DUCTWORK TO BE OF GALVANISED STEEL CONSTRUCTION.
14. FLEXIBLE VENTILATION DUCTWORK SHALL ONLY BE USED FOR THE FINAL CONNECTIONS TO GRILLES. ALL EXCESS FLEXIBLE DUCTWORK SHALL BE CUT BACK TO A MINIMUM OF 500mm WHEN MAKING FINAL CONNECTIONS.
15. ALL FANS AND VENTILATION UNITS SHALL BE INSTALLED WITH ACCESSIBLE LOCATIONS WITH DUE REGARD TO THE MANUFACTURERS MAINTENANCE SPACE RECOMMENDATIONS.
16. AS PER DW144 ALL PLENUM BOXES AND AIR TERMINALS SHALL BE INDEPENDENTLY SUPPORTED DIRECT TO SOFIT.
17. ALL ROOF EQUIPMENT TO BE INSTALLED ON BIGFOOT SYSTEM ISOLATED FROM ROOF STRUCTURE.

HVAC LEGEND:

- SQUARE DIFFUSER
- EGGCRATE GRILLE
- SWIRL GRILLE
- CIRCULAR SWIRL GRILLE
- CIRCULAR AIR VALVE
- LINEAR DIFFUSER
- BELLMOUTH
- SPIRAL DUCTWORK
- RECTANGULAR DUCTWORK
- EXTERNAL LOUVRE
- DOOR UNDERCUT
- FIRE DAMPER
- DTB / RTA & DTLL / RTHL
- DTB / RTA & DTLL / RTHL
- VOLUME CONTROL DAMPER
- CROSSTALK ATTENUATOR
- AC CONTROLLER
- CENTRAL CONTROLLER
- FAN CONTROLLER
- ACCESS HATCH
- IN LINE FAN
- HEAT RECOVERY UNIT
- FAN COIL UNIT
- AC CASSETTE
- WALL MOUNTED FAN COIL
- OUTDOOR CONDENSING UNIT
- BRANCH CONTROLLER
- ELECTRIC HEATER BATTERY
- PANEL HEATER / RADIATOR
- PIPEWORK CONTAINMENT
- BUILDER/WORK PENETRATION

LINETYPES:

- PRIMARY SUPPLY
- RETURN / EXTRACT
- SECONDARY SUPPLY
- DIRTY EXTRACT
- EXISTING
- STRIP-OUT / RELOCATE

REV	DESCRIPTION	DATE
P5	ISSUED FOR COMMENT/APPROVAL	22.01.2025
P4	ISSUED FOR COMMENT/APPROVAL	09.01.2025
P3	ISSUED FOR COMMENT/APPROVAL	27.10.2024
P2	ISSUED FOR COMMENT/APPROVAL	08.10.2024
P1	ISSUED FOR COMMENT/APPROVAL	01.08.2024

DRAWING STATUS

PRELIMINARY

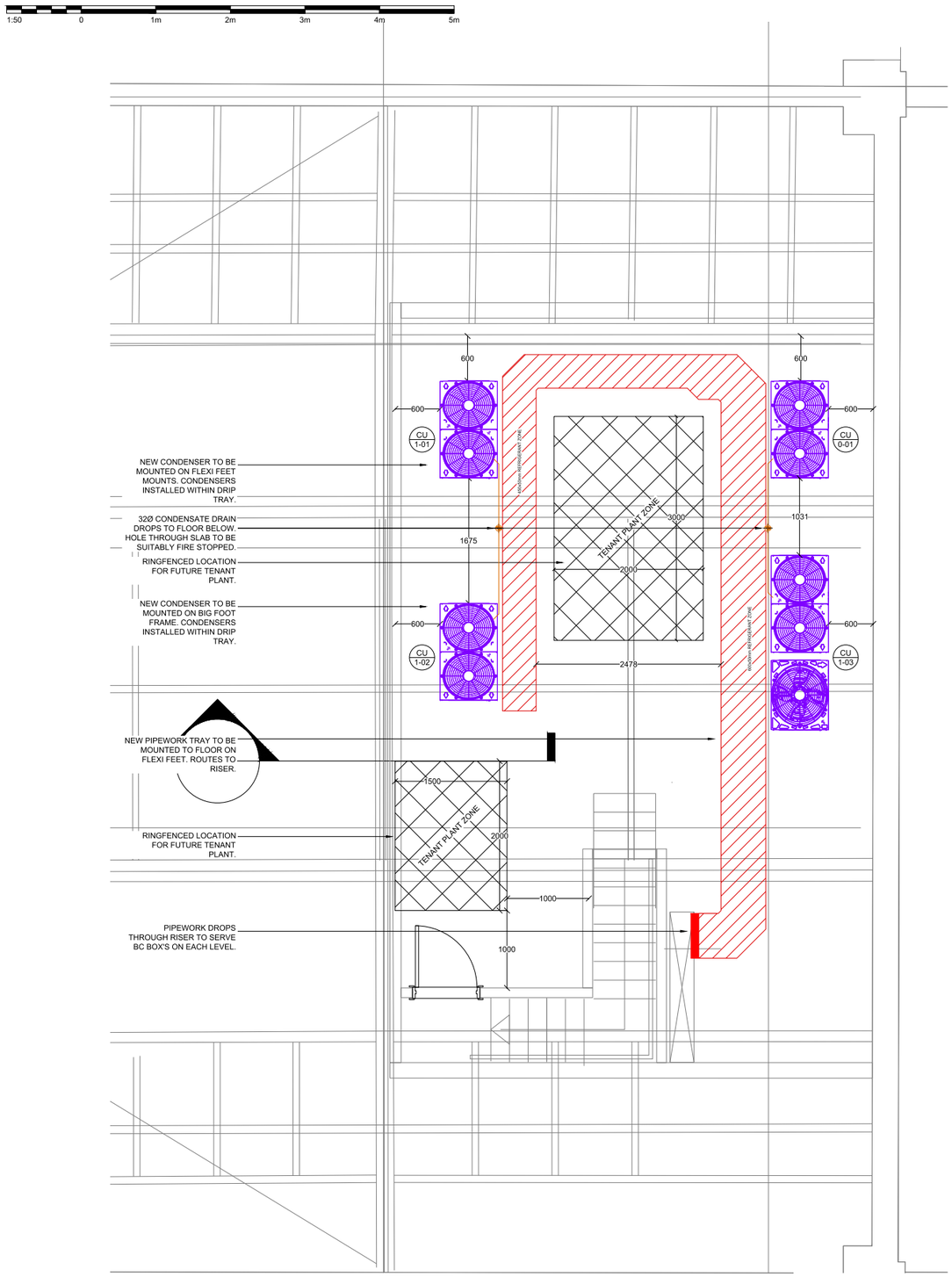
Solution
environmental services
Pure Office, Brooks Drive,
Cheadle Royal Business Park, Cheadle, SK8 3TD
Tel: 0161 532 9460
www.solution-es.co.uk

PROJECT MANAGER	DESIGN
AM	AB
SCALE @A0	DRAWN BY
1:50	AB
DATE	01.08.2024

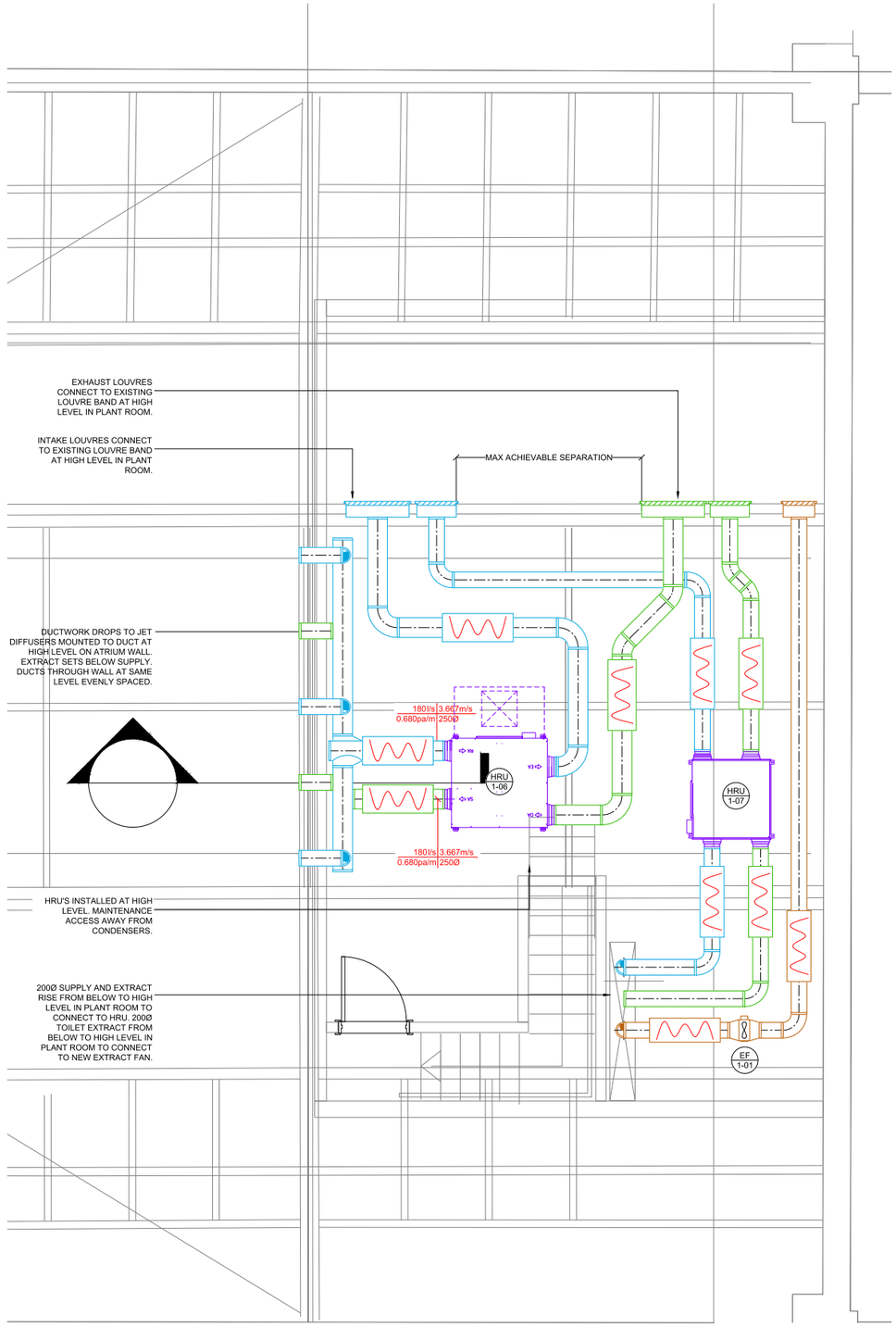
PROJECT
SE4719
UPPER CAMPFIELD MARKET
MANCHESTER

DRAWING TITLE
HVAC SERVICES
SECOND FLOOR LAYOUT

DRAWING NO.	REV
SE4719-SOL-XX-02-DR-M-0007	P5



PLANT ROOM LOW LEVEL
SCALE - 1:50



PLANT ROOM HIGH LEVEL
SCALE - 1:50

VENTILATION NOTES:

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17. ALL ROOF EQUIPMENT TO BE INSTALLED ON BIGFOOT SYSTEM ISOLATED FROM ROOF STRUCTURE.

REV	DESCRIPTION	DATE
P5	ISSUED FOR COMMENT/APPROVAL	22.01.2024
P4	ISSUED FOR COMMENT/APPROVAL	05.01.2024
P3	ISSUED FOR COMMENT/APPROVAL	27.10.2024
P2	ISSUED FOR COMMENT/APPROVAL	08.10.2024
P1	ISSUED FOR COMMENT/APPROVAL	01.08.2024

DRAWING STATUS
PRELIMINARY

Solution
environmental services
Pure Office, Brooks Drive,
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Tel: 0161 532 9460
www.solution-es.co.uk

PROJECT MANAGER	DESIGN
AM	AB
SCALE @A2	DRAWN BY
1:50	AB

DATE
01.08.2024

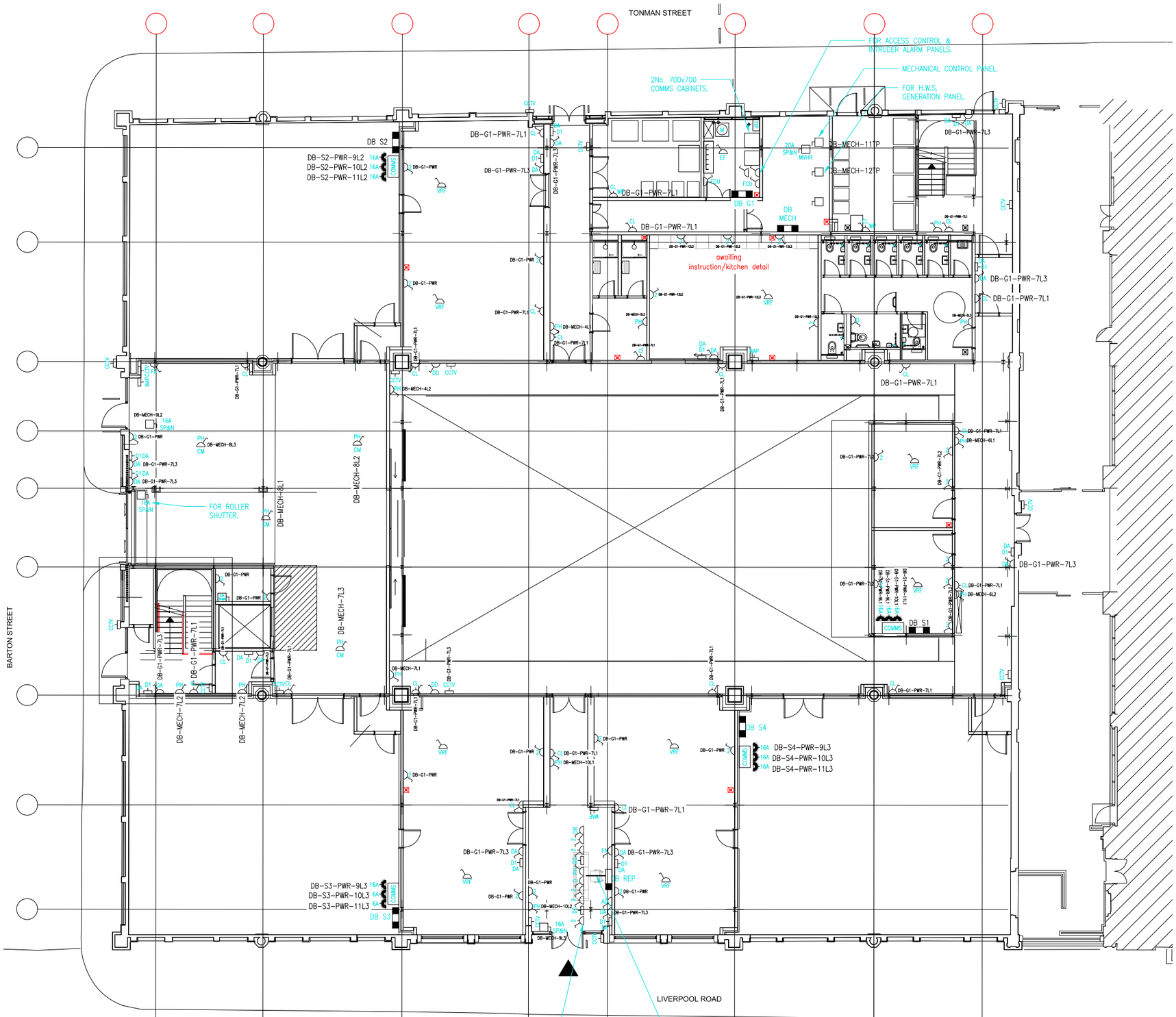
PROJECT
SE4719
UPPER CAMPFIELD MARKET
MANCHESTER

DRAWING TITLE
PLANT ROOM HVAC LAYOUT

DRAWING NO.	REV
SE4719-SOL-XX-02-DR-M-0008	P5

02 Hayvern Electrical drawings

C4488-E002-SMALL-POWER-GROUND-FLOOR-Rev.C4
C4488-E003-SMALL-POWER-MEZZANINE-Rev.C4
C4488-E004-CONTAINMENT-GROUND-FLOOR-Rev.C4
C4488-E005-CONTAINMENT-MEZZ-FLOOR-Rev.C4
LIGHTING-GF & MEZZ-C4-GF-E006
LIGHTING-GF & MEZZ-C4-MEZZ-E007
FIRE-SECURITY--GF & MEZZ - C3-GF - E008
FIRE-SECURITY--GF & MEZZ - C3-MEZZ- E009



SMALL POWER & DATA LEGEND

TYPE	SINGLE UNSWITCHED SOCKET OUTLET.
TYPE	SINGLE SWITCHED SOCKET OUTLET 'CL' DENOTES CLEANERS SOCKET OUTLET.
TYPE	DOUBLE SWITCHED SOCKET OUTLET. 'USB' DENOTES C/W DOUBLE USB OUTLETS.
TYPE	SINGLE NTE5 OR RJ45 TELEPHONE OUTLET.
TYPE	DOUBLE NTE5 OR RJ45 TELEPHONE OUTLET.
TYPE	SINGLE RJ45 DATA OUTLET. 'SALTO' DENOTES FOR SALTO WIRELESS ROUTERS (DOOR ACCESS CONTROL TO OFFICES).
TYPE	DOUBLE RJ45 DATA OUTLET.
TYPE	SINGLE DATA OUTLET AT HIGH LEVEL FOR WIFI WIRELESS ACCESS POINT.
TYPE	SINGLE DATA OUTLET AT HIGH LEVEL FOR CCTV CAMERA.
*	SWITCHED FUSED CONNECTION UNIT.
	UNSWITCHED FUSED CONNECTION UNIT.
	FLEX OUTLET FRONT PLATE.
	ROTARY LOCKABLE ISOLATOR SIZED AS SHOWN.
	BS60309 COMMANDO SOCKET OUTLET SIZED AS SHOWN.
TYPE	20A DOUBLE POLE SWITCH WITH NEON INDICATOR WHERE '*g' DENOTES NUMBER OF GANGS. EACH GANG TO BE LABELLED TO STATE EQUIPMENT SUPPLIED.
MP	MEDIA PLATE BEHIND TV C/W DOUBLE SWITCHED SOCKET OUTLET, DATA OUTLET AND HDMI OUTLET WIRED TO FLOOR BOX.

NOTICE

THIS DRAWING INCLUDING THE PRINCIPLES OF DESIGN, REMAINS THE PROPERTY OF HAYVERN ELECTRICAL LTD. AND IS ISSUED ON THE UNDERSTANDING THAT IT IS NOT REPRODUCED OR LOANED IN PART OR WHOLE EXCEPT WITH THE OWNERS WRITTEN CONSENT. IT IS NOT TO BE USED IN ANY MANNER THAT MAY BE DETRIMENTAL TO HAYVERN ELECTRICAL LTD. ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN AGREEMENT OF THE ABOVE.

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

GENERAL LEGEND

L/L	ITEM MOUNTED AT LOW LEVEL.
H/L	ITEM MOUNTED AT HIGH LEVEL.
C/V	ITEM MOUNTED IN CEILING VOID.
R/V	ITEM MOUNTED IN ROOF VOID.
F/V	ITEM MOUNTED IN FLOOR VOID.
W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
EX	DENOTES EXISTING TO BE RETAINED.
R	DENOTES EXISTING TO BE RELOCATED.
R.T.A.	RISE TO ABOVE.
R.F.B.	RISE FROM BELOW.
D.F.A.	DROP FROM ABOVE.
D.T.B.	DROP TO BELOW.

ABBREVIATIONS LEGEND

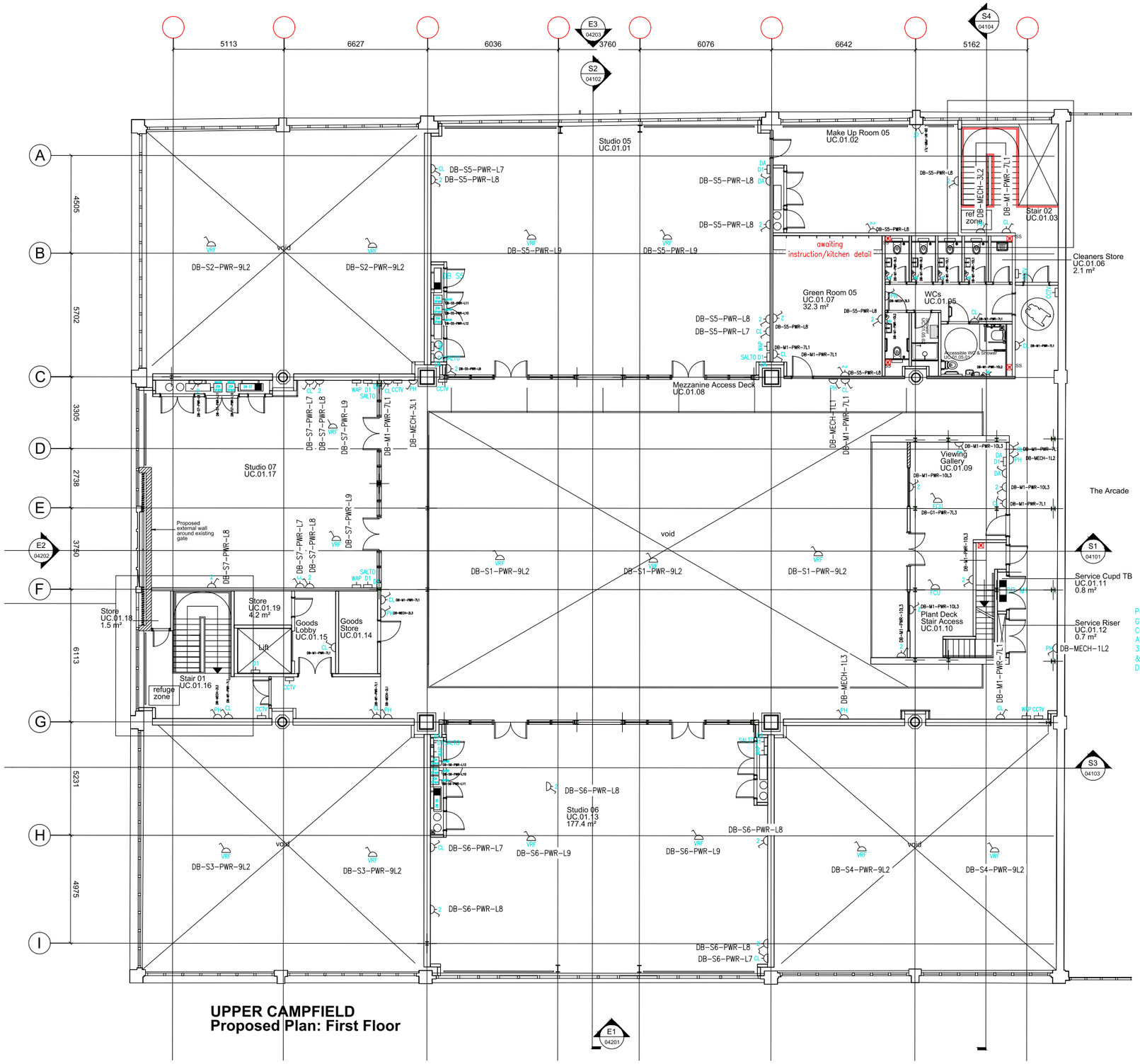
AD – AUTOMATIC OPENING DOOR.
AMP – A.V. AMPLIFIER IN CEILING VOID.
CCTV – CCTV CAMERA MOUNTED IN CEILING VOID.
CH – COOKER HOOD AT HIGH LEVEL.
D – DISABLED ALARM MOUNTED IN CEILING VOID.
DA – DOOR ACCESS CONTROL IN CEILING VOID.
DC – DOOR CLOSER MOUNTED AT HIGH LEVEL/ IN CEILING VOID.
DD – DOOR DETENTE IN CEILING VOID.
DR – DISABLED REFUGE AT HIGH LEVEL.
DW – DISHWASHER AT LOW LEVEL.
EF – EXTRACT FAN IN CEILING VOID.
F – FRIDGE AT LOW LEVEL.
FA – FIRE ALARM AT HIGH LEVEL WITH LABEL – "FIRE ALARM DO NOT SWITCH OFF"
FCU – MECHANICAL FAN COIL UNIT CEILING VOID.
FF – FRIDGE/FREEZER AT LOW LEVEL.
FK – FLY KILLER AT HIGH LEVEL.
HD – HAND DRYER MOUNTED AT HIGH LEVEL WITH FLEX OUTLET PLATE BEHIND HAND DRYER FOR FINAL CONNECTION.
HP – HEAT PUMP UNIT IN CEILING VOID.
HR – HAIR DRYER AT WORKTOP LEVEL.
HRU – HEAT RECOVERY UNIT IN CEILING VOID.
IA – INTRUDER ALARM MOUNTED IN CEILING VOID.
IL – INDUCTION LOOP IN CEILING VOID.
MCU – MODE CONTROL UNIT (VRF) IN CEILING VOID.
PH – ELECTRIC PANEL HEATER AT LOW LEVEL.
RP – RADIANT PANEL HEATER IN CEILING VOID.
SH – ELECTRIC SHOWER.
VRF – VRF CASSETTE UNIT.
WB – WATER BOILER.
WC – WATER COOLER AT LOW LEVEL.
WH – WATER HEATER AT LOW LEVEL.

Revisions	Description	Ref	Eng	Date

HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC

56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	TJM
Project Title	UPPER CAMPFIELD
Drawing Title	SMALL POWER GROUND FLOOR
In Association with	–
Drawn by	SB
Checked by	DC
Date	20-01-25
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E002
Rev.	C4



UPPER CAMPFIELD
Proposed Plan: First Floor

NOTICE

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SMALL POWER & DATA LEGEND

- TYPE — SINGLE UNSWITCHED SOCKET OUTLET.
- TYPE — SINGLE SWITCHED SOCKET OUTLET 'CL' DENOTES CLEANERS SOCKET OUTLET.
- TYPE — DOUBLE SWITCHED SOCKET OUTLET. 'USB' DENOTES C/W DOUBLE USB OUTLETS.
- TYPE — SINGLE NTE5 OR RJ45 TELEPHONE OUTLET.
- TYPE — DOUBLE NTE5 OR RJ45 TELEPHONE OUTLET.
- TYPE — SINGLE RJ45 DATA OUTLET. 'SALTO' DENOTES FOR SALTO WIRELESS ROUTERS (DOOR ACCESS CONTROL TO OFFICES).
- TYPE — DOUBLE RJ45 DATA OUTLET.
- TYPE — SINGLE DATA OUTLET AT HIGH LEVEL FOR WIFI WIRELESS ACCESS POINT.
- TYPE — SINGLE DATA OUTLET AT HIGH LEVEL FOR CCTV CAMERA.
- SWITCHED FUSED CONNECTION UNIT.
- UNSWITCHED FUSED CONNECTION UNIT.
- FLEX OUTLET FRONT PLATE.
- ROTARY LOCKABLE ISOLATOR SIZED AS SHOWN.
- BS60309 COMMANDO SOCKET OUTLET SIZED AS SHOWN.
- TYPE — 20A DOUBLE POLE SWITCH WITH NEON INDICATOR WHERE '*g' DENOTES NUMBER OF GANGS. EACH GANG TO BE LABELLED TO STATE EQUIPMENT SUPPLIED.
- MP — MEDIA PLATE BEHIND TV C/W DOUBLE SWITCHED SOCKET OUTLET, DATA OUTLET AND HDMI OUTLET WIRED TO FLOOR BOX.

GENERAL NOTES

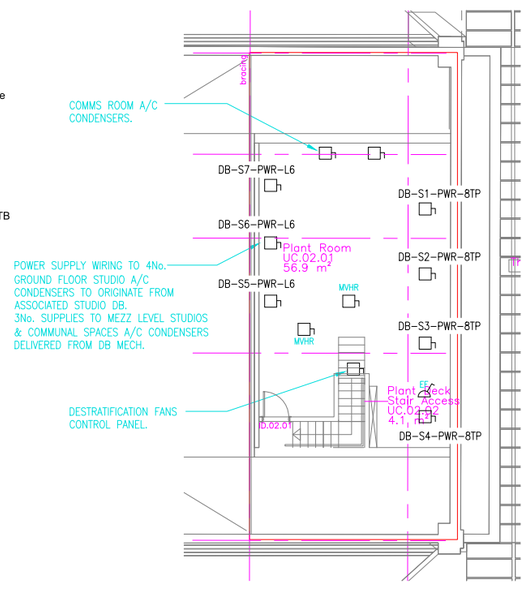
1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

GENERAL LEGEND

- L/L — ITEM MOUNTED AT LOW LEVEL.
- H/L — ITEM MOUNTED AT HIGH LEVEL.
- C/V — ITEM MOUNTED IN CEILING VOID.
- R/V — ITEM MOUNTED IN ROOF VOID.
- F/V — ITEM MOUNTED IN FLOOR VOID.
- W/T — ITEM MOUNTED AT WORKTOP LEVEL.
- WP — DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
- EX — DENOTES EXISTING TO BE RETAINED.
- R — DENOTES EXISTING TO BE RELOCATED.
- R.T.A. — RISE TO ABOVE.
- R.F.B. — RISE FROM BELOW.
- D.F.A. — DROP FROM ABOVE.
- D.T.B. — DROP TO BELOW.

ABBREVIATIONS LEGEND

- AD — AUTOMATIC OPENING DOOR.
- AMP — A.V. AMPLIFIER IN CEILING VOID.
- CCTV — CCTV CAMERA MOUNTED IN CEILING VOID.
- CH — COOKER HOOD AT HIGH LEVEL.
- D — DISABLED ALARM MOUNTED IN CEILING VOID.
- DA — DOOR ACCESS CONTROL IN CEILING VOID.
- DC — DOOR CLOSER MOUNTED AT HIGH LEVEL/ IN CEILING VOID.
- DD — DOOR DETENTE IN CEILING VOID.
- DR — DISABLED REFUGE AT HIGH LEVEL.
- DW — DISHWASHER AT LOW LEVEL.
- EF — EXTRACT FAN IN CEILING VOID.
- F — FRIDGE AT LOW LEVEL.
- FA — FIRE ALARM AT HIGH LEVEL WITH LABEL – "FIRE ALARM DO NOT SWITCH OFF"
- FCU — MECHANICAL FAN COIL UNIT CEILING VOID.
- FF — FRIDGE/FREEZER AT LOW LEVEL.
- FK — FLY KILLER AT HIGH LEVEL.
- HD — HAND DRYER MOUNTED AT HIGH LEVEL WITH FLEX OUTLET PLATE BEHIND HAND DRYER FOR FINAL CONNECTION.
- HP — HEAT PUMP UNIT IN CEILING VOID.
- HR — HAIR DRYER AT WORKTOP LEVEL.
- HRU — HEAT RECOVERY UNIT IN CEILING VOID.
- IA — INTRUDER ALARM MOUNTED IN CEILING VOID.
- IL — INDUCTION LOOP IN CEILING VOID.
- MCU — MODE CONTROL UNIT (VRF) IN CEILING VOID.
- PH — ELECTRIC PANEL HEATER AT LOW LEVEL.
- RP — RADIANT PANEL HEATER IN CEILING VOID.
- SH — ELECTRIC SHOWER.
- VRF — VRF CASSETTE UNIT.
- WB — WATER BOILER.
- WC — WATER COOLER AT LOW LEVEL.
- WH — WATER HEATER AT LOW LEVEL.



PLANT ROOM ABOVE MEZZANINE LEVEL

Revisions	Description	Ref	Eng	Date

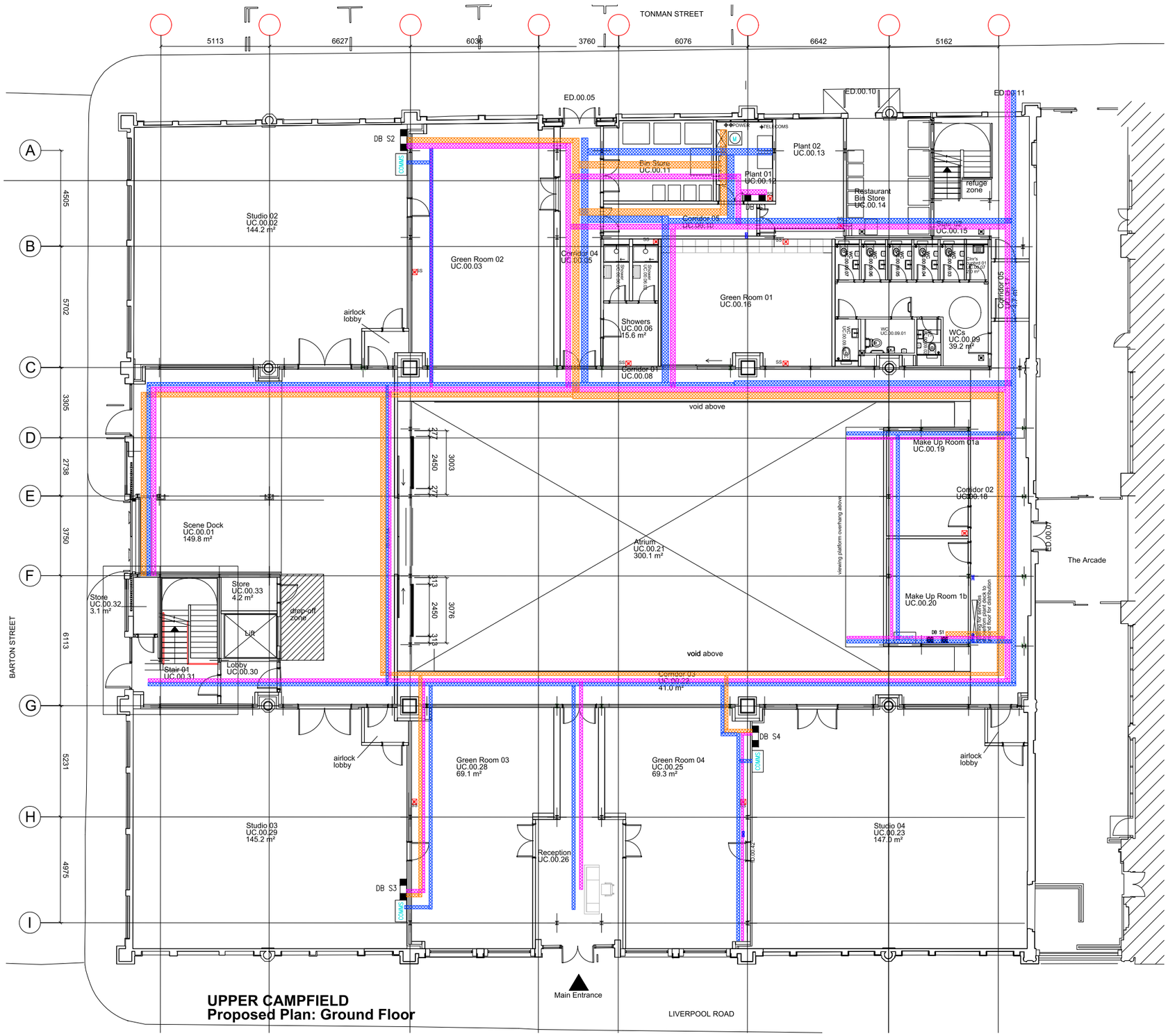
HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC

56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	TJM
Project Title	UPPER CAMPFIELD
Drawing Title	SMALL POWER MEZZANINE
In Association with	–
Drawn by	SB
Checked by	DC
Date	20-01-25
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E003
Rev.	C4

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UPPER CAMPFIELD
Proposed Plan: Ground Floor

GENERAL LEGEND

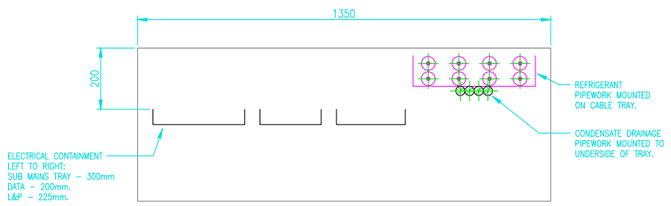
L/L	ITEM MOUNTED AT LOW LEVEL.
H/L	ITEM MOUNTED AT HIGH LEVEL.
C/V	ITEM MOUNTED IN CEILING VOID.
R/V	ITEM MOUNTED IN ROOF VOID.
F/V	ITEM MOUNTED IN FLOOR VOID.
W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
EX	DENOTES EXISTING TO BE RETAINED.
R	DENOTES EXISTING TO BE RELOCATED.
R.T.A.	RISE TO ABOVE.
R.F.B.	RISE FROM BELOW.
D.F.A.	DROP FROM ABOVE.
D.T.B.	DROP TO BELOW.

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

CONTAINMENT LEGEND

	100mm (UNLESS INDICATED) LIGHTING & POWER TRAY.
	225mm (UNLESS INDICATED)SUB MAINS TRAY.
	150mm (UNLESS INDICATED) BT/DATA/COMMS/FIRE ALARM/SECURITY BASKET WITH DIVIDERS.
	TP&N DISTRIBUTION BOARD.
	SP&N DISTRIBUTION BOARD.
	H.D.H.C. COPPER EARTH BAR.
	CONTAINMENT RISE/DROP.
	SWITCH PANEL.
	LOCKABLE ROTARY ISOLATOR SIZED AS SHOWN.
	REGIONAL ELECTRICITY COMPANY (R.E.C.) CABLE/SERVICE HEAD.
M	REGIONAL ELECTRICITY COMPANY (R.E.C.) METER.
TIP	INCOMING TELECOMS TERMINATION POINT.
COMMS	DATA/COMMUNICATIONS CABINET.
WP	DENOTES WEATHERPROOF TYPE.



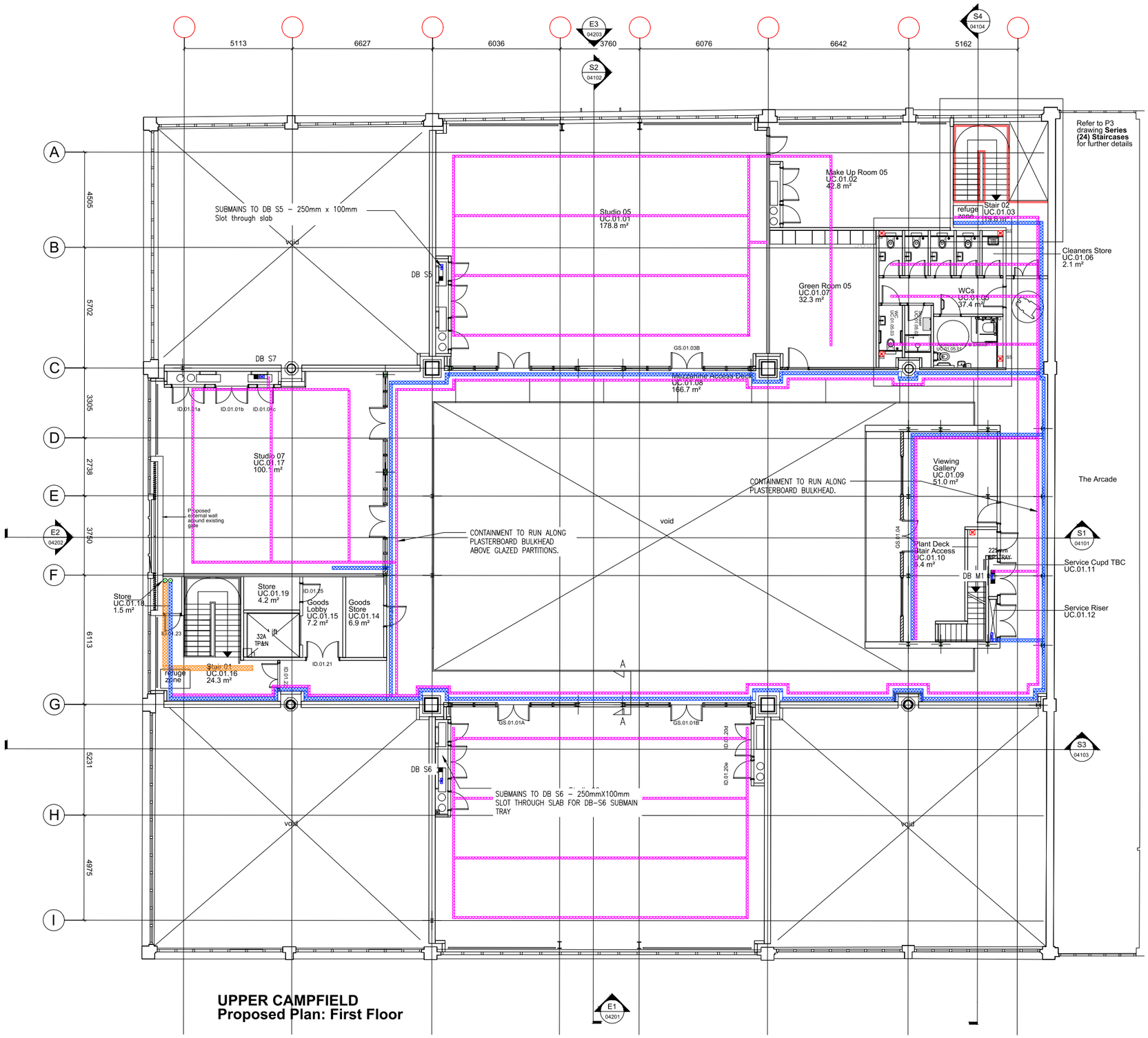
INDICATIVE SECTION A-A
SCALE 1 : 10

HAYVERN ELECTRICAL LTD
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56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	TJM
Project Title	UPPER CAMPFIELD
Drawing Title	CONTAINMENT GROUND FLOOR
In Association with	–
Drawn by	SB
Checked by	DC
Date	20-01-25
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E004
Rev.	C4

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UPPER CAMPFIELD
Proposed Plan: First Floor

GENERAL LEGEND

L/L	ITEM MOUNTED AT LOW LEVEL.
H/L	ITEM MOUNTED AT HIGH LEVEL.
C/V	ITEM MOUNTED IN CEILING VOID.
R/V	ITEM MOUNTED IN ROOF VOID.
F/V	ITEM MOUNTED IN FLOOR VOID.
W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
EX	DENOTES EXISTING TO BE RETAINED.
R	DENOTES EXISTING TO BE RELOCATED.
R.T.A.	RISE TO ABOVE.
R.F.B.	RISE FROM BELOW.
D.F.A.	DROP FROM ABOVE.
D.T.B.	DROP TO BELOW.

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

CONTAINMENT LEGEND

- 100mm (UNLESS INDICATED) LIGHTING & POWER TRAY
- 225mm (UNLESS INDICATED)SUB MAINS TRAY.
- 150mm (UNLESS INDICATED) BT/DATA/COMMS/FIRE ALARM/SECURITY BASKET WITH DIVIDERS.
- TP&N DISTRIBUTION BOARD.
- SP&N DISTRIBUTION BOARD.
- H.D.H.C. COPPER EARTH BAR.
- CONTAINMENT RISE/DROP.
- SWITCH PANEL.
- LOCKABLE ROTARY ISOLATOR SIZED AS SHOWN.
- REGIONAL ELECTRICITY COMPANY (R.E.C.) CABLE/SERVICE HEAD.
- REGIONAL ELECTRICITY COMPANY (R.E.C.) METER.
- TTP — INCOMING TELECOMS TERMINATION POINT.
- COMMS — DATA/COMMUNICATIONS CABINET.
- WP — DENOTES WEATHERPROOF TYPE.

HAYVERN ELECTRICAL LTD
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56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	TJM
Project Title	UPPER CAMPFIELD
Drawing Title	CONTAINMENT MEZZ FLOOR
In Association with	–
Drawn by	SB
Checked by	DC
Date	20-01-25
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E005
Rev.	C4

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GENERAL LEGEND

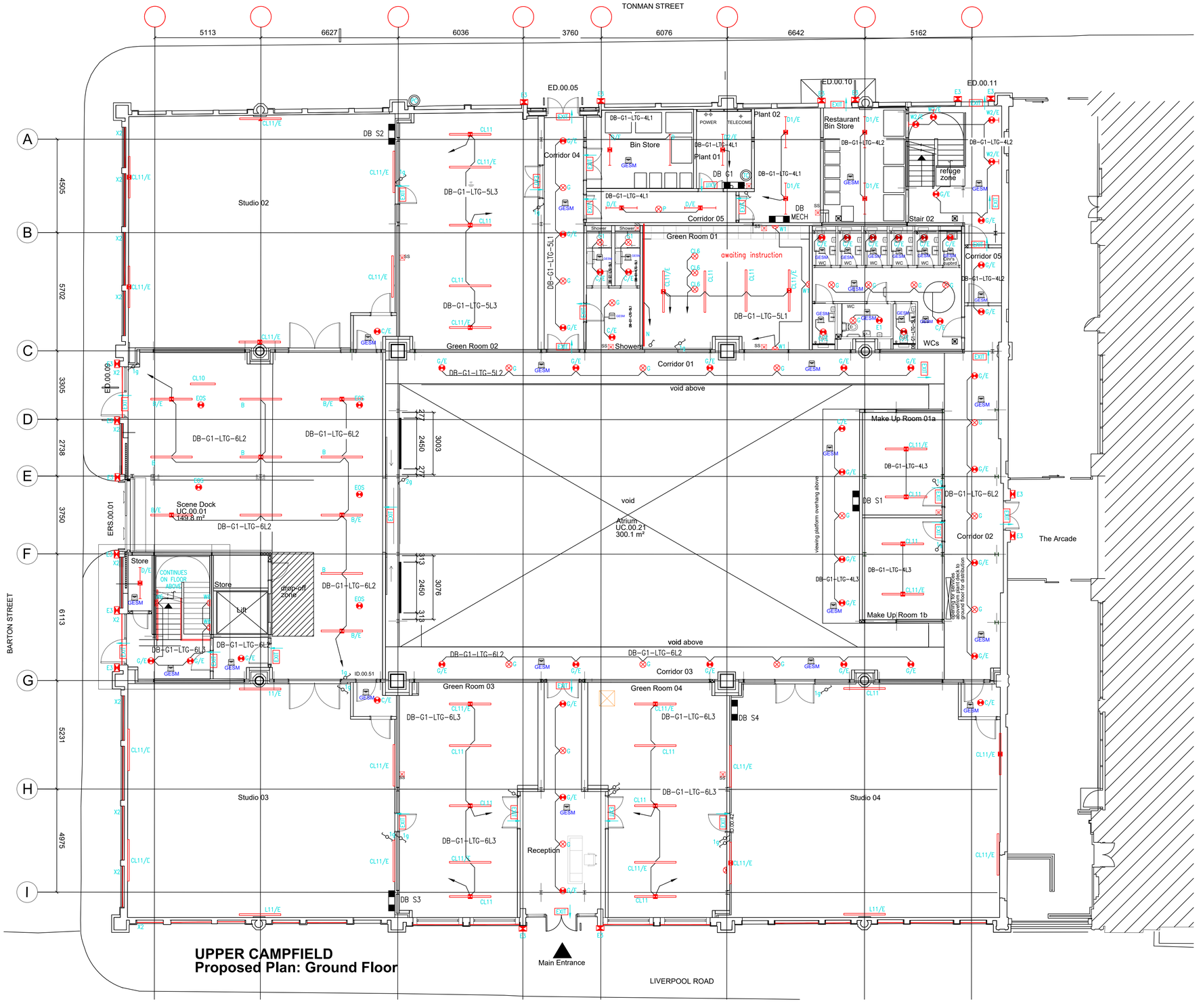
L/L	ITEM MOUNTED AT LOW LEVEL.
H/L	ITEM MOUNTED AT HIGH LEVEL.
C/V	ITEM MOUNTED IN CEILING VOID.
R/V	ITEM MOUNTED IN ROOF VOID.
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W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
EX	DENOTES EXISTING TO BE RETAINED.
R	DENOTES EXISTING TO BE RELOCATED.
R.T.A.	RISE TO ABOVE.
R.F.B.	RISE FROM BELOW.
D.F.A.	DROP FROM ABOVE.
D.T.B.	DROP TO BELOW.

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

LIGHTING LEGEND

/E	DENOTES C/W 3 HOUR EMERGENCY BATTERY BACK-UP & LED INDICATOR
/g	LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.
/g	TWO WAY LIGHT SWITCH. 'xg' – DENOTES No. OF GANGS.
/R	EMERGENCY LIGHTING KEY TEST SWITCH. LABELLED FOR EACH SWITCH WITH DESCRIPTION OF CIRCUIT. ELECTRICAL SUB-CONTRACTOR TO PROVIDE REQUIRED NUMBER OF GANGS TO TEST EACH LOCAL CIRCUIT.
	PHOTOELECTRIC CELL.
	PROGRAMMABLE TIMECLOCK.
EXIT	3 HOUR SELF CONTAINED, NON-MAINTAINED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.
EXIT	3 HOUR SELF CONTAINED, NON-MAINTAINED DOUBLE SIDED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.



UPPER CAMPFIELD
Proposed Plan: Ground Floor

Lighting legend Upper Campfield	
Type	Information
B	LDL Millie
BE	LDL Millie EM
B1	LDL Millie
B1E	LDL Millie EM
B3	LDL Millie
B3E	LDL Millie EM
C	LDL Crookes
CE	LDL Crookes EM
C1	LDL Crookes
C1E	LDL Crookes EM
C10	Zero Grid
C11	LDL Banda
C11E	LDL Banda
D	LDL WPZ IP65 fitting
DE	LDL WPZ IP65 fitting EM
D2E	LDL WPZ IP65 fitting
D1E	LDL WPZ IP65 fitting EM
G	LDL Dominque
GE	LDL Dominque
W1	ESSE 14
W2E	LDL Norminia EM
N1	LDL cornice extrusion and LED tape fixed output
EOS	LDL EM SPOT - EMD
GEFL	CP electronics GEFL PIR Sensor

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56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	TJM
Project Title	UPPER CAMPFIELD
Drawing Title	LIGHTING GROUND FLOOR
In Association with	–
Drawn by	SB
Checked by	DC
Date	04.12.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E006
Rev.	C4

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GENERAL LEGEND

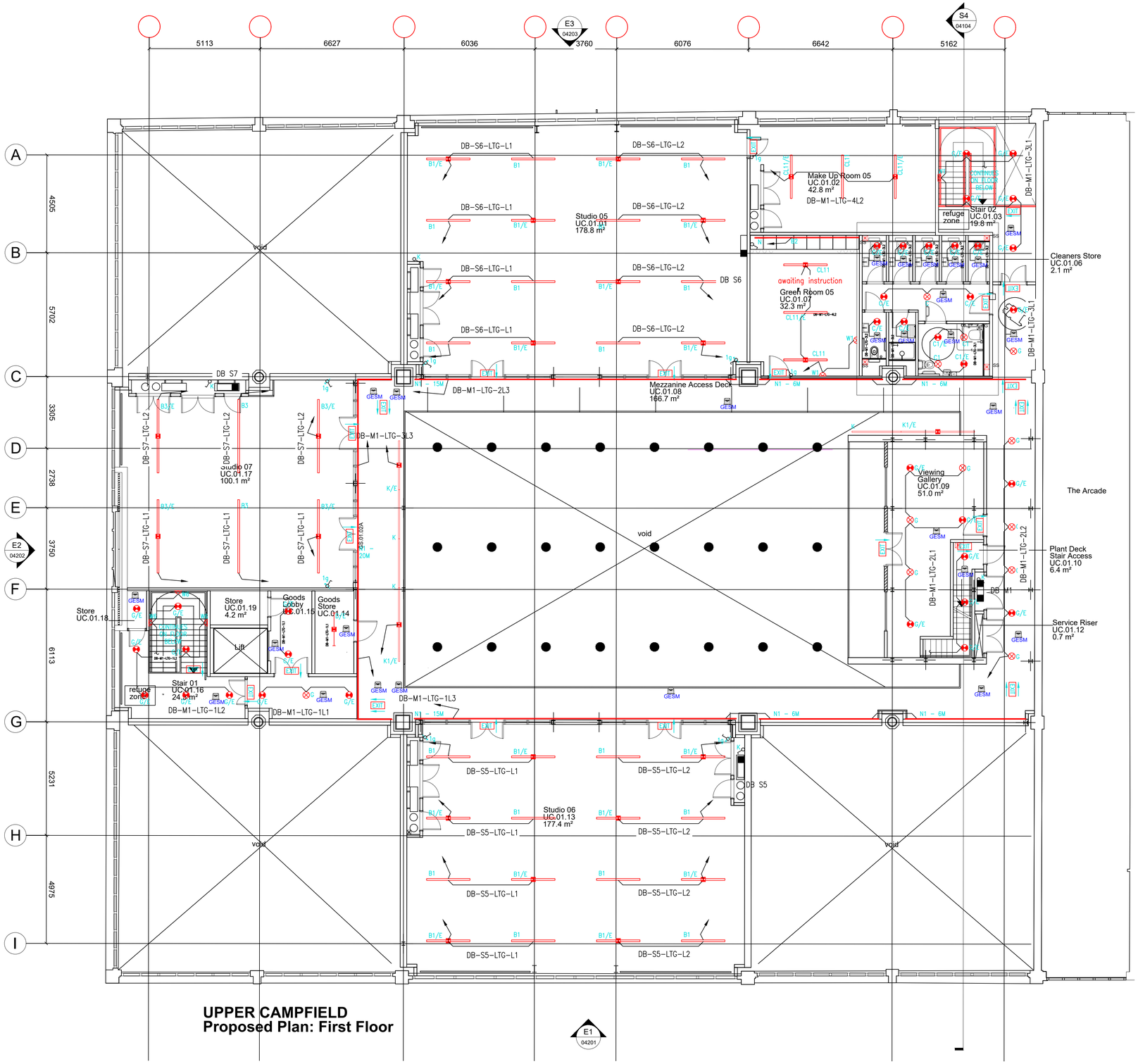
L/L	ITEM MOUNTED AT LOW LEVEL.
H/L	ITEM MOUNTED AT HIGH LEVEL.
C/V	ITEM MOUNTED IN CEILING VOID.
R/V	ITEM MOUNTED IN ROOF VOID.
F/V	ITEM MOUNTED IN FLOOR VOID.
W/T	ITEM MOUNTED AT WORKTOP LEVEL.
WP	DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
EX	DENOTES EXISTING TO BE RETAINED.
R	DENOTES EXISTING TO BE RELOCATED.
R.T.A.	RISE TO ABOVE.
R.F.B.	RISE FROM BELOW.
D.F.A.	DROP FROM ABOVE.
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GENERAL NOTES

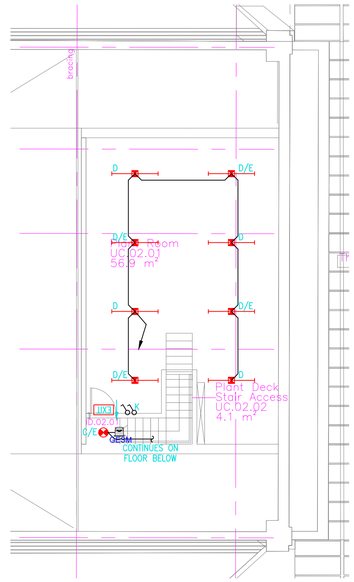
1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

LIGHTING LEGEND

/E	DENOTES C/W 3 HOUR EMERGENCY BATTERY BACK-UP & LED INDICATOR
	LIGHT SWITCH. '*g' – DENOTES No. OF GANGS.
	TWO WAY LIGHT SWITCH. '*g' – DENOTES No. OF GANGS.
K	EMERGENCY LIGHTING KEY TEST SWITCH. LABELLED FOR EACH SWITCH WITH DESCRIPTION OF CIRCUIT. ELECTRICAL SUB-CONTRACTOR TO PROVIDE REQUIRED NUMBER OF GANGS TO TEST EACH LOCAL CIRCUIT.
	PHOTOELECTRIC CELL.
	PROGRAMMABLE TIMECLOCK.
EXIT	3 HOUR SELF CONTAINED, NON-MAINTAINED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.
EXIT	3 HOUR SELF CONTAINED, NON-MAINTAINED DOUBLE SIDED EMERGENCY EXIT SIGN WHERE ARROW DENOTES DIRECTION OF LEGEND PANEL.



UPPER CAMPFIELD
Proposed Plan: First Floor

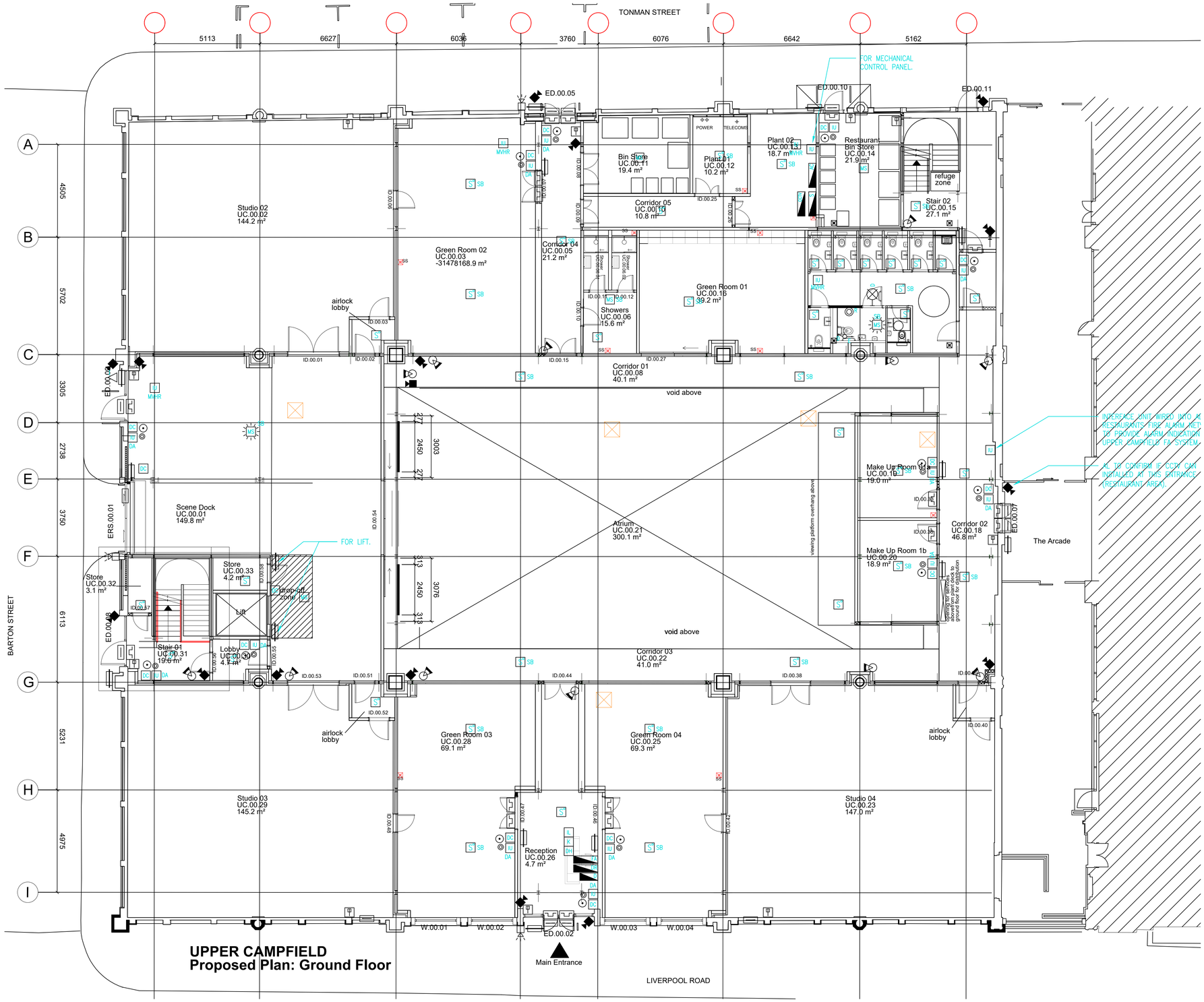


PLANT ROOM ABOVE MEZZANINE LEVEL

Lighting legend Upper Campfield	
Type	Information
B	LDL Millie
BE	LDL Millie EM
B1	LDL Millie
B1E	LDL Millie EM
B3	LDL Millie
B3E	LDL Millie EM
C	LDL Crookes
CE	LDL Crookes EM
C1	LDL Crookes
C1E	LDL Crookes EM
C10	Zero Grid
C11	LDL Banda
C11E	LDL Banda
D	LDL WPZ IP65 fitting
DE	LDL WPZ IP65 fitting EM
D2E	LDL WPZ IP65 fitting EM
D1E	LDL WPZ IP65 fitting EM
G	LDL Dominque
GE	LDL Dominque
W1	ESSE 14
W2E	LDL Normna EM
N1	LDL cornice extrusion and LED tape fixed output
EOS	LDL EM SPOT - EMD
GEFL	CP electronics GEFL PIR Sensor

HAYVERN ELECTRICAL LTD
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56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	TJM
Project Title	UPPER CAMPFIELD
Drawing Title	LIGHTING MEZZ FLOOR
In Association with	–
Drawn by	SB
Checked by	DC
Date	04.12.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E007
Rev.	C4



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FIRE ALARMS LEGEND

- MAIN FIRE ALARM PANEL.
- FIRE ALARM REPEATER PANEL.
- MANUAL CALL POINT.
- INTERFACE UNIT. "DC" DENOTES DOOR CLOSER IN CEILING VOID. "DH" DENOTES DOOR HOLD OPEN IN CEILING VOID. "DA" DENOTES FOR DOOR ACCESS. "EF" – DENOTES EXTRACT FAN. "HRU" – HEAT RECOVERY UNIT.
- OPTICAL SMOKE DETECTOR.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE.
- OPTICAL SMOKE DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- HEAT DETECTOR.
- HEAT DETECTOR C/W SOUNDER BASE.
- HEAT DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- MULTI–SENSOR DETECTOR.
- MULTI–SENSOR DETECTOR C/W SOUNDER BASE.
- MULTI–SENSOR DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- OPTICAL SMOKE DETECTOR MOUNTED IN CEILING VOID WITH REMOTE INDICATOR MOUNTED DIRECTLY BELOW.
- REMOTE INDICATOR UNIT.
- BEAM DETECTOR TRANSMITTER AT H/L.
- BEAM DETECTOR RECEIVER AT H/L.
- ELECTRONIC SOUNDER.
- ELECTRONIC SOUNDER & FLASHING BEACON.
- DOOR DETENTE/HOLD OPEN WITH INTEGRAL RESET BUTTON.

INTRUDER ALARM LEGEND

- INTRUDER ALARM PANEL.
- DOOR/WINDOW CONTACT.
- KEYPAD.
- DUALTECH DETECTOR.
- SOUNDER & FLASHING BEACON.



DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT
FINISH TO BE CONFIRMED BY INTERIOR DESIGNER

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

SERVICES SPECIFIC NOTES

1.0 ALL VISIBLE SERVICES IN THE BUILDING TO BE AGREED WITH HART

2.0 ALL VISIBLE SERVICES WITHIN STUDIO 01 WILL HAVE A BLACK FINISH.

GENERAL LEGEND

- L/L ITEM MOUNTED AT LOW LEVEL.
- H/L ITEM MOUNTED AT HIGH LEVEL.
- C/V ITEM MOUNTED IN CEILING VOID.
- R/V ITEM MOUNTED IN ROOF VOID.
- F/V ITEM MOUNTED IN FLOOR VOID.
- W/T ITEM MOUNTED AT WORKTOP LEVEL.
- WP DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
- EX DENOTES EXISTING TO BE RETAINED.
- R DENOTES EXISTING TO BE RELOCATED.
- R.T.A. RISE TO ABOVE.
- R.F.B. RISE FROM BELOW.
- D.F.A. DROP FROM ABOVE.
- D.T.B. DROP TO BELOW.

ACCESS CONTROL LEGEND

- ACCESS CONTROL PANEL/HEAD END P.C.
- ELECTRONIC KEYPAD/PROXIMITY READER/SWIPE CARD READER FOR DOOR RELEASE. 'B' DENOTES BATTERY OPERATED WIRELESS SMART DOOR LOCK.
- GREEN BREAKGLASS.
- GREEN REQUEST TO EXIT BUTTON.
- DOOR CONTROLLER.
- INTERCOM.
- DOOR INTERCOM HANDSET.
- REMOTE DOOR RELEASE BUTTON.
- SALTO WIRELESS ROUTER.
- MAGLOCK.

CCTV LEGEND

- CCTV SYSTEM CONTROL EQUIPMENT & MONITOR.
- FIXED CCTV CAMERA.

DISABLED WC ALARM LEGEND

- DISABLED WC ALARM INDICATOR PANEL.
- DISABLED WC EMERGENCY PULL CORD.
- DISABLED WC RESET BUTTON.
- DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT.

DISABLED REFUGE LEGEND

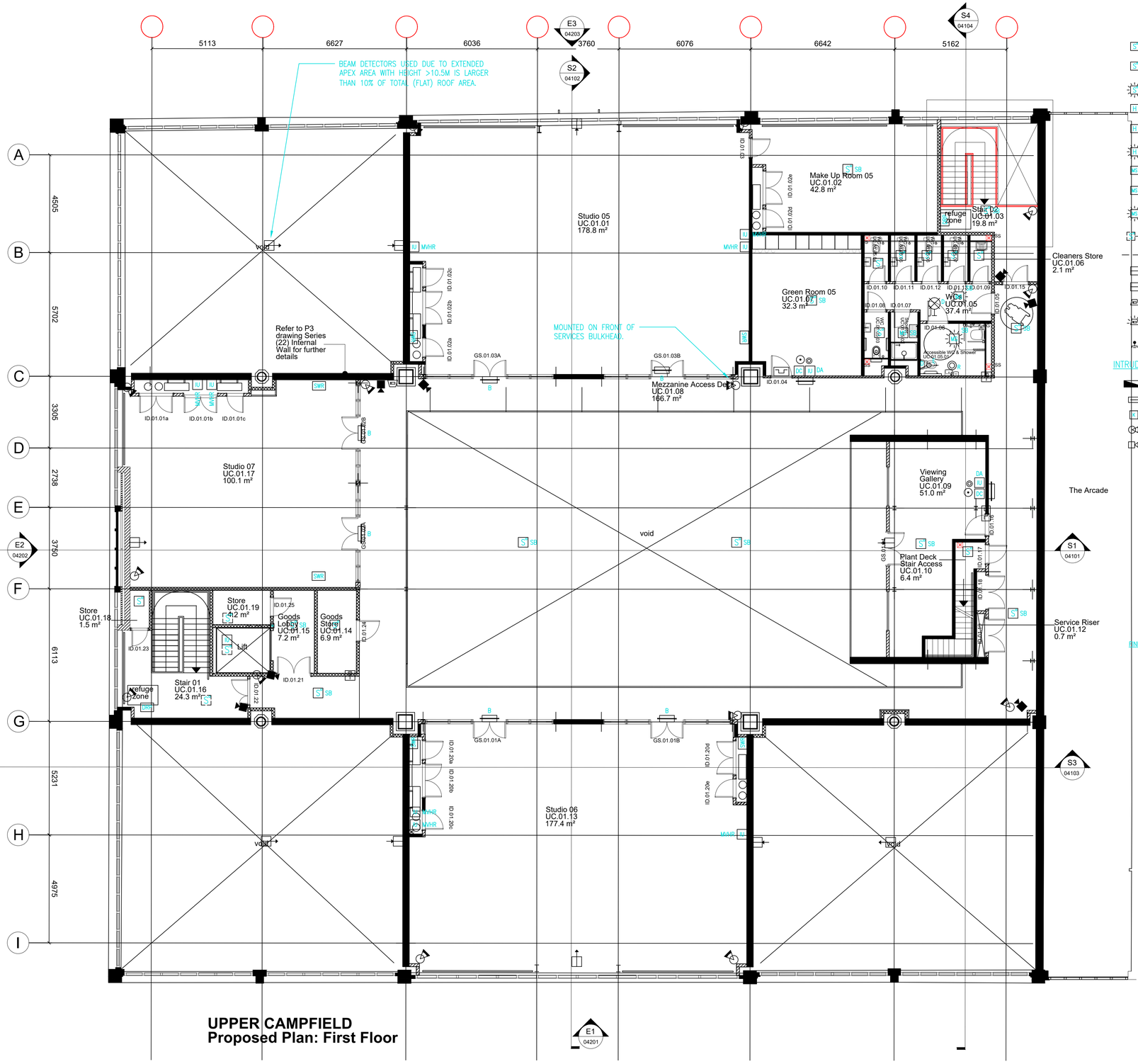
- DISABLED REFUGE ALARM PANEL.
- DISABLED REFUGE ALARM CALL POINT.

MISCELLANEOUS DISABLED SYSTEMS LEGEND

- INDUCTION LOOP.

HAYVERN ELECTRICAL LTD
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56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	TJM
Project Title	UPPER CAMPFIELD
Drawing Title	FIRE AND SECURITY GROUND FLOOR
In Association with	–
Drawn by	SB
Checked by	DC
Date	12.11.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E008
Rev.	C3



UPPER CAMPFIELD
Proposed Plan: First Floor

FIRE ALARMS LEGEND

- MFA — MAIN FIRE ALARM PANEL.
- FARP — FIRE ALARM REPEATER PANEL.
- MCP — MANUAL CALL POINT.
- IU — INTERFACE UNIT. 'DC' DENOTES DOOR CLOSER IN CEILING VOID. 'DH' DENOTES DOOR HOLD OPEN IN CEILING VOID. 'DA' DENOTES FOR DOOR ACCESS. 'EF' – DENOTES EXTRACT FAN. 'HRU' – HEAT RECOVERY UNIT.
- S — OPTICAL SMOKE DETECTOR.
- S SB — OPTICAL SMOKE DETECTOR C/W SOUNDER BASE.
- SB — OPTICAL SMOKE DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- H — HEAT DETECTOR.
- H SB — HEAT DETECTOR C/W SOUNDER BASE.
- SB — HEAT DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- MS — MULTI-SENSOR DETECTOR.
- MS SB — MULTI-SENSOR DETECTOR C/W SOUNDER BASE.
- SB — MULTI-SENSOR DETECTOR C/W SOUNDER BASE & FLASHING BEACON.
- OPTICAL SMOKE DETECTOR MOUNTED IN CEILING VOID WITH REMOTE INDICATOR MOUNTED DIRECTLY BELOW.
- REMOTE INDICATOR UNIT.
- BEAM DETECTOR TRANSMITTER AT H/L.
- BEAM DETECTOR RECEIVER AT H/L.
- ELECTRONIC SOUNDER.
- ELECTRONIC SOUNDER & FLASHING BEACON.
- DOOR DETENTE/HOLD OPEN WITH INTEGRAL RESET BUTTON.

INTRUDER ALARM LEGEND

- IAP — INTRUDER ALARM PANEL.
- DOOR/WINDOW CONTACT.
- K — KEYPAD.
- DUALTECH DETECTOR.
- SOUNDER & FLASHING BEACON.



DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT
FINISH TO BE CONFIRMED BY INTERIOR DESIGNER

GENERAL NOTES

1.0 THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS

SERVICES SPECIFIC NOTES

1.0 ALL VISIBLE SERVICES IN THE BUILDING TO BE AGREED WITH HART

2.0 ALL VISIBLE SERVICES WITHIN STUDIO 01 WILL HAVE A BLACK FINISH.

GENERAL LEGEND

- L/L — ITEM MOUNTED AT LOW LEVEL.
- H/L — ITEM MOUNTED AT HIGH LEVEL.
- C/V — ITEM MOUNTED IN CEILING VOID.
- R/V — ITEM MOUNTED IN ROOF VOID.
- F/V — ITEM MOUNTED IN FLOOR VOID.
- W/T — ITEM MOUNTED AT WORKTOP LEVEL.
- WP — DENOTES WEATHERPROOF IP65 TYPE SUITABLE FOR EXTERNAL USE.
- EX — DENOTES EXISTING TO BE RETAINED.
- R — DENOTES EXISTING TO BE RELOCATED.
- R.T.A. — RISE TO ABOVE.
- R.F.B. — RISE FROM BELOW.
- D.F.A. — DROP FROM ABOVE.
- D.T.B. — DROP TO BELOW.

ACCESS CONTROL LEGEND

- ACP — ACCESS CONTROL PANEL/HEAD END P.C.
- ELECTRONIC KEYPAD/PROXIMITY READER/SWIPE CARD READER FOR DOOR RELEASE. 'B' DENOTES BATTERY OPERATED WIRELESS SMART DOOR LOCK.
- GREEN BREAKGLASS.
- GREEN REQUEST TO EXIT BUTTON.
- DC — DOOR CONTROLLER.
- INTERCOM.
- DH — DOOR INTERCOM HANDSET.
- DR — REMOTE DOOR RELEASE BUTTON.
- SWR — SALTO WIRELESS ROUTER.
- MAGLOCK.

CCTV LEGEND

- CCTV — CCTV SYSTEM CONTROL EQUIPMENT & MONITOR.
- FIXED CCTV CAMERA.

DISABLED WC ALARM LEGEND

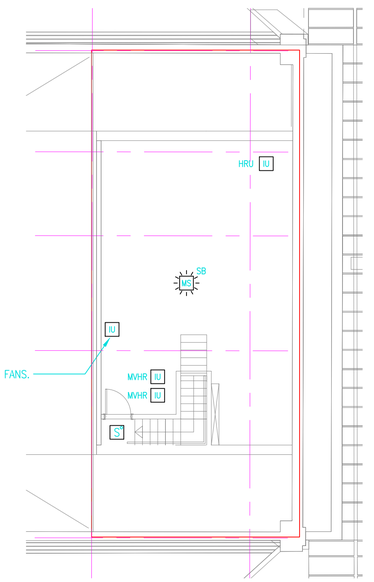
- DWC — DISABLED WC ALARM INDICATOR PANEL.
- E — DISABLED WC EMERGENCY PULL CORD.
- R — DISABLED WC RESET BUTTON.
- D — DISABLED WC WALL MOUNTED REPEAT ALARM LAMP UNIT.

DISABLED REFUGE LEGEND

- DRP — DISABLED REFUGE ALARM PANEL.
- DRP — DISABLED REFUGE ALARM CALL POINT.

MISCELLANEOUS DISABLED SYSTEMS LEGEND

- IL — INDUCTION LOOP.



PLANT ROOM ABOVE MEZZANINE LEVEL

NOTICE

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HAYVERN ELECTRICAL LTD
• INDUSTRIAL • COMMERCIAL • DOMESTIC
56 QUEEN STREET, FARNWORTH, BOLTON, 01204 579975

Client	TJM
Project Title	UPPER CAMPFIELD
Drawing Title	FIRE AND SECURITY MEZZ FLOOR
In Association with	–
Drawn by	SB
Checked by	DC
Date	12.11.24
Scales	1:100 (work to figured dimensions)
DRG No.	C4488/E009
Rev.	C3

03 Hart lighting schedule, UC_sL

HART

23-058: LIGHTING SCHEDULE

UC_sL	Project	Upper Campfield
	Date	15 January 2025

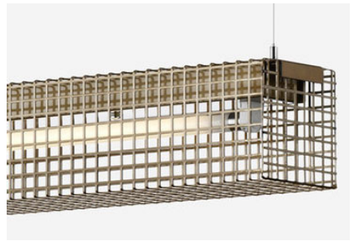
Client Address	Project Address
All Work & Social Bonded Warehouse 18 Lower Byrom Street Manchester M3 4AP	Upper Campfield Liverpool Road Manchester M3 4FP

Revision:	**T1**	Stage 3+ Tender	15/12/2023
	T2	Stage 3+ Redesign Tender	30/04/2024
	C1	Stage 3+ Construction	13/08/2024
		Stage 3+ information to be developed by the contractor/subcontractors for construction. Subject to any VE or contract admissions / omissions undertaken by the client	
	C2	Stage 3+ Construction	15/01/2025
		Stage 3+ information to be developed by the contractor/subcontractors for construction. Subject to any VE or contract admissions / omissions undertaken by the client	

Please Note:
- Revisions made since the last issue are marked in blue
- Omissions made since the last issue are struck through in grey
- Target lux levels are provided within this schedule. The client does <u>not</u> require 100% uniformity to be achieved. A reasonable uniformity is sufficient, whilst keeping the quantity of fittings to a reasonable level.
- This schedule is for design intent purposes only, final specifications of light fittings will be by the MEP Engineer and lighting controls must be agreed with the client
- Any 'acceptable equivalents' proposed by the Architect or Contractor need to be approved by the client prior to manufacture or any orders being placed
- Contractor to provide co-ordinated RCP for review and comment by client/architect prior to ordering fittings and prior to installation of containment
- Quantity of fittings shown on architectural reflected ceiling plans (CL series) are indicative at this stage

HART Ref Code	MEP Design Ref Code	Location	Image	Description	Colour/Finish	Product Code	Manufacturer	Notes
LIGHTING								
CL1	H & H/E	Various Corridors / Lobbies		Surface-mounted downlight 'can' fitting	White	Force Size tbc by MEP Design	Mount Lighting	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings
CL2	G & G/E	Viewing Gallery / Stairs		Surface-mounted downlight 'can' fitting	White	Force Size tbc by MEP Design	Mount Lighting	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings

HART Ref Code	MEP Design Ref Code	Location	Image	Description	Colour/Finish	Product Code	Manufacturer	Notes
~~CL3~~				~~Omitted~~				
CL4	J1 & J1/E	WC Lobbies / Shower Lobby		Surface-mounted downlight 'can' fitting IP rating tbc by MEP Engineer	White	Force Size tbc by MEP Design MEP to confirm if this fitting has the required IP rating	Mount Lighting	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings
CL5	B1 & B1/E B2 & B2/E	Mezz Studios	 Design intent image	Suspended linear light	White	Tbc by MEP Design	Tbc by MEP Design	Light temp: 3000k Target Lux Level: 300-350 Lux to Prod. Office & Workspaces 200 Lux to Loading Bay Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings
CL6	CL6	Green Room 01		Suspended pendant light **Quantity of 3, centred above teapoint island** Installed at 2000mm AFFL	Mustard 325mm diameter	Unfold Pendant	Muuto	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings
CL7	F & F/E	Circulation / Corridors		Suspended downlight 'can' fitting	White	Force Extended suspension drop may be required due to high soffit height Size tbc by MEP Design	Mount Lighting	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings

HART Ref Code	MEP Design Ref Code	Location	Image	Description	Colour/Finish	Product Code	Manufacturer	Notes
~~CL8~~	~~K & K/E~~ ~~K1 & K1/E~~	~~Mezzanine Deck (around exterior of Studio 01)~~	~~Design intent of fitting mounted on arm brackets, to give sufficient clearance to provide an even wall wash down the double height partition~~ ~~Top image is not representative of proposed colour~~	~~Surface-mounted linear light with wall wash diffuser~~ ~~Installed on arm brackets~~	~~Custom RAL Colour tbc~~	~~Estrella Pro Linear with Wallwash Diffuser~~	~~Ricoman~~	~~Light temp: 3000k~~ ~~Target Lux Level: 200 Lux~~ ~~Dimmable: Yes~~ ~~Or acceptable equivalent, client to approve~~ ~~To contain integrated emergency fittings~~
CL9	D & D/E	BOH Areas	Tbc by MEP Design					
CL10		Reception	 	Suspended linear light, centred above reception desk Installed at 2000mm AFFL	Metal	Grid	Zero Lighting	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve
CL11		Scene Dock / Green Rooms / Atrium Ancillary Rooms / Make-Up Room 05		Suspended tubular LED fitting Length: 1500mm	Aluminium/SS end caps	Keela	LDL Lighting	Light temp: 3000k Target Lux Levels: - 300-350 Lux to Make-Up Rooms & Atrium Ancillary - 200 Lux to Scene Dock & Green Rooms Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings
CL12		Reception		Surface-mounted downlight 'can' fitting	Black	Force Size tbc by MEP Design	Mount Lighting	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings

HART Ref Code	MEP Design Ref Code	Location	Image	Description	Colour/Finish	Product Code	Manufacturer	Notes
D1	C & C/E	WC Cubicles / Cleaners Cupboards		Recessed downlight IP rating tbc by MEP Engineer	White	Crookes	LDL Lighting	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: No Or acceptable equivalent, client to approve To contain integrated emergency fittings
D2	C & C/E	Shower		Recessed downlight IP rating tbc by MEP Engineer	White	Crookes	LDL Lighting	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: No Or acceptable equivalent, client to approve To contain integrated emergency fittings
~~D3~~	~~Omitted~~							
~~D4~~	~~Omitted~~							
D5	L & L/E	Various		Recessed downlight	White	Crookes	LDL Lighting	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: No Or acceptable equivalent, client to approve To contain integrated emergency fittings
~~D6~~	~~Omitted~~							
LL2	N	Teapoints	To MEP Engineer's proposals					Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings
~~LL3~~	~~Omitted~~							
LL4	N1	Mezzanine Deck (services bulkhead)	 Indicative image of angled profile, colour is not representative of proposed finish	Angled linear strip	White profile, opal diffuser	Loox5 LED Flexible Strip	Hafele	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings

HART Ref Code	MEP Design Ref Code	Location	Image	Description	Colour/Finish	Product Code	Manufacturer	Notes
~~TL1~~					~~Omitted~~			
~~P1~~					~~Omitted~~			
~~P2~~					~~Omitted~~			
~~P3~~					~~Omitted~~			
~~P4~~					~~Omitted~~			
~~P5~~					~~Omitted~~			
P6	A1	Corner Studios 02-04 / Atrium		High-bay suspended pendant	White cap	Molly	LDL Lighting	Light temp: 3000k Target Lux Level: 300-350 Lux Dimmable: Yes Or acceptable equivalent, client to approve To contain integrated emergency fittings
~~P7~~	~~A~~	~~Studio 01~~		~~High-bay suspended pendant~~	~~Black~~	~~Hangar~~ ~~MEP Design to confirm if proposed fitting achieves client requiements~~	~~Ideal Lux~~	~~Light temp: 3000k~~ ~~Target Lux Level: 300-350 Lux~~ ~~Dimmable: Yes~~ ~~Or acceptable equivalent, client to approve~~ ~~To contain integrated emergency fittings~~
W1	W1	Stairs / Green Rooms 01 & 05		Wall-mounted vertical tube light With opal/porcelain effect bulb	Black	Esse 14 - 300mm	Creative Cables	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve

HART Ref Code	MEP Design Ref Code	Location	Image	Description	Colour/Finish	Product Code	Manufacturer	Notes
W6		Make-Up Rooms		Galvanised conduit with surface mounted lightbulbs around mirrors	Galvanised	Tbc by MEP Design	Tbc by MEP Design	Light temp: 3000k Target Lux Level: 200 Lux Dimmable: Yes Or acceptable equivalent, client to approve **Refer to design drawings for details**

04 TJM AC kit hanging proposals

UPPER CAMPFIELD - AC KIT HANGING

Upper Campfield

Tuesday 26 November 2024

Prepared For Allied London

12 Items Identified



1

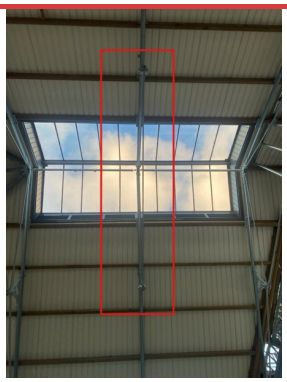
Option 1- unistrut between timbers with rods hanging off

Option 2 - gripple around existing steel and spider rods down



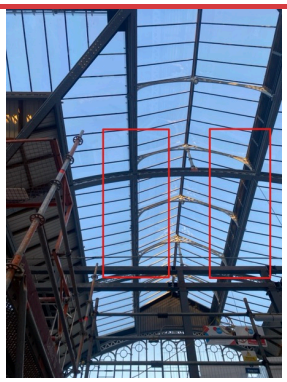
2

Method of hanging TBC by sub contractor



3

Gripple rods down from centre of existing steel section



4+5

Gripple rods hanging off the existing beam down to kit.



6

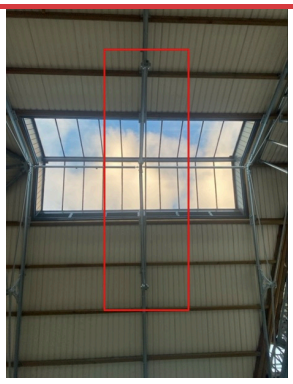
Option 1- unistrut between timbers with rods hanging off

Option 2 - gripple around existing steel and spider rods down



7

Method of hanging TBC by sub contractor



8

Gripple rods down from centre of existing steel section



9+10

Gripple rods hanging off the existing beam down to kit.



14+15

Gripple rods hanging off the existing beam down to kit.



11

Gripple rods down from centre of existing steel section



12

Method of hanging TBC by sub contractor



13

Option 1- unistrut between timbers with rods hanging off

Option 2 - gripple around existing steel and spider rods down

05 Gripple wire hanging

Gripple Loop End Fixing

End fixing that is ideal for looping around purlins, beams, roof trusses and other accessible building features.

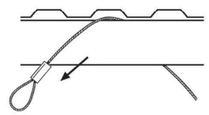
ADVANTAGES

- Quick, simple choke-knot installation.
- No need for nuts, bolts, clamps or other accessories.
- Up to 6 times faster installation compared with threaded rod or chain.
- Available in No.1 - No.5
- Supplied in a ready-to-use kit with a length of wire and a Gripple.
- Also available in a Stainless Steel version.

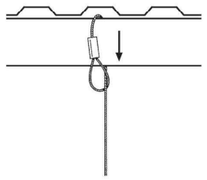




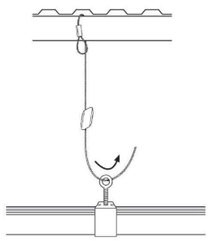
INSTALLATION



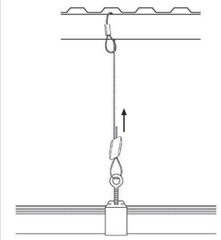
1. Pass the loop end over the building feature.



2. Thread the tail wire through the loop to create a choke knot.

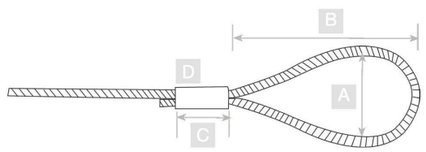


3. Use Gripple to attach the service to the loop and adjust the height.



4. The completed installation.

LOOP SPECIFICATION



	A (Nominal) mm	B (Nominal) mm	C mm	D mm
No.1	30	60	11	6
No.2	30	60	13	8
No.3	25	60	15	12
No.4	45	85	24	16
No.5	45	90	28	20

Important Information

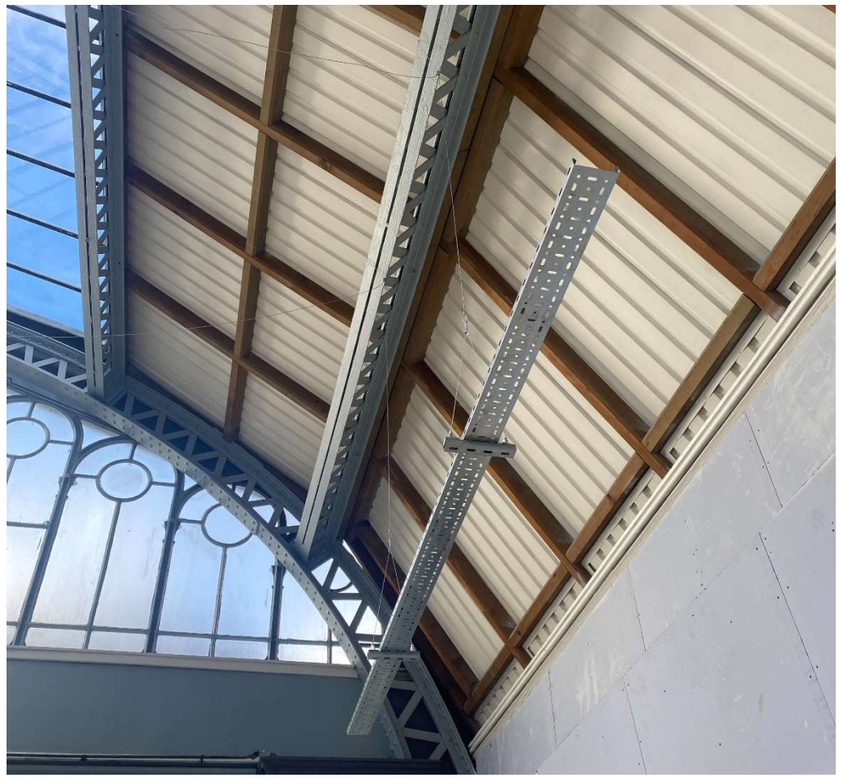
1. Construction materials and conditions vary on different sites. If it suspected that the base material has insufficient strength to achieve a suitable fixing, contact Gripple Ltd. The responsibility for judgement of base material strength lies with the installer, and not with Gripple Ltd.

2. The information and recommendations given herein are believed to be correct at time of writing. The data has been obtained from tests done under laboratory, or other controlled conditions and it is the users responsibility to use the data given in light of conditions on site, taking account of the intended use of the products concerned.

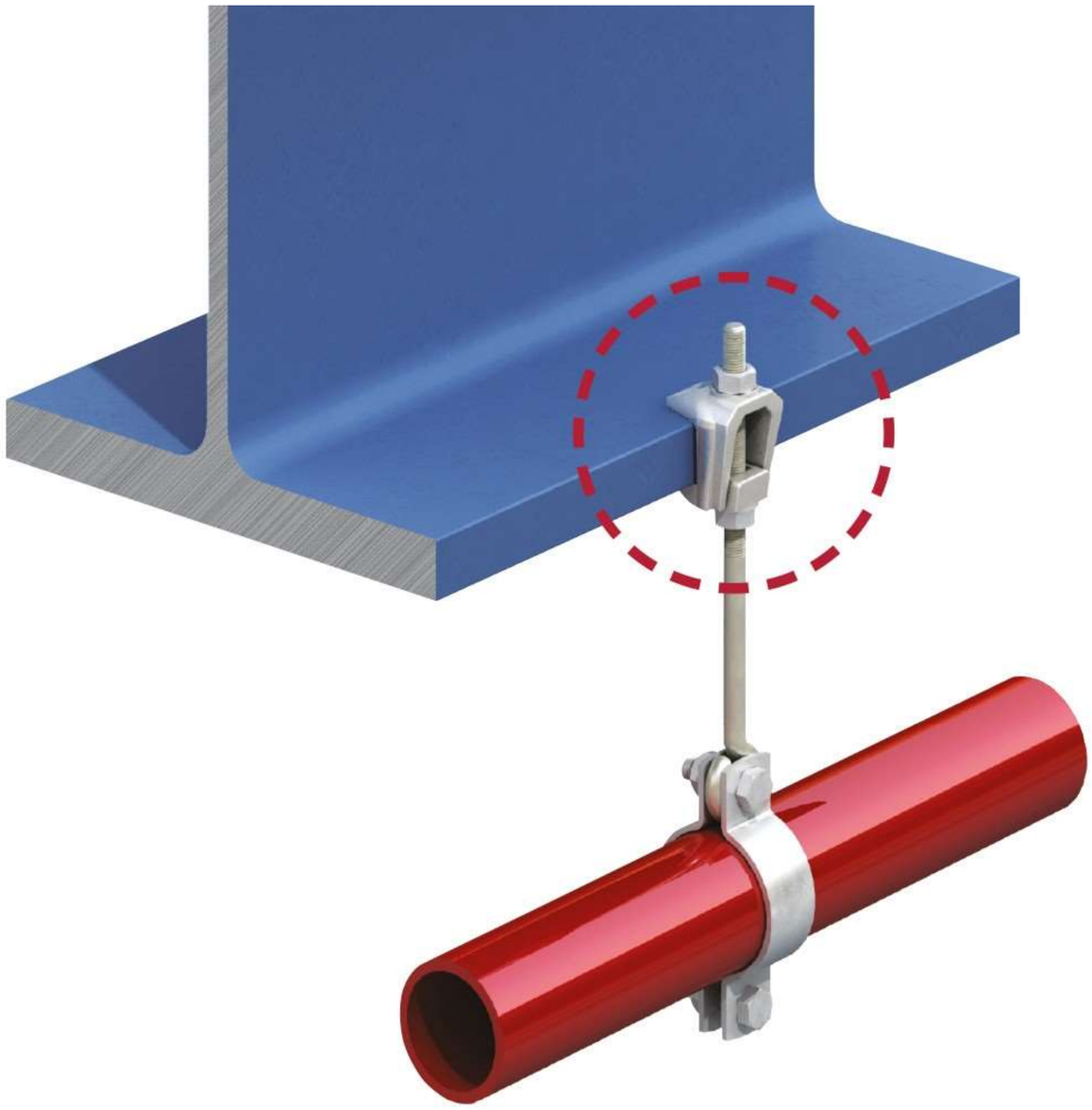
3. Whilst Gripple Ltd can give general guidance and advice, the nature of Gripple products means that the ultimate responsibility for selecting the correct product for a particular application must lie with the customer.

4. All products must be used, handled and applied in accordance with current product instructions and manufacturers recommendations for use, published by Gripple Ltd.

5. Gripple's policy is one of continuous development and innovation. We, therefore reserve the right to alter specifications, etc. without notice.



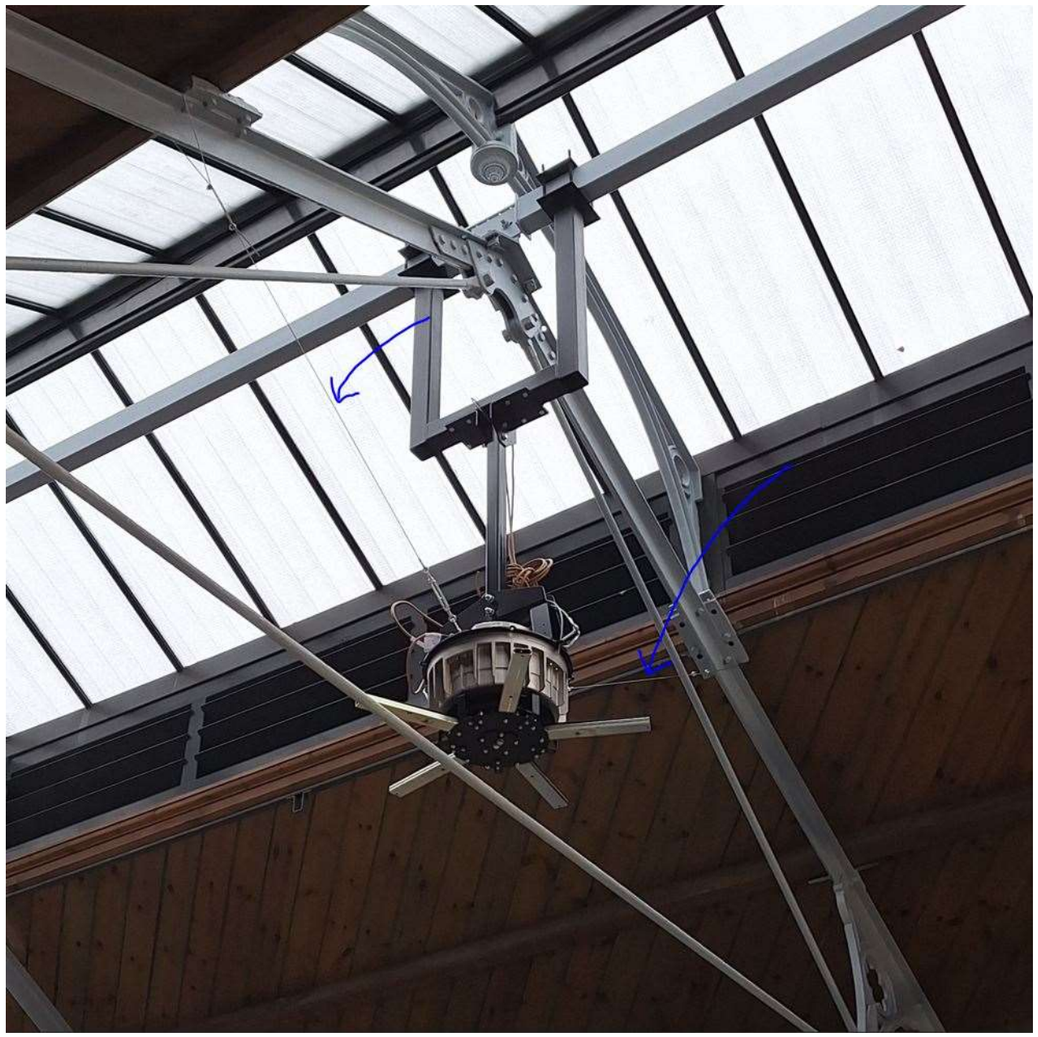
06 Lindapter flange clamps to existing beams





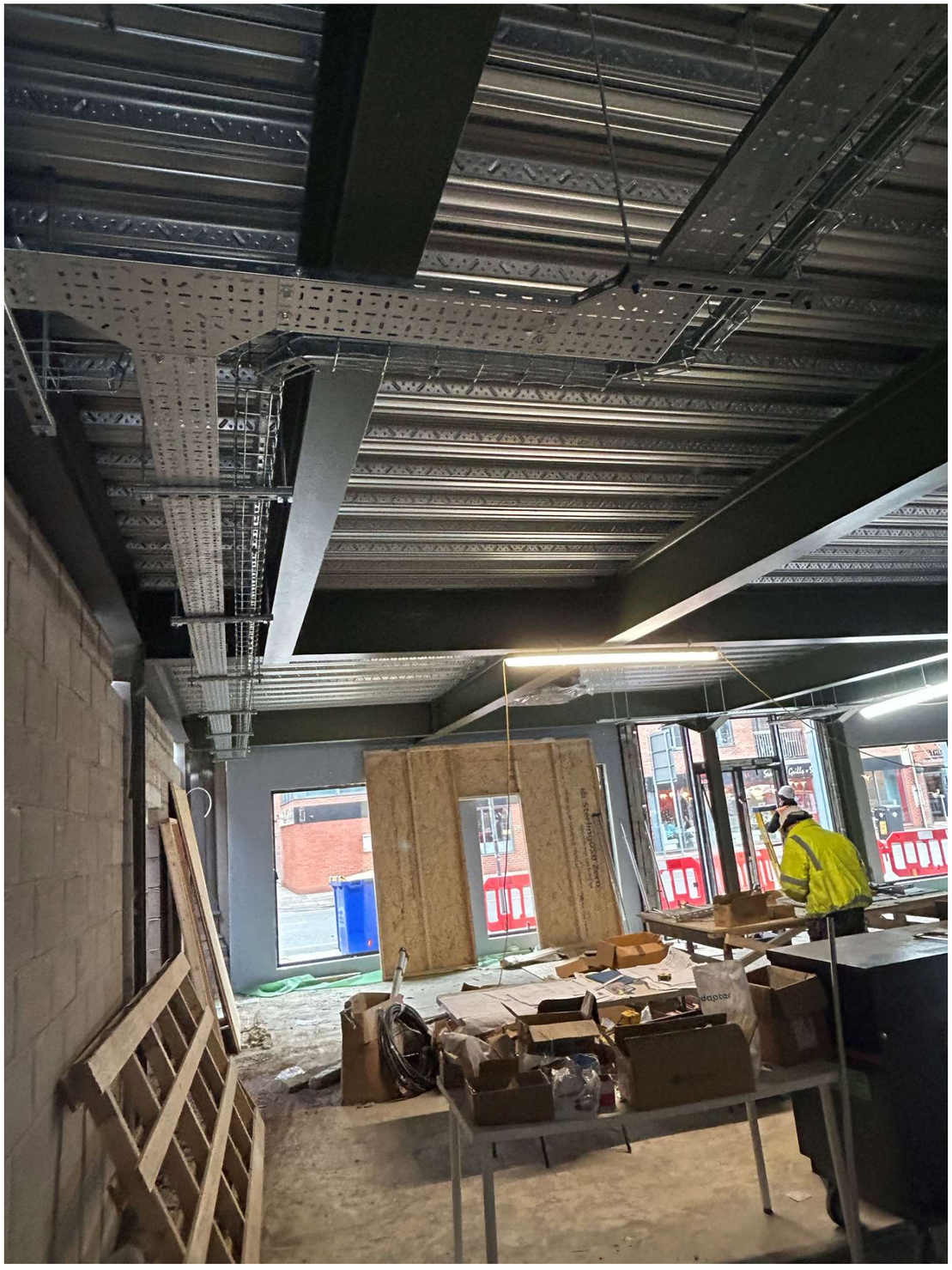
07 Destratification fan clamp fitting

The high level destratification fans will be fixed using a flat plate which will be mechanically clamped to the existing box section steel for rigidity with no fixing actually into the existing steel structure



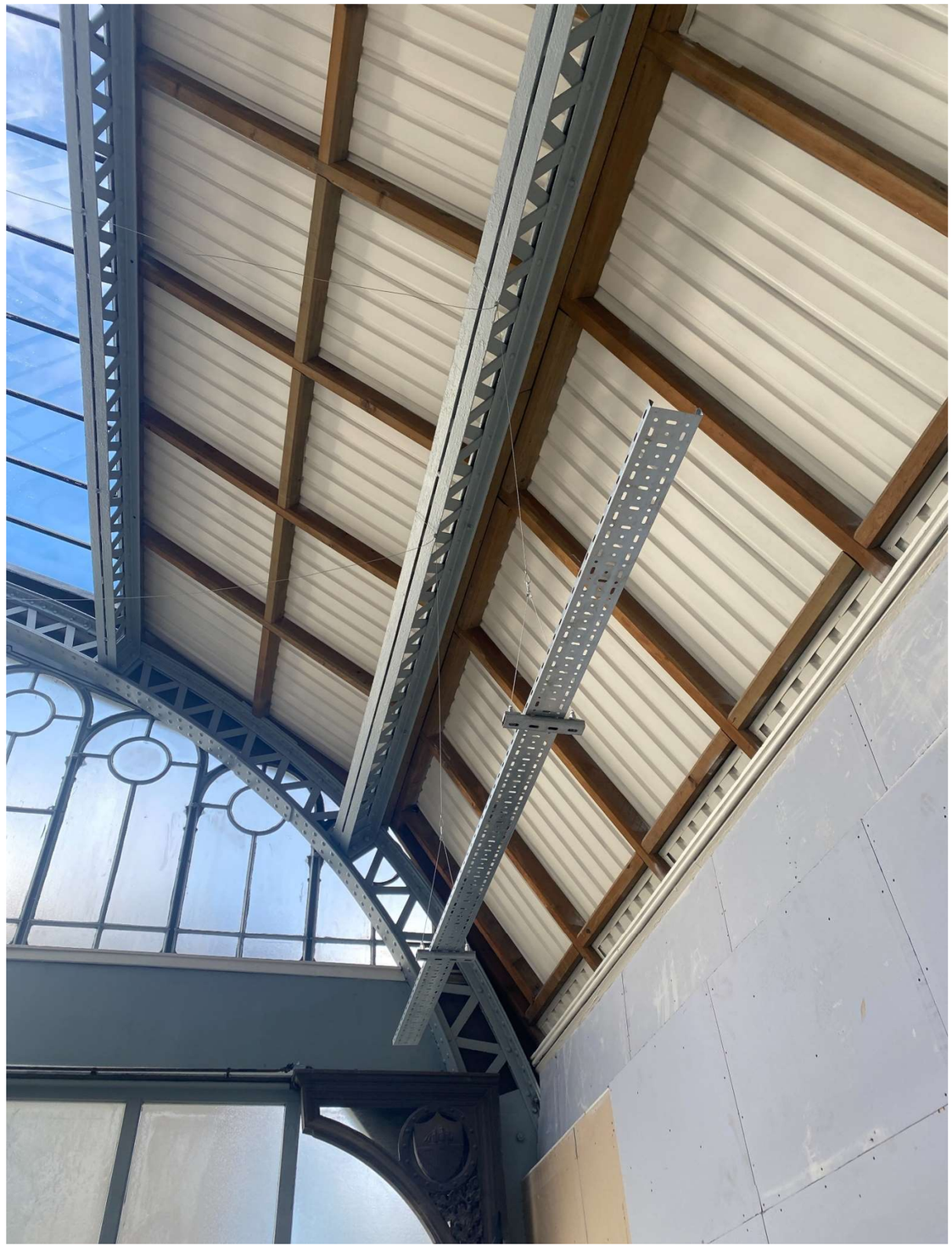


08 Photos of mock-up installations









09 Exterior light and CCTV fitting

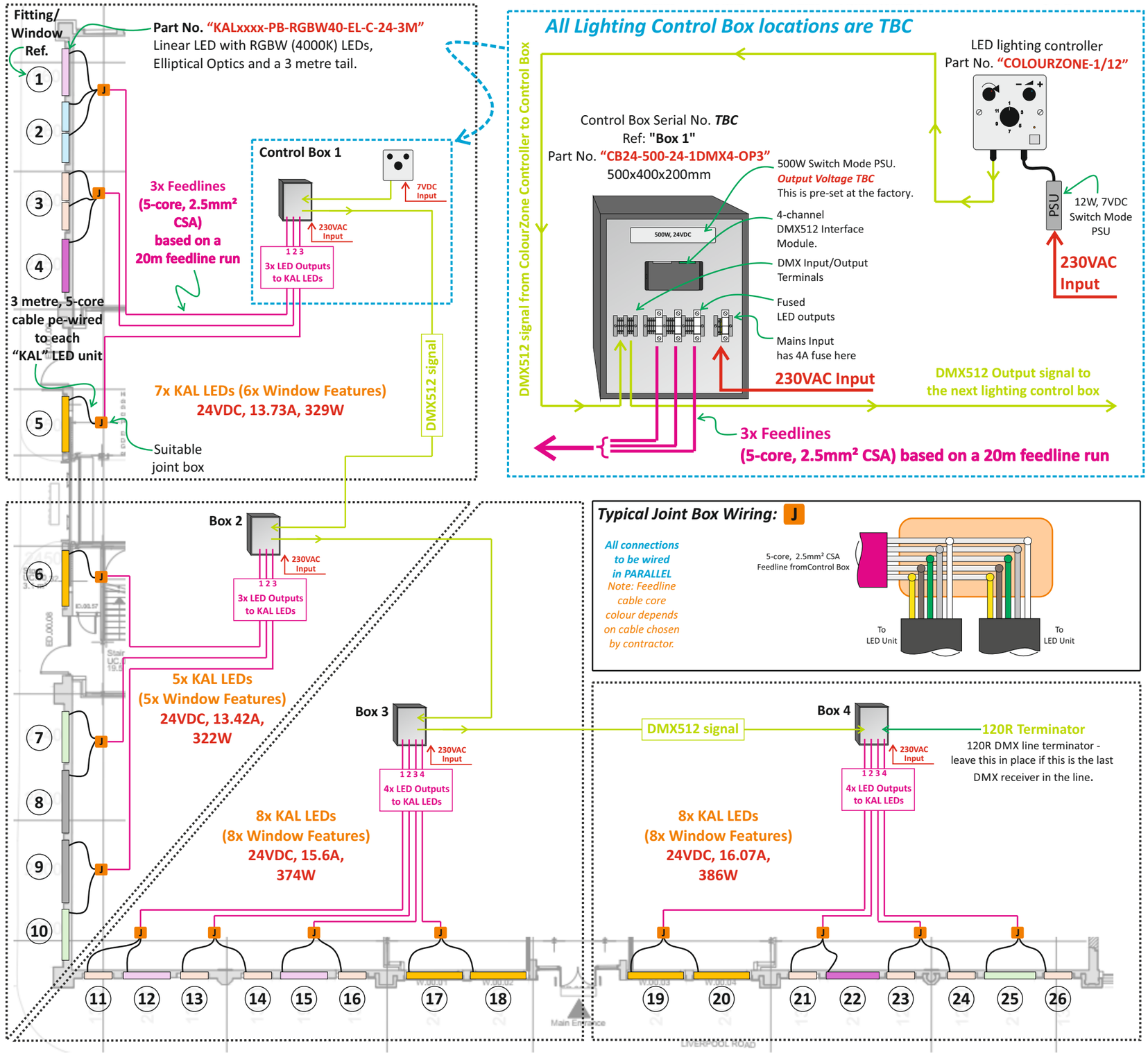
LDL Lighting – LED linear lights proposal
Colour Zone Multizone LED colour controller
Images of installed LED lighting mock-up
Lighting Motions, Fusion Wall light – to be installed above each exit door
CCTV fixing locations

Upper Campfield - RGBW "KAL" LED Linear Lights, 1 Zone of Control - Provisional Wiring Overview

This drawing shows the typical wiring for 1 ZONE of control. There are 28x "KAL" LEDs on the project to illuminate 26x window features (windows (2) & (3) have 2x LEDs each). Each "KAL" length is fitted with RGBW (4000K) LEDs and Elliptical (45°x16°) Optics. The lights are powered by 4x Control Boxes located near the window features. The control boxes are fitted with 500W, 24VDC PSUs, 1-Zone (4-channel) DMX512 interface modules and SELV fused output terminals. The lighting is controlled by a DMX512 ColourZone Controller with 12 customisable lighting scenes.

Drawing No./Status:
27535 Rev.A
Provisional
09/01/2025

LDL lighting




"KAL" LED Unit


Typical Control Box


ColourZone Controller

This drawing shows the system configured as 1 Zone of control.

Equipment Summary:

Product Image	Qty	Part No:	Electrical Details		
			Operating Voltage	Max. Current Per Unit	Max. Wattage Per Unit
	10	KAL1165-PB-RGBW40-EL-C-24-3M	24VDC typ.	1.4A	34W
	2	KAL1415-PB-RGBW40-EL-C-24-3M	24VDC typ.	1.72A	41W
	3	KAL1790-PB-RGBW40-EL-C-24-3M	24VDC typ.	2.18A	53W
	3	KAL1915-PB-RGBW40-EL-C-24-3M	24VDC typ.	2.34A	56W
	2	KAL2040-PB-RGBW40-EL-C-24-3M	24VDC typ.	2.5A	60W
	6	KAL2290-PB-RGBW40-EL-C-24-3M	24VDC typ.	2.8A	68W
	2	KAL2415-PB-RGBW40-EL-C-24-3M	24VDC typ.	2.96A	71W
	1	COLOURZONE-1/12	7VDC.	-	-
	2	CB24-500-24-1DMX4-OP3 *(Boxes 1 & 2)*	230VAC	4A	500W
	2	CB24-500-24-1DMX4-OP4 *(Boxes 3 & 4)*	230VAC	4A	500W

Cable Key:

Image	Function	Type	Supplied By
	DMX512 Data Cable	2-core screened	Installation Contractor
	Feedline	5-core feedline, size 2.5mm² CSA	Installation Contractor
	230VAC Input Cable	L, E, N	Installation Contractor
J	Junction Box	Feedline Junction Box	Installation Contractor
	Luminaire Cable	3 metre cable, 5-cores, 0.34mm² CSA , 4.9mm O.D. njo Ref. W509	Pre-wired to LED

All connections to be wired in PARALLEL

These LED lights operate from a Low Voltage source and must not be Connected to a Mains Voltage supply. WARNING! Reverse Polarity damages LEDs

					Drawing No. 27535	
					Batch No:	TBC
					Drawn By:	SI
					Approved By:	MR
A	Drawn	SI	MR	09/01/25	Date:	09/01/2025
Rev.	Change	Drawn	App'd.	Date	Print A3	Page 1 of 1

LDL Lighting Ltd, Unit 3 Stonehouse Rd, Martland Mill Business Park,Wigan. WN5 OLE.
t: +44 (0)1942 629179 e: sales@ldl.lighting

ColourZone

Multizone LED Colour Controller, DMX512 Output

- Suitable for multizone schemes of all sizes
- Produces 6 Zones of DMX512
- Vivid colour rendition and smooth colour change
- Customisable scene, USB2.0 compatible
- 12 scenes available
- Scene speed control
- Dimming adjustment function
- Microsoft Windows compatible
- 1-gang brushed stainless steel plate



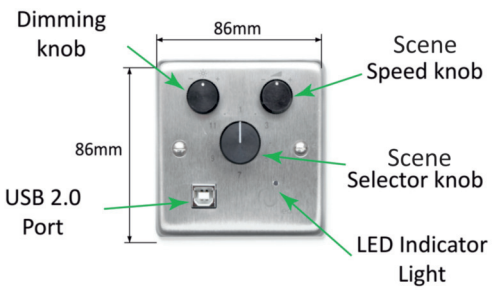
Description

ColourZone is a DMX512 colour change LED controller suitable for controlling multiple Zones of lighting. It allows RGBW control for up to 6 Zones of lighting using 12 programmable scenes. These scenes are fully customisable using the ColourZone software provided. The ColourZone controller has speed & dimming functions, allowing the user to fine tune the speed & brightness of the selected scene.

The ColourZone software allows the user to program specific colour sequences for each Zone of lighting within one scene. The software enables the programmer to select a wide range of colours using a very simple colour picker. The speed and hold settings for each scene can be adjusted in the software, providing a wide range of flexibility of control for the project lighting. Please refer to ColourZone Programming Guide for more information.

The ColourZone is supplied with a 1.2m USB cable, 12W 7VDC power supply, metal or plastic 1-gang back box and a ColourZone Software CD.

Controller Operation Guide



Scene Selecting:
Use the Scene Selector Knob to select a specific program. The controller is pre-programmed with 12 routines.

Dimming:
The light output can be dimmed & brightened using the Dimming knob. Turn clockwise to increase the brightness and anti-clockwise to dim the lights.

Speed:
The speed of any running program can be increased or decrease using the Scene Speed knob. Turn clockwise to increase the speed and anti-clockwise to decrease the speed of the selected scene.

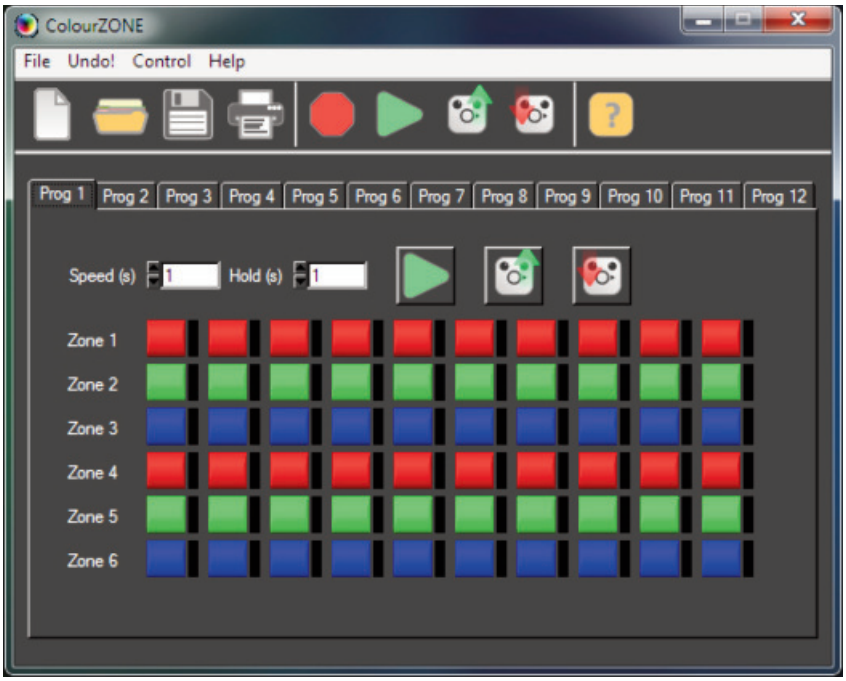
USB Port:
USB 2.0 port allows connection to a PC via a USB cable. This allows the user to customise and create scenes within the ColourZone software. For more information see ColourZone Programming Guide.

LED Indicator:
Blue LED light indicates scene selection change, scene upload and software initialisation during power on.

ColourZone

Multizone LED Colour Controller, DMX512 Output

ColourZone Software - Sample Screen



ColourZone Software Screen - Program 1
(this is a preset program on the controller)



Colour Picker

See ColourZone Programming Guide for software set up and custom program instructions.

ColourZone Accessories & Wiring

ColourZone Accessories
(Supplied with Controller)



- USB Lead



- 7VDC, 12W, Power Supply

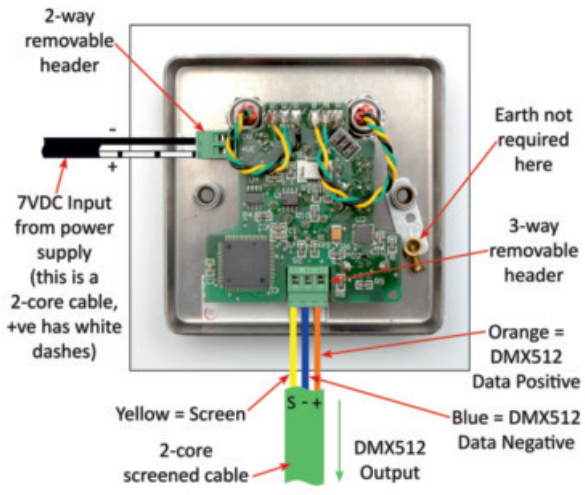


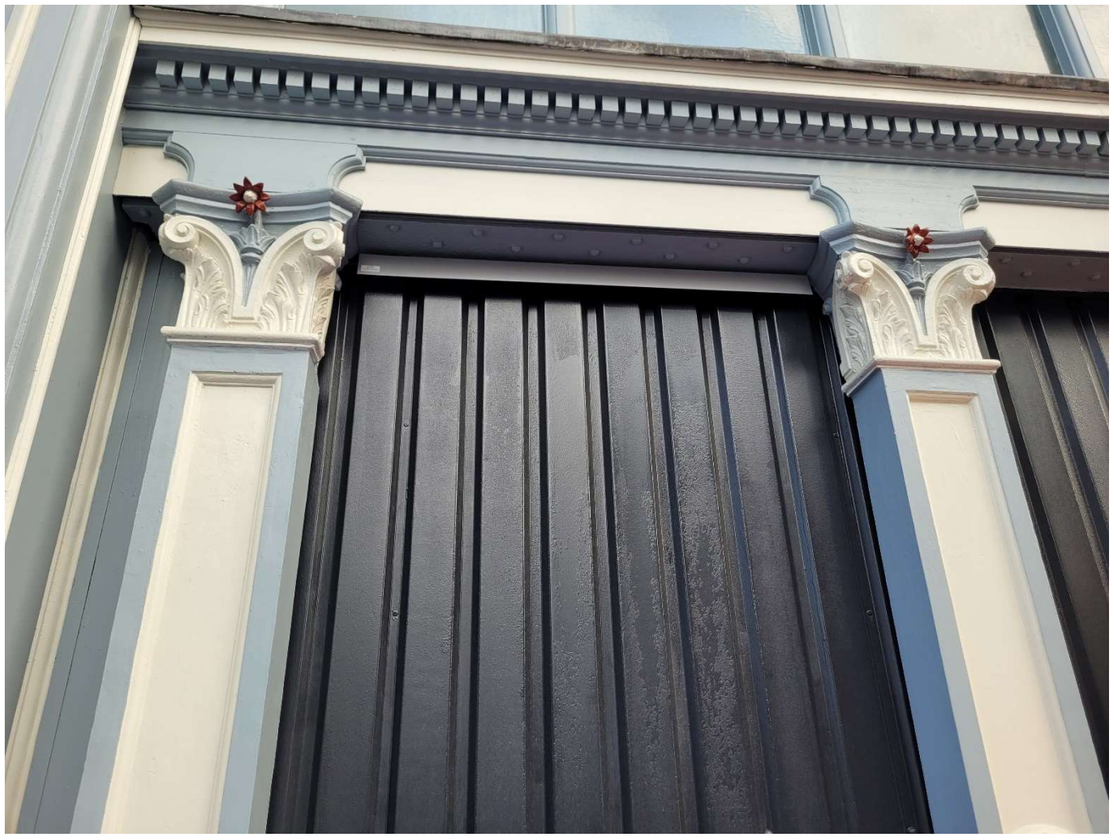
- 2 metre Figure 8 power lead



- ColourZone Programming Software CD

Wiring - Internal Rear View of Controller







External LED linear lighting mock-up

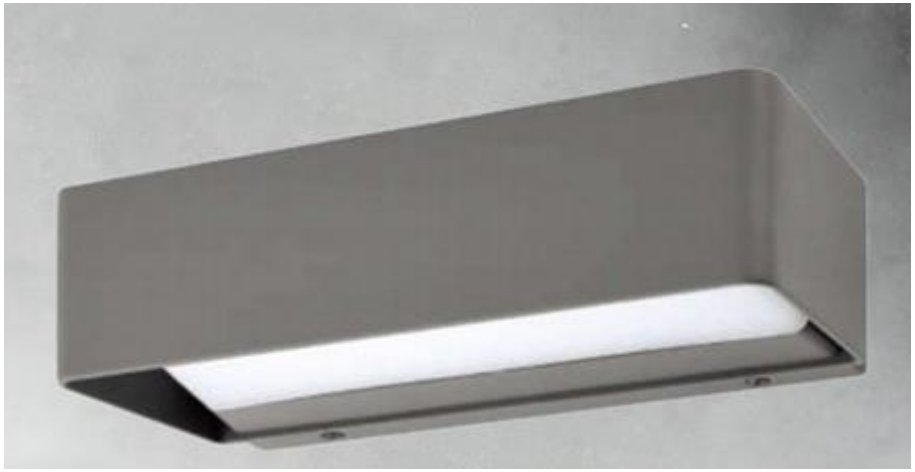


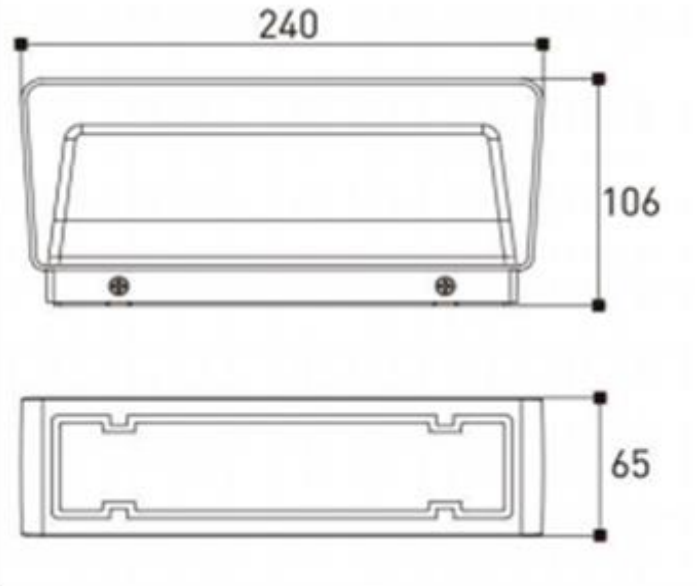


External LED linear lighting mock-up

LIGHTING MOTIONS

FUSION WALL





CAT NO	COLOUR TEMP (K)	COLOUR RENDERING (RA)	LIFE (L80) (HRS)	TOTAL CONNECTED LOAD	TOTAL DELIVERED LUMENS	LUMINIARE SYSTEM EFFICACY (lm/w)	IP RATING	MECHANICAL IMPACT RESISTANCE	FINISH	CONTROL GEAR
FXW1384	4000	80	50,000	13	800	61	IP65	IK08	DARK GREY	FIXED OUT PUT

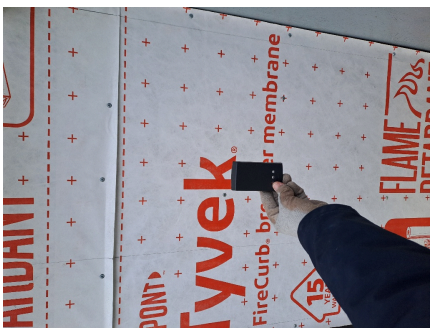
Add suffix to catalogue number:
DALI: Digital Addressable Lighting Interface.
PD : Phase dimming.SD: Dimming with push to make switch.
EM3: 3 hour emergency. **EM3ST**: 3 hour self test emergency.
EM3DALI: DALI addressable emergency.



Please note that with the continuous rapid development in lighting technology, specification values may change. Contact our technical department for details. We reserve the right to amend or change details without prior notification. All performance data is taken at an ambient temperature of +25°C. Lumens and connected system load are subject to an initial tolerance of up to +/- 10%.

Report

Project		
Name	upper campfield	
Images	n/a	
Date	2025-02-18	
Time	10:35:31	
Location	n/a	
Details	n/a	
Issues		
No Image	Issue 1 Unassigned	
No Image	Issue 2 Unassigned	
No Image	Issue 3 Unassigned	
	cctv at tonman street entrance Unassigned	
	cctv at stairwell 2 exit door Unassigned	

	card reader at main entrance door on Liverpool road Unassigned
	cctv at main entrance on Liverpool road Unassigned
	cctv at arcade entrance Unassigned
	card reader at arcade entrance Unassigned
	card reader at tonman street entrance Unassigned

	card reader at stairwell 1 exit door Unassigned
	card reader at door next to roller shutter Unassigned
	cctv at stairwell 1 exit door & at door next to roller shutter Unassigned
	bellbox at roller shutter Unassigned
	bellbox at tonman street entrance Unassigned

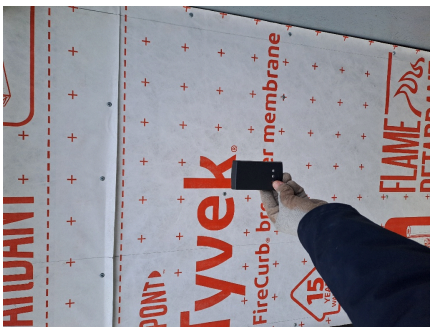
	bellbox at main entrance on Liverpool road Unassigned

Summary		
Auditor Company	n/a	
Auditor Name	n/a	
Signature	n/a	















IDS
FIRE & SECURITY