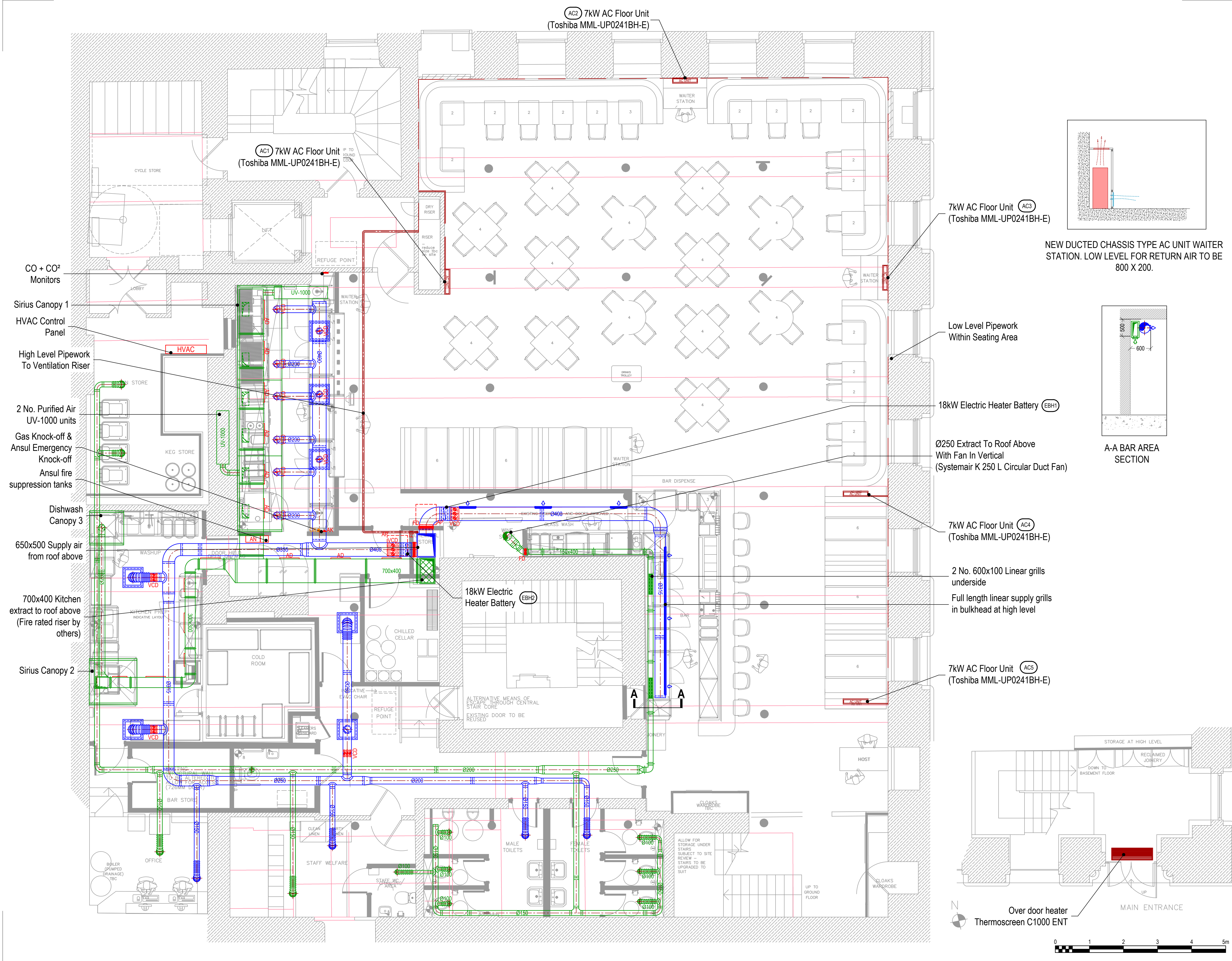
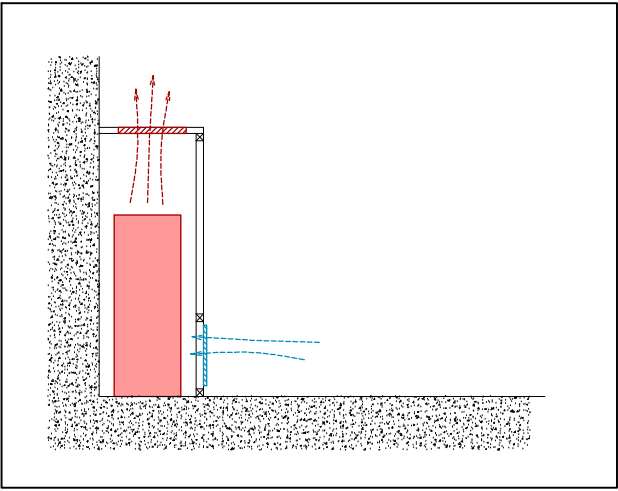
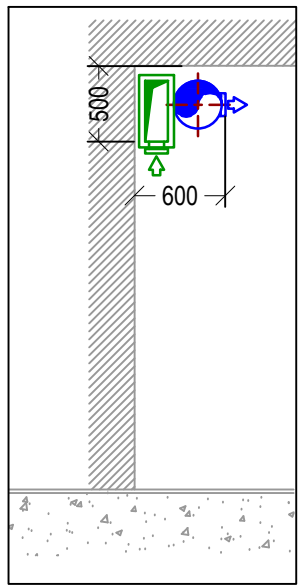




- General notes:
- Positions of all equipment, ductwork and fittings are indicative only.
 - Contractors shall confirm the sequence of installation works to ensure safe access is maintained.
 - Attention is drawn to health & safety issues. Liaise with the main contractor to ensure that installation works are programmed to minimise H&S risks and optimise co-ordination.
 - All dimensions / duct sizes are in millimetres unless otherwise stated.
 - This drawing was produced using CAD and should not be amended by hand.
 - All dimensions shown are for reference and should be checked on site prior to commencement of work.

- Specific notes:
- This drawing should be read in conjunction with all architectural, structural and drawings from other services (incl. mechanical, catering, electrical, sprinklers), along with contract documentation and specification for the works.
 - Ensure all method statements, sign offs and approvals are in place before proceeding with any work.
 - All work to be carried out in accordance with the current British Standards, B.S. codes of practice and loading regulations.
 - The HVAC services works shall be carried out in full accordance with the client specification and brief, together with any standard technical guide and specification.
 - Ductwork shall be installed in accordance with all current industry standard guidelines / regulations.
 - Galvanised ductwork to be manufactured to DW144.
 - Ductwork sized in accordance with all current industry standard guidelines / regulations. Duct dimensions shown on drawings are clear internal dimensions (not including flanges and hangings).
 - Access doors required on kitchen extract duct every 1500mm for cleaning and before / after every change of direction & should be accessible at all locations via ceiling access panels or gridded ceiling etc. Access panels to be provided by main contractor in any solid ceilings where final requirements indicated by HVAC installation contractor.
 - Duct connections with fans and other equipment to be a manufactured canvas connection to prevent duct breakout noise and transmission of vibrations.
 - Volume control dampers shall be installed on all branch legs and diffuser / grille terminals to facilitate commissioning.
 - Supply and secondary fan coil unit ductwork to be fully insulated.
 - Fresh air intakes and exhausts locations are shown inductively on these drawings. The exact positions shall be agreed with the client, architect and the main contractor and shall be shown accurately on the working / co-ordinated drawings.
 - Position of all grilles / air valves shown are in optimum positions for air flow. The grilles to be positioned as close as practicable to location shown and coordinated with other services and fabric constraints.
 - Fire dampers are to be shown on ductwork (excluding kitchen extract ducts) penetrating fire compartment divides and shall incorporate certified fire dampers to match the barrier rating, together with access panels. Reference to be made to architect fire strategy drawing to establish locations. Fire dampers are shown inductively on these drawings.
 - All transfer grilles and ductwork where fire rated, shall match the fire rating of the wall in which it is installed.
 - Attenuation and anti-vibration measures shall be incorporated on all plant and ductwork supports in full accordance with acoustic consultant's specification.
 - Access required to all plant equipment for maintenance and cleaning.
 - Refer to catering specialist layout to determine confirmed canopy sizes and location.
 - Condensate drain from AC condensers to be run to the nearest waste connection or rooftop drain. Condensate drains from the FCU's to be run to the nearest drain (25mm), subject to manufacturer and their requirements. Both shall be the equivalent plastic or copper sizes.
 - Install all mechanical equipment in accordance with manufacturers guidelines.
 - Catering condensers are not CUL equipment. However, they are inductively shown on CUL drawings to allow for provisioned space and access within the HVAC plant area.
 - Locations of all required floor, wall and roof openings shall be co-ordinated with all other trades involved.
 - No other loads (other services or man loading) shall be hung from ductwork supports.

G	13/07/23	JJ	AC locations updated.
F	10/07/23	JJ	Controls added. Notation updated.
E	30/06/23	PR	Revised GA layout.
D	15/06/23	JJ	Section added.
C	13/06/23	JJ	AC box moved, Ducts stacked.
B	08/06/23	JJ	GA updated
A	17/05/23	JJ	AC units updated

No.	Date	Rev.	By	Revision Description
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Client:

Blacklock

Project :

**FREETRADE EXCHANGE,
27 PETER ST
MANCHESTER,
M2 5GB**

Drawing Title :

**Proposed Lower Ground
Floor HVAC Plan**

Drawing No.:

001-1056-01

Scale: 1:50 @ A1 1:100 @ A3

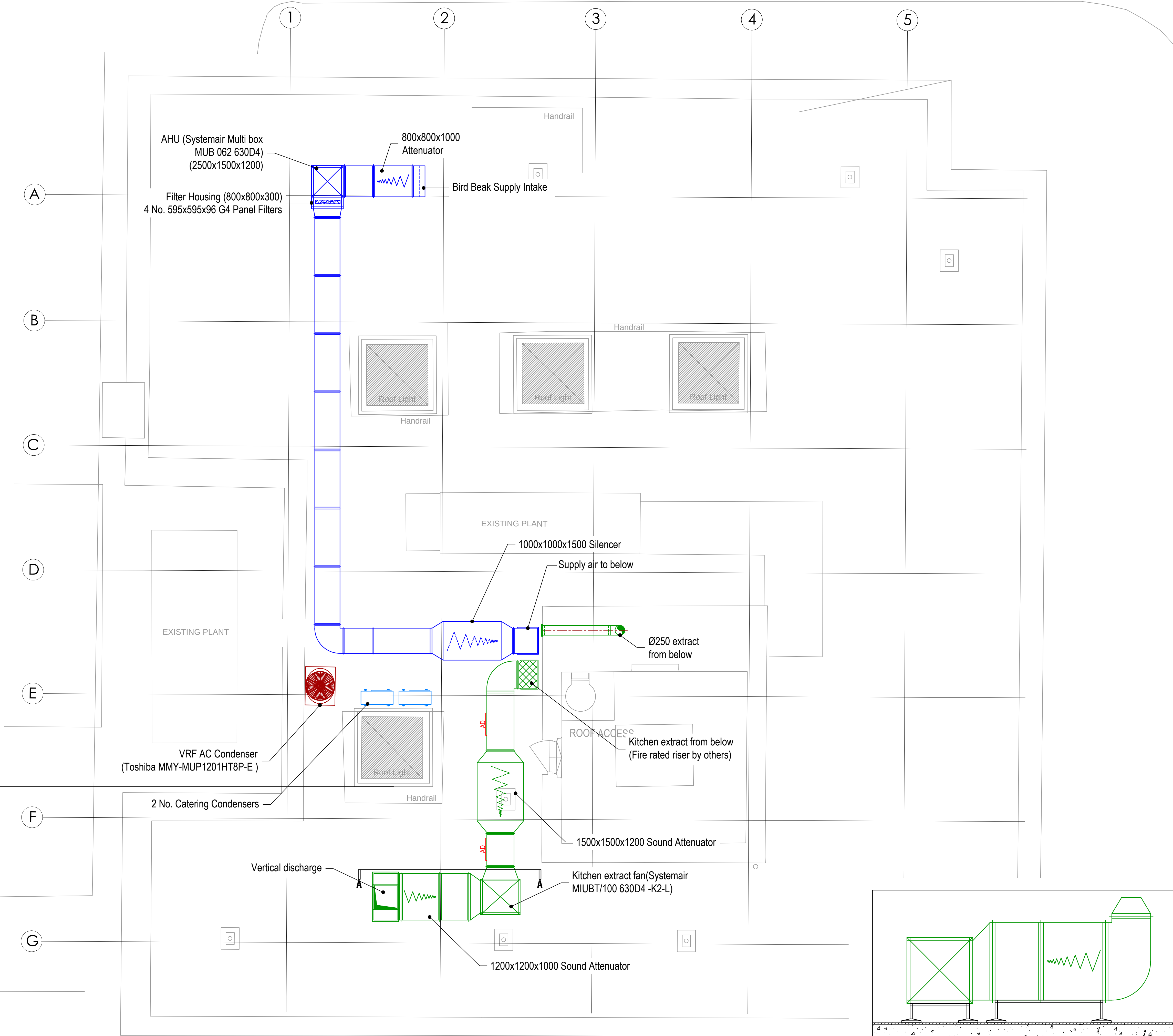
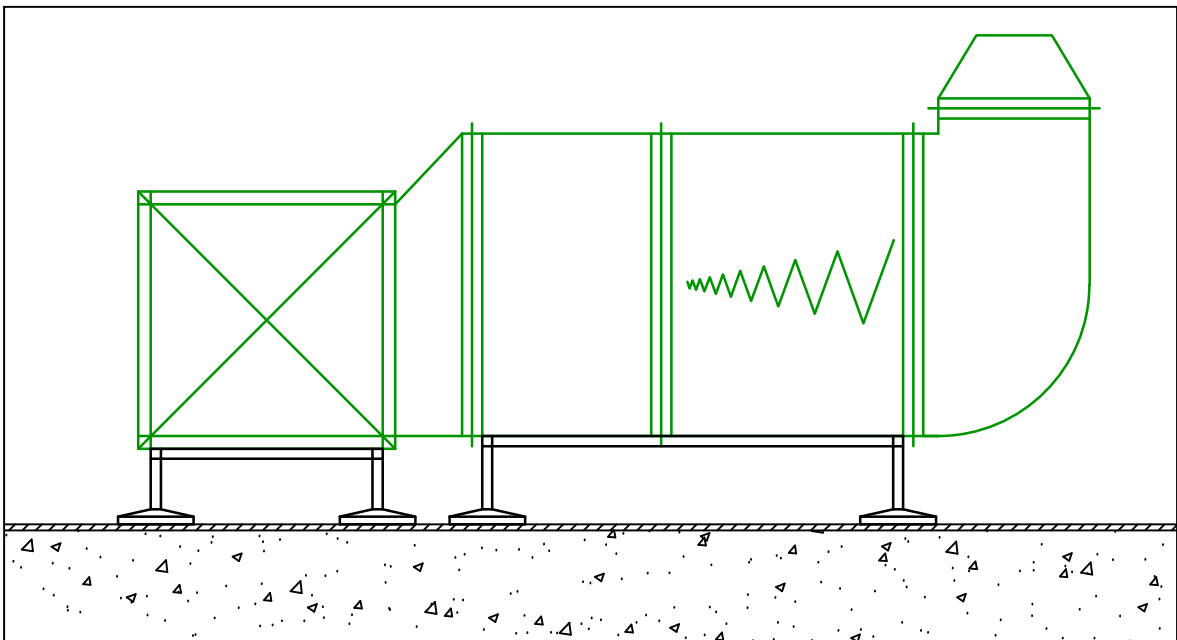
Drawn By: DPH Checked By: - Date: 18/03/23

**chapman
ventilation**

15-20 Woodfield Road, Welwyn Garden City
Hertfordshire AL7 1JQ
Tel: 01707 372858 Fax: 01707 325001
E-mail: info@chapmanventilation.co.uk
Web: www.chapmanventilation.co.uk

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A-A Section

- General notes:
- Positions of all equipment, ductwork and fittings are indicative only.
 - Contractors shall confirm the sequence of installation works to ensure safe access is maintained.
 - Attention is drawn to health & safety issues. Liaise with the main contractor to ensure that installation works are programmed to minimise risks and optimise co-ordination.
 - All dimensions / duct sizes are in millimetres unless otherwise stated.
 - This drawing was produced using CAD and should not be amended by hand.
 - All dimensions shown are for reference and should be checked on site prior to commencement of work.

- Specific notes:
- This drawing should be read in conjunction with all architectural, structural and drawings from other services (incl. mechanical, catering, electrical, sprinklers), along with contract documentation and specification for the works.
 - Ensure all method statements, sign offs and approvals are in place before proceeding with any works.
 - All works to be carried out in accordance with the current British Standards, B.S. codes of practice and loading regulations.
 - The HVAC services works shall be carried out in full accordance with the client specification and in full accordance with any standard technical guide and specification.
 - Ductwork shall be installed in accordance with all current industry standard guidelines / regulations.
 - Galvanised ductwork to be manufactured to DW144.
 - Ductwork sized in accordance with all current industry standard guidelines / regulations. Duct dimensions shown on drawings are clear internal dimensions (not including flanges and hangers).
 - Access doors required on kitchen extract duct every 1500mm for cleaning and before / after every change of direction & should be accessible at all locations via ceiling access panels or gridded ceiling etc. Access panels to be provided by main contractor in any solid ceilings where final requirements indicated by HVAC installation contractor.
 - Duct connections with fans and other equipment to be a manufactured canvas connection to prevent duct breakout noise and transmission of vibrations.
 - Volume control dampers shall be installed on all branch legs and diffuser / grille terminals to facilitate commissioning.
 - Supply and secondary fan coil unit ductwork to be fully insulated.
 - Fresh air intakes and exhausts locations are shown indicatively on these drawings. The exact positions shall be agreed with the client, architect and the main contractor and shall be shown accurately on the working / co-ordinated drawings.
 - Position of all grilles / air valves shown are in optimum positions for air flow. The grilles to be positioned as close as practicable to location shown and coordinated with other services and fabric constraints.
 - Fire dampers are to be shown on ductwork (excluding kitchen extract ducts) penetrating fire compartment divides and shall incorporate certified fire dampers to match the barrier rating, together with access panels. Reference to be made to architect fire strategy drawing to establish locations. Fire dampers are shown indicatively on these drawings.
 - All transfer grilles and ductwork where fire rated, shall match the fire rating of the wall in which it is installed.
 - Attenuation and anti-vibration measures shall be incorporated on all plant and ductwork supports in full accordance with acoustic consultant's specification.
 - Access required to all plant equipment for maintenance and cleaning.
 - Refer to catering specialist layout to determine confirmed canopy sizes and location.
 - Condensate drain from AC condensers to be run to the nearest waste connection or rooftop drain. Condensate drains from the FCU's to be run to the nearest drain (20mm), subject to manufacturer and their requirements. Both shall be the equivalent plastic or copper sizes.
 - Install all mechanical equipment in accordance with manufacturers guidelines.
 - Catering condensers are not CVL equipment. However, they are indicatively shown on CVL drawings to allow for provisioned space and access within the HVAC plant area.
 - Locations of all required floor, wall and roof openings shall be co-ordinated with all other trades involved.
 - No others load(s) (other services or man loading) shall be hung from ductwork supports.

METERAGE		
SUPPLY DUCTWORK		0.0m
WC EXTRACT DUCTWORK		0.0m
AC PIPEWORK		0.0m
Quantities are for this sheet only		

F	03/08/23	JJ	Fans & attenuators updated
E	20/07/23	JJ	ESPs omitted
D	14/07/23	JJ	Catering condensers added
C	10/07/23	JJ	Section added
B	15/06/23	JJ	Plant equipment relocated
A	18/05/23	JJ	Condensers updated

No.	Date	Rev. By	Revision Description
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Client:

Blacklock

Project :

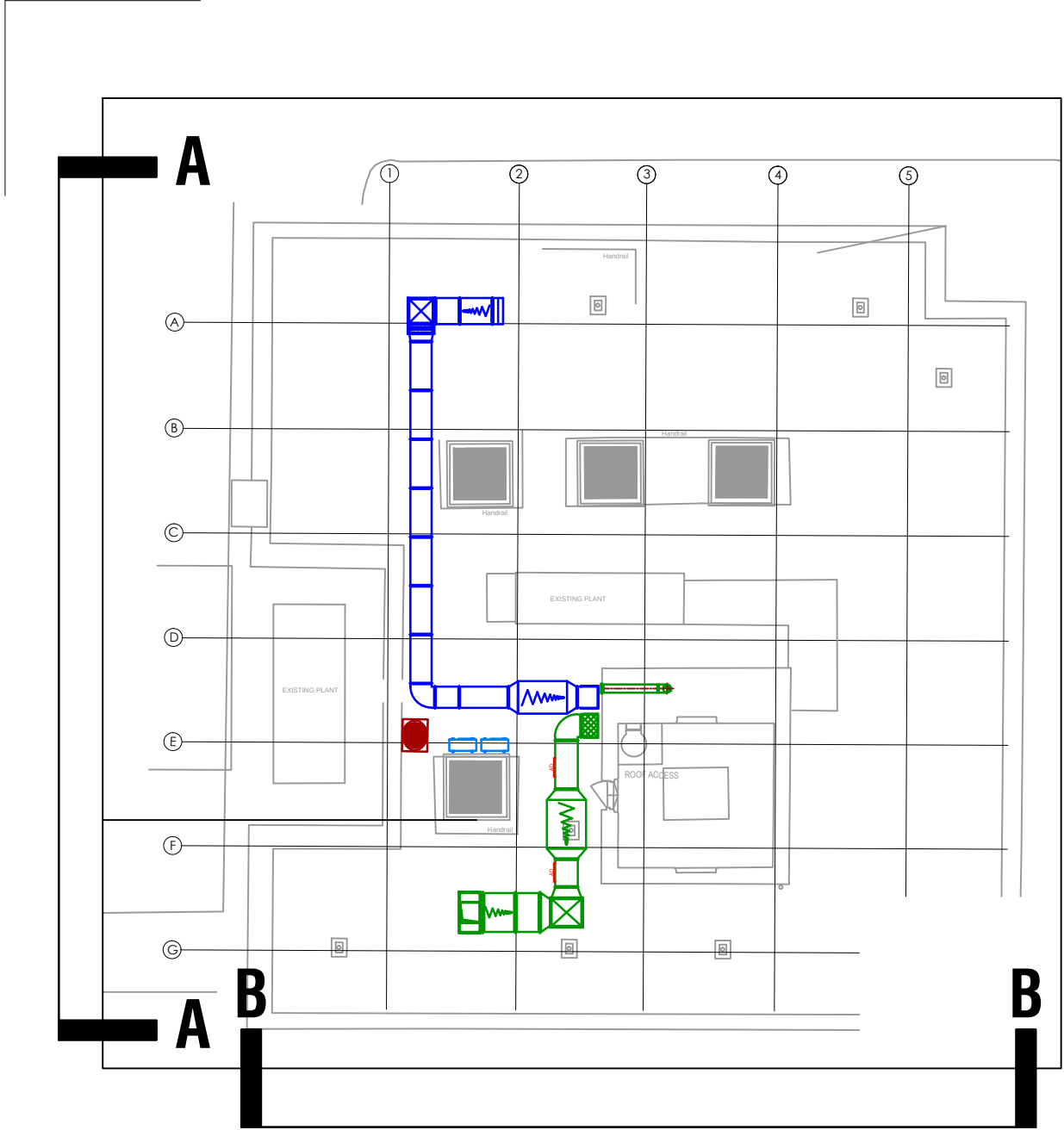
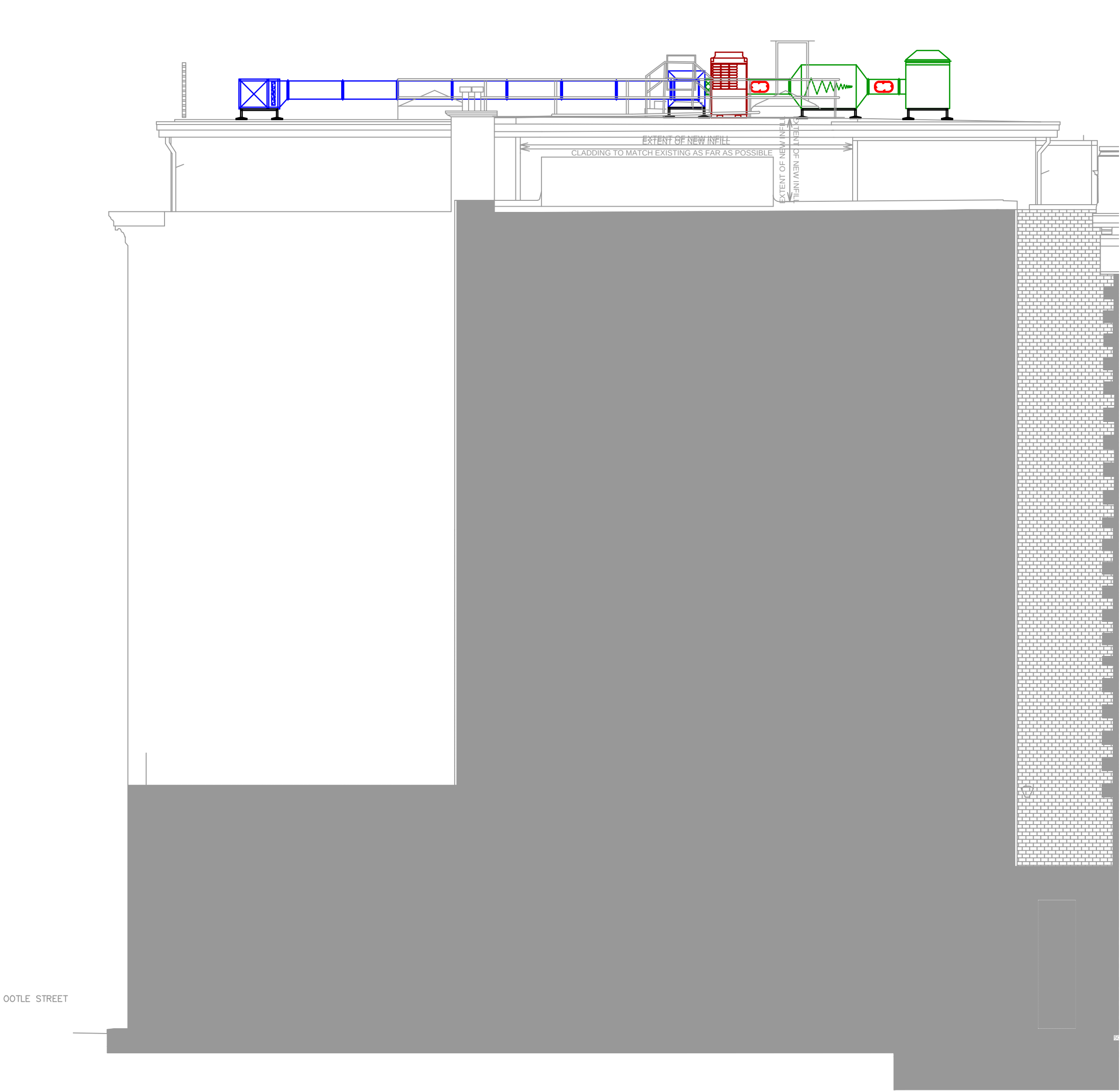
**FREETRADE EXCHANGE,
27 PETER ST,
MANCHESTER,
M2 5GB**

Drawing Title :

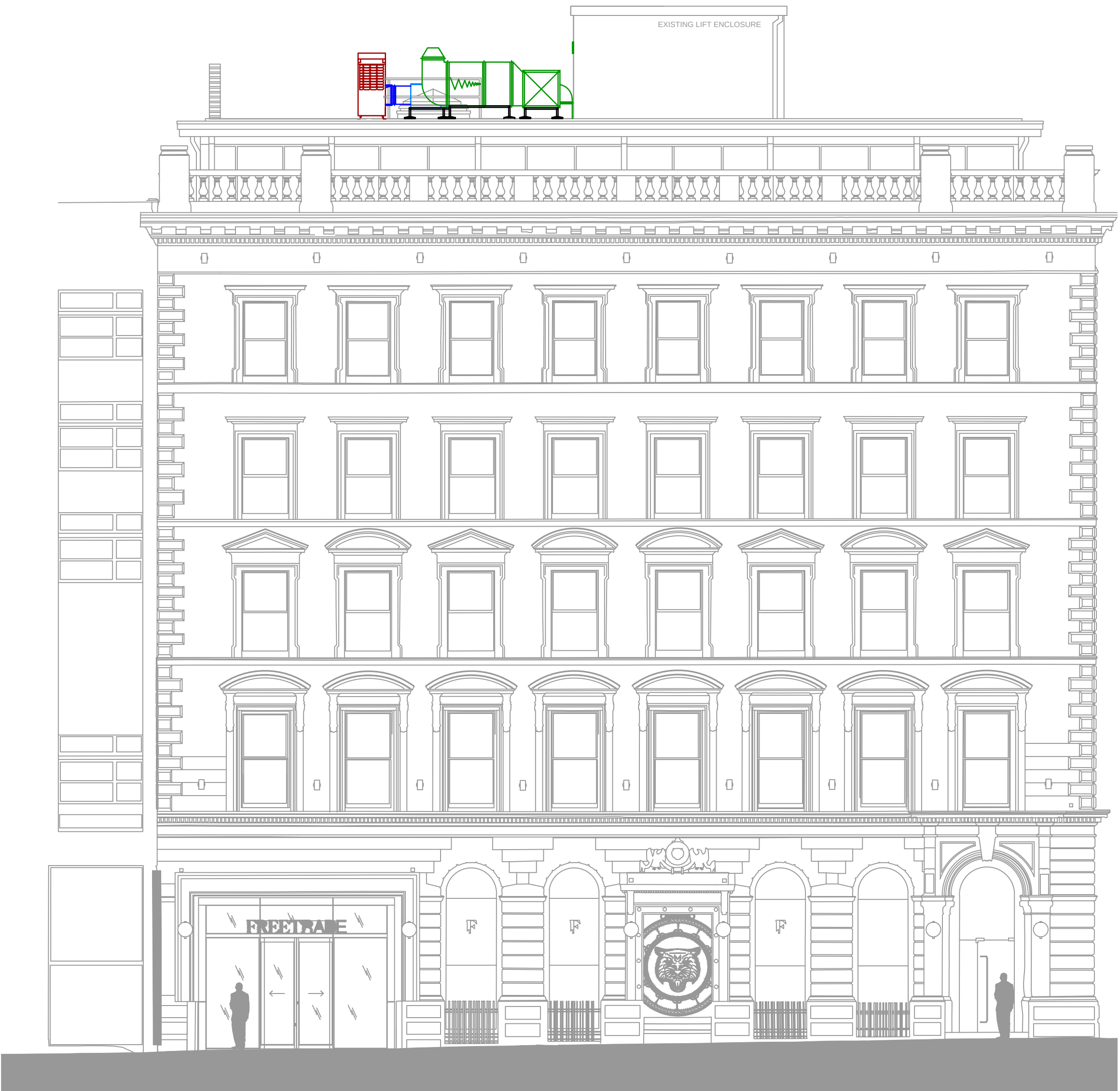
Proposed Roof HVAC Plan

Drawing No.:	Rev:
001-1056-02	F
Scale: 1:50 @ A1 1:100 @ A3	
Drawn By: DPH	Checked By: - Date: 18/03/23





A-A ELEVATION



B-B ELEVATION

- General notes:
- Positions of all equipment, ductwork and fittings are indicative only.
 - Contractors shall confirm the sequence of installation works to ensure safe access is maintained.
 - Attention is drawn to health & safety issues. Liaise with the main contractor to ensure that installation works are programmed to minimise H&S risks and optimise co-ordination.
 - All dimensions / duct sizes are in millimetres unless otherwise stated.
 - This drawing was produced using CAD and should not be amended by hand.
 - All dimensions shown are for reference and should be checked on site prior to commencement of work.

- Specific notes:
- This drawing should be read in conjunction with all architectural, structural and drawings from other services (incl. mechanical, catering, electrical, sprinklers), along with contract documentation and specification for the works.
 - Ensure all method statements, sign offs and approvals are in place before proceeding with any works.
 - All works to be carried out in accordance with the current British Standards, B.S. codes of practice and loading regulations.
 - The HVAC services works shall be carried out in full accordance with the client specification and in full, together with any standard technical guide and specification.
 - Ductwork shall be installed in accordance with all current industry standard guidelines / regulations.
 - Galvanneal ductwork to be manufactured to DW144.
 - Ductwork sized in accordance with all current industry standard guidelines / regulations. Duct dimensions shown on drawing are clear internal dimensions (not including flanges and hangers).
 - Access doors required on kitchen extract duct every 1500mm for cleaning and before / after every change of direction & should be accessible at all locations via ceiling access panels or gridded ceiling etc. Access panels to be provided by main contractor in any solid ceilings where final requirements indicated by HVAC installation contractor.
 - Duct connections with fans and other equipment to be a manufactured canvas connection to prevent duct breakout noise and transmission of vibrations.
 - Volume control dampers shall be installed on all branch legs and diffuser / grille terminals to facilitate commissioning.
 - Supply and secondary fan coil unit ductwork to be fully insulated.
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 - All transfer grilles and ductwork where fire rated, shall match the fire rating of the wall in which it is installed.
 - Attenuation and anti-vibration measures shall be incorporated on all plant and ductwork supports in full accordance with acoustic consultant's specification.
 - Access required to all plant equipment for maintenance and cleaning.
 - Refer to catering specialist layout to determine confirmed canopy sizes and location.
 - Condensate drain from AC condensers to be run to the nearest waste connection or to rooftop drain. Condensate drains from the FCU's to be run to the nearest drain (25mm), subject to manufacturer and their requirements. Both shall be the equivalent plastic or copper sizes.
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 - Catering condensers are not CVL equipment. However, they are indicatively shown on CVL drawings to allow for provisioned space and access within the HVAC plant area.
 - Locations of all required floor, wall and roof openings shall be co-ordinated with all other trades involved.
 - No other loads (other services or man loading) shall be hung from ductwork supports.

METERAGE

SUPPLY DUCTWORK	0.0m
WC EXTRACT DUCTWORK	0.0m
AC PIPEWORK	0.0m

Quantities are for this sheet only

B	03/08/23	JJ	Fans updated
A	20/07/23	JJ	ESPs omitted
No.	Date	Rev. By	Revision Description

Client:

Blacklock

Project :

**FREETRADE EXCHANGE,
27 PETER ST
MANCHESTER,
M2 5GB**

Drawing Title :

**Proposed Roof West & South
Elevations**

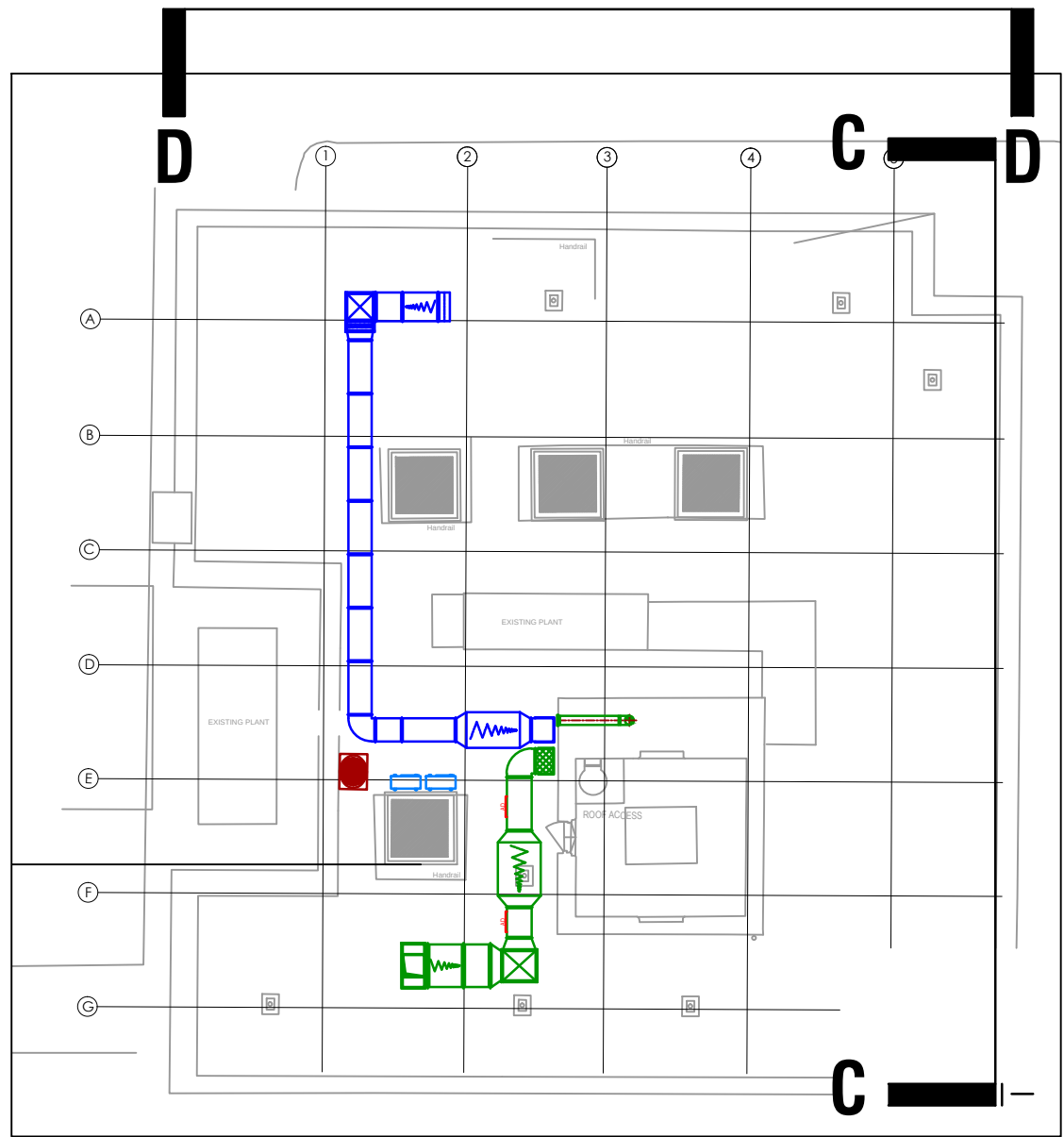
Drawing No.:	Rev:
001-1056-03	B
Scale: 1:50 @ A1	1:100 @ A3
Drawn By: JJ	Checked By: - Date: 14/07/23

**chapman
ventilation**

15-20 Woodfield Road, Welwyn Garden City
Hertfordshire AL7 1JQ
Tel: 01707 372858 Fax: 01707 325001
E-mail: info@chapmanventilation.co.uk
Web: www.chapmanventilation.co.uk

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C-C ELEVATION



D-D ELEVATION

- General notes:
- Positions of all equipment, ductwork and fittings are indicative only.
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 - All dimensions / duct sizes are in millimetres unless otherwise stated.
 - This drawing was produced using CAD and should not be amended by hand.
 - All dimensions shown for reference and should be checked on site prior to commencement of work.

- Specific notes:
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 - Ductwork shall be installed in accordance with all current industry standard guidelines / regulations.
 - Galvanneal ductwork to be manufactured to DW144.
 - Ductwork sized in accordance with all current industry standard guidelines / regulations. Duct dimensions shown on drawing are clear internal dimensions (not including flanges and fittings).
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 - Locations of all required floor, wall and roof openings shall be co-ordinated with all other trades involved.
 - No other loads (other services or man loading) shall be hung from ductwork supports.

METERAGE

SUPPLY DUCTWORK	0.0m
WC EXTRACT DUCTWORK	0.0m
AC PIPEWORK	0.0m

Quantities are for this sheet only

B	03/08/23	JJ	Fans updated
A	20/07/23	JJ	ESPs omitted
No.	Date	Rev. By	Revision Description

Client:

Blacklock

Project :

**FREETRADE EXCHANGE,
27 PETER ST
MANCHESTER,
M2 5GB**

Drawing Title :

**Proposed Roof East & North
Elevations**

Drawing No.:	Rev:
001-1056-04	B
Scale: 1:50 @ A1 1:100 @ A3	
Drawn By: JJ	Checked By: - Date: 17/07/23

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ventilation**

15-20 Woodfield Road, Welwyn Garden City
Hertfordshire AL7 1JQ

Tel: 01707 372858 Fax: 01707 325001
E-mail: info@chapmanventilation.co.uk
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