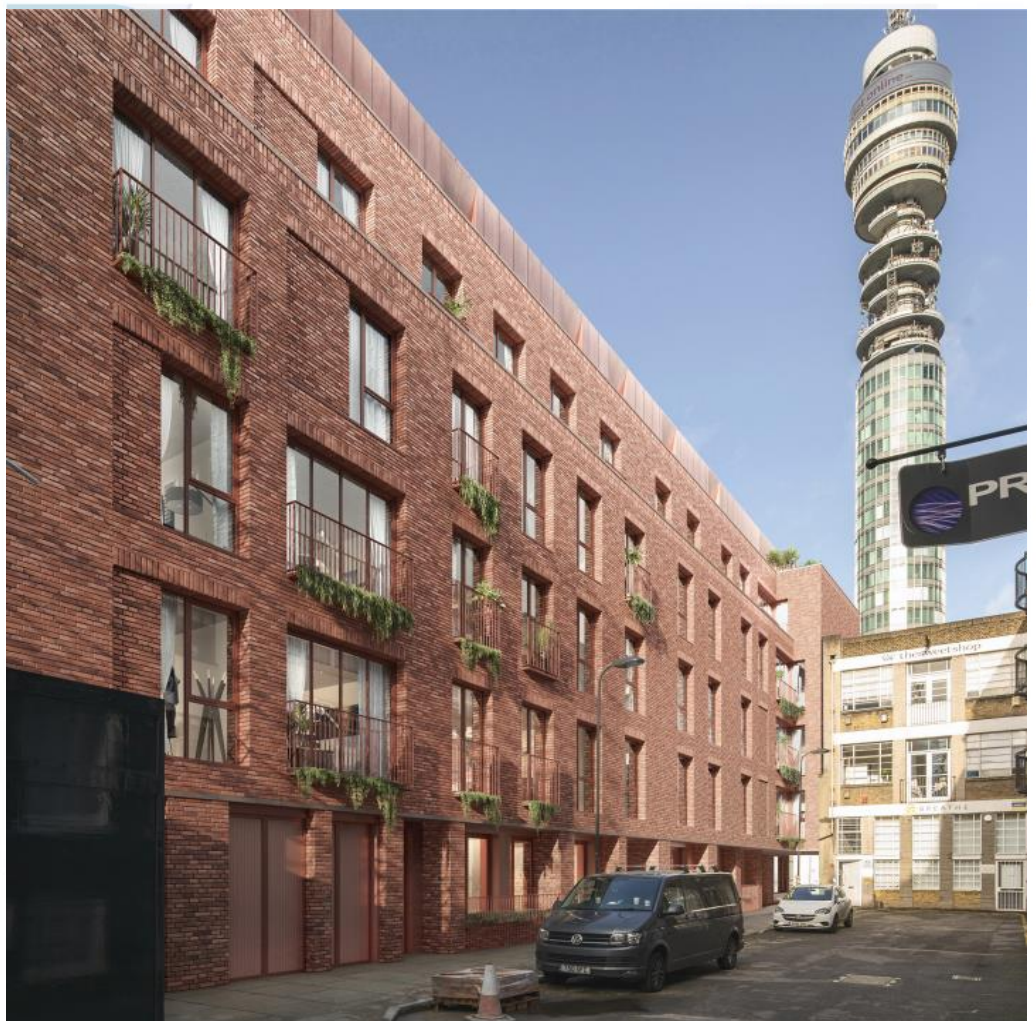


Report

Ventilation & Extract Statement

14-19 TOTTENHAM MEWS, LONDON
Central London Commercial Estates Limited



CONFIDENTIAL

Revision: 3.0 – FINAL
Issued: 14 May 2021



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1 EXECUTIVE SUMMARY

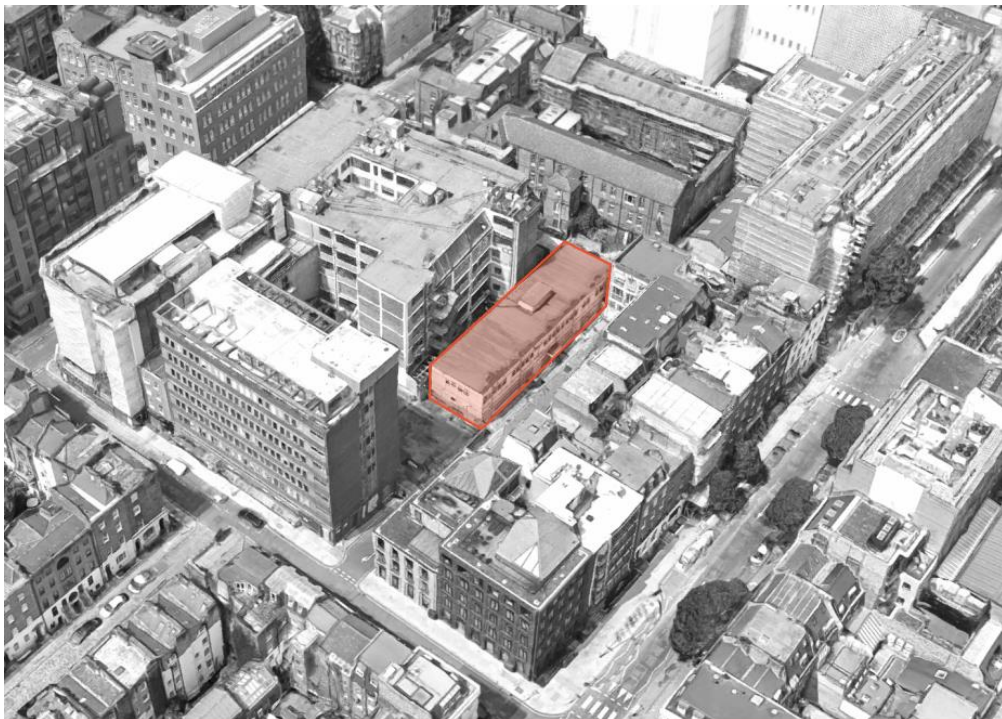
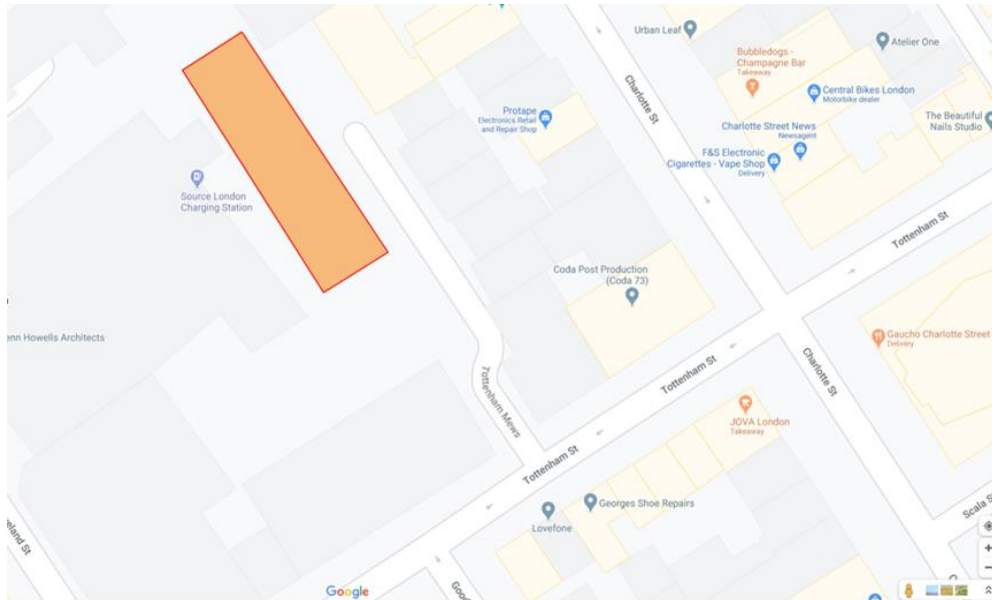
The proposed 14-19 Tottenham Mews development involves erection of a ground plus five storey building (plus one basement level) to provide office (e class) at part ground and basement level and residential dwellings (C3) at ground and floors one to five and associated landscaping, cycling parking and all necessary enabling works. A summary of the ventilation and extract systems is noted below, and described further in subsequent sections of this report.

- Mechanical ventilation to each apartment will be provided via Mechanical Ventilation Heat Recovery (MVHR) units located above the bathroom of each dwelling; ventilation rates will comply with Approved Document F.
- Ventilation to the main corridor will be provided by a dedicated local MVHR unit on each floor.
- Ducts from each MVHR unit will be routed to the local façade to fresh air intake and exhaust discharge locations, ensuring as much separation between the two locations as possible to minimise recirculation of air between the extract and intake positions.
- The refuse stores on Ground Floor will be mechanically ventilated. Intake and discharge louvres are to be separated to avoid the recirculation of extract air.
- Fresh air ventilation to the office space located on the Ground and Lower Ground Floors will be via a local MVHR unit on the Ground Floor, connected to intake and extract louvres located along the Ground Floor façade.
- There are no gas boilers or diesel life-safety generators proposed as part of the development, hence there will be no exhaust flues.
- The smoke ventilation for the protected corridors on each residential floor will be via actuated doors to the Access Deck on the western side of the building. Basement smoke clearance will be provided via natural means through smoke outlets with break-out covers provided in the external pavement at Ground Floor.



2 OVERVIEW

The purpose of this report is to highlight the ventilation strategy proposed for 14-19 Tottenham Mews, which is a new development providing residential floorspace with a mix of tenures, and affordable workspace at Ground and Lower Ground floors. The site located at 14-19 Tottenham Mews is accessed from Tottenham Street in Fitzrovia, London. The site of the existing building is highlighted in orange on the below site plan.



Proposed Building Location



3 PROPOSED VENTILATION AND EXTRACT PROVISIONS

The main ventilation systems proposed for the building include:

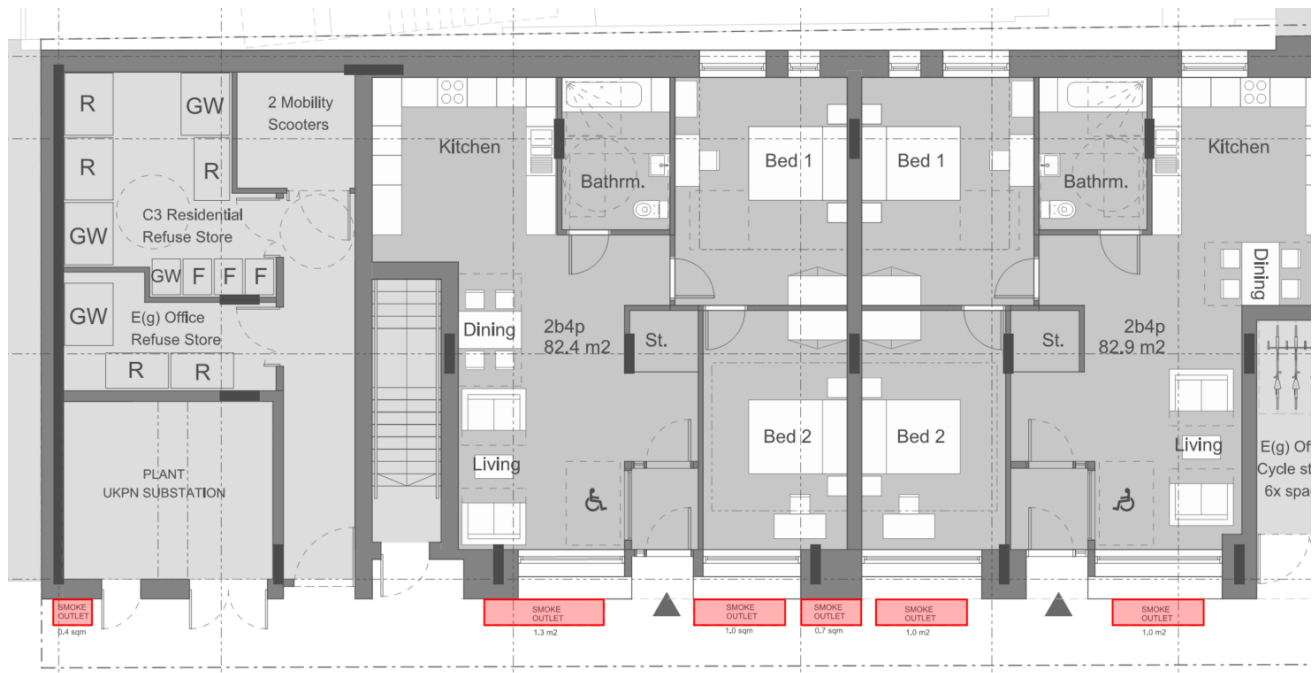
- Mechanical ventilation to each apartment will be provided via efficient Mechanical Ventilation Heat Recovery (MVHR) units located above the bathroom of each dwelling. The MVHR units will extract air from the kitchen and bathroom, and supply air to living areas and bedrooms. These units include an air-to-air heat exchanger to recover heat from the extracted air. A heat exchanger bypass mode is to be incorporated as part of the MVHR units selected.
- The MVHR units will provide continuous ventilation to the apartment dwellings, complying with and exceeding Approved Document F ventilation rates by 50% to reduce overheating risk within the apartments.
- Ventilation to the main corridor will be provided by a dedicated local MVHR unit on each floor.
- Ducts from each MVHR unit will be routed to the local façade to fresh air intake and exhaust discharge locations, ensuring as much separation between the two locations as possible to avoid recirculation of air between the extract and intake positions. Refer to Appendix A which shows intake and discharge locations proposed for each apartment. The intake and exhaust openings will be detailed by the project architect, ensuring that the necessary ventilation areas are provided.
- Purge ventilation to each apartment dwelling will be via natural means (openable windows).
- The refuse stores on Ground Floor will be mechanically ventilated. Intake and discharge louvres are to be sufficiently separated to avoid recirculation of extract air.
- Fresh air ventilation to the office space located on the Ground and Lower Ground Floors will be via a local MVHR unit on the Ground Floor, connected to intake and extract louvres located along the Ground Floor façade.
- There are no gas boilers proposed as part of the development, and as such flue provision will not be required.
- There are no diesel life-safety generators required for the development, and as such diesel flue provision will not be required.
- Refer to Appendix B which includes the Residential and B1 Office Ventilation System Schematic

4 SMOKE VENTILATION

The basement level will be provided with natural smoke outlets with break-out covers at Ground Floor. The outlets will connect directly to open air and be distributed along the east side of the building. They will provide a combined clear cross-sectional area of at least 2.5% of the area of each floor they serve.

Smoke ventilation for the protected corridors on each residential floor will be via actuated doors to the Access Deck on the western side of the building.

Refer to the Ventilation System Schematic within Appendix B, and the Fire Strategy Report for the building for further details.

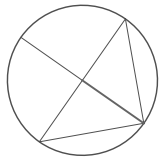
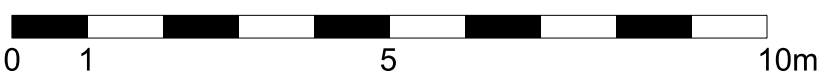



Ground smoke outlet locations shown in red



5 APPENDIX A – INTAKE & EXTRACT LOCATIONS

Ground Floor



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Project: 14-19 Tottenham Mews							
Title: Intake & Extract Locations							
Document Number: Appendix A							
Project No: U14072-001		Drawn: GS	Date: 13.05.2021		Scale: 1:100	Rev: 3.0	

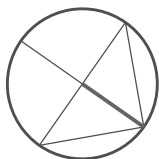
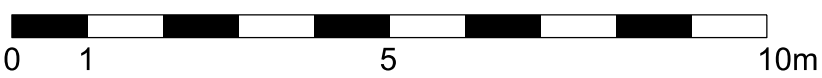
First Floor




Second Floor

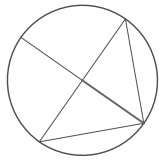
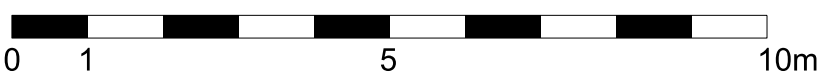



Third Floor



 <div>Norman Disney & Young</div>		This drawing is for information purposes only.		
Project: 14-19 Tottenham Mews				
Title: Intake & Extract Locations				
Document Number: Appendix A				
Project No: U14072-001	Drawn: GS	Date: 13.05.2021	Scale: 1:100	Rev: 3.0

Fourth Floor





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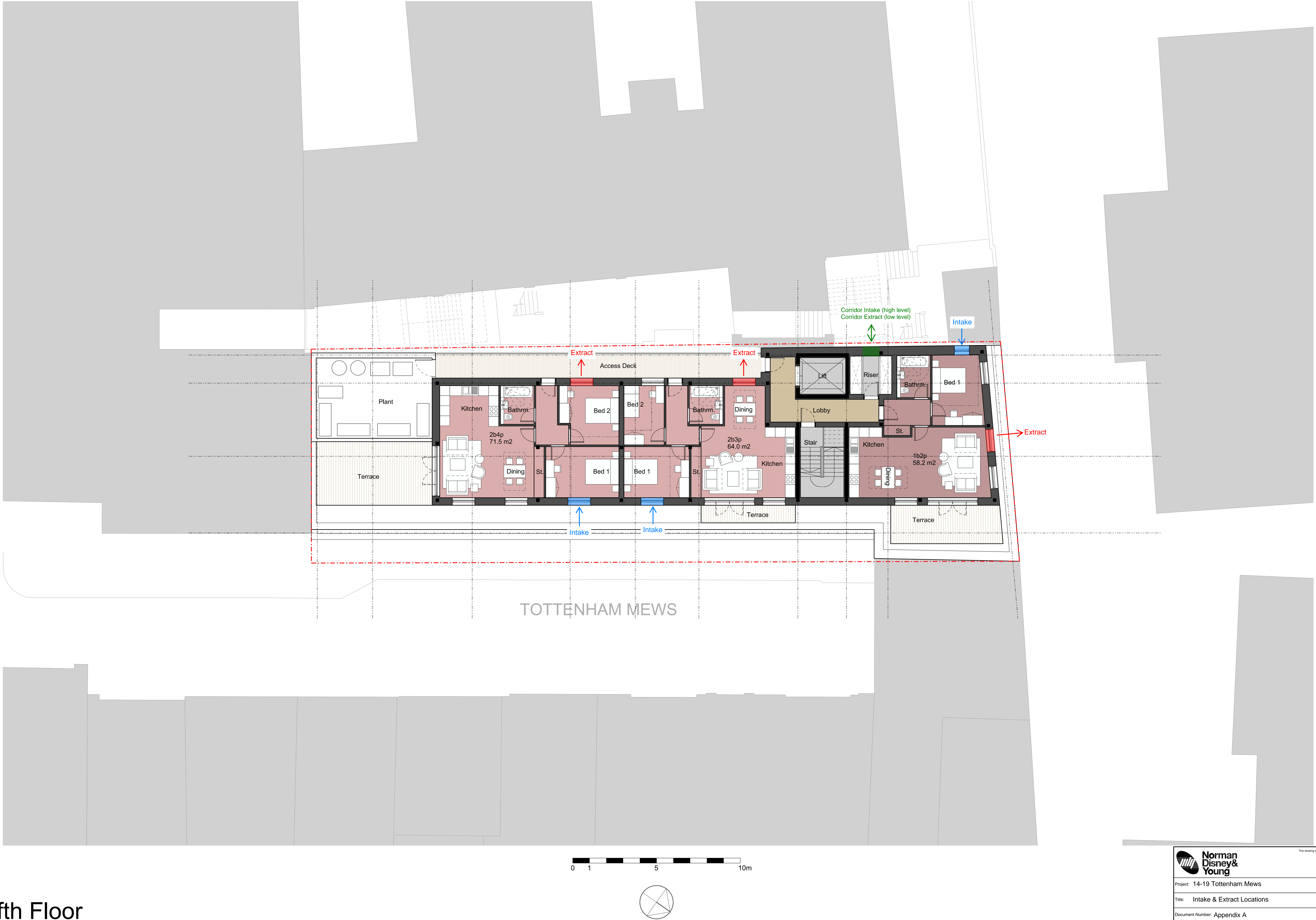
This drawing is for information purposes only.

Project: 14-19 Tottenham Mews

Title: Intake & Extract Locations

Document Number: Appendix A

Project No: U14072-001	Drawn: GS	Date: 13.05.2021	Scale: 1:100	Rev: 3.0
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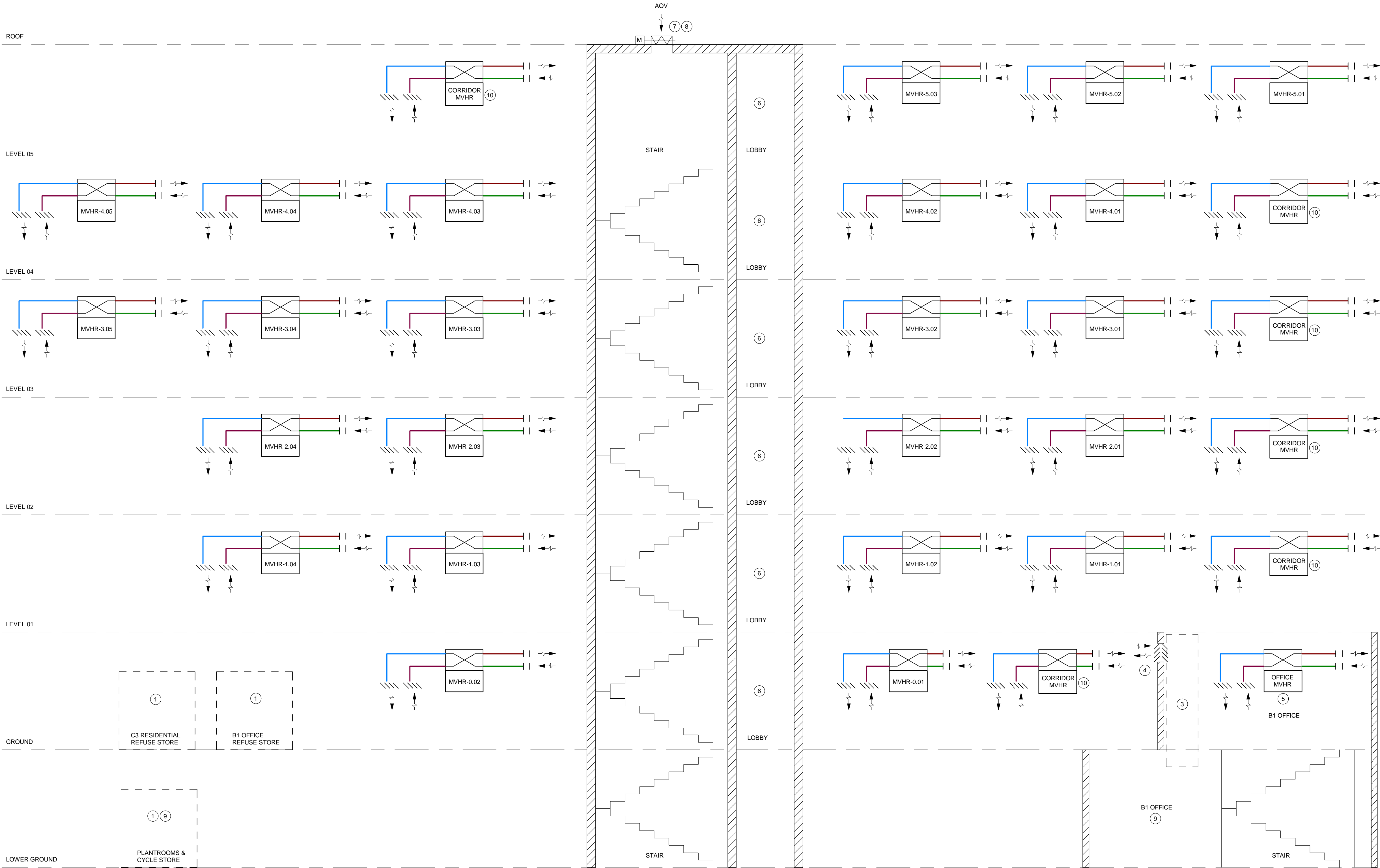




6 APPENDIX B - VENTILATION SYSTEM SCHEMATIC

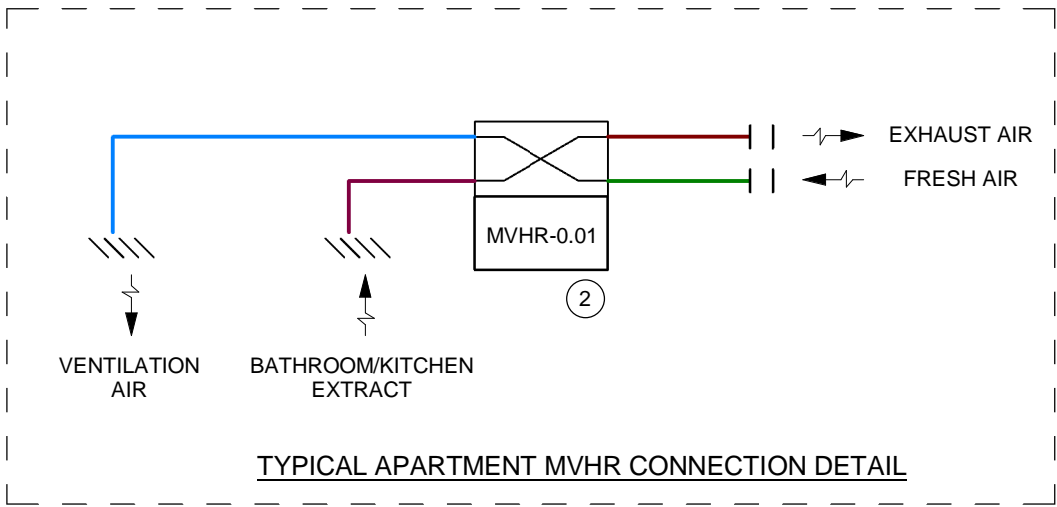
LINE TYPE LEGEND

- SUPPLY AIR DUCTWORK
RETURN/EXTRACT AIR DUCTWORK
FRESH AIR DUCTWORK
EXHAUST AIR DUCTWORK



No. DESCRIPTION

- REFUSE STORES AND BASEMENT BOH AREAS TO BE MECHANICALLY VENTILATED VIA SUPPLY AND EXTRACT FANS CONNECTED TO PERIMETER LOUVRES ON GROUND FLOOR. REFER TO COMBINED SERVICES LAYOUTS FOR FURTHER DETAILS
- MVHR UNITS TO BE LOCATED ABOVE BATHROOM CEILINGS IN EACH APARTMENT. REFER TO COMBINED SERVICES LAYOUTS FOR FURTHER DETAILS
- B1 OFFICE VENTILATION RISER
- INTAKE AND EXTRACT LOUVRES TO SERVE THE B1 OFFICE SPACE
- MVHR UNIT TO SERVE THE B1 OFFICE SPACE, CONNECTED TO INDOOR FAN COIL UNITS.
- ACTUATED DOOR TO RESPOND ON FIRE ALARM TO PROVIDE NATURAL SMOKE VENTILATION FOR COMMON PROTECTED CORRIDOR.
- MOTORISED AUTOMATIC OPENING VENT (AOV) AT TOP OF STAIRWELL FOR MAKE-UP AIR PATH TO LOBBY.
- AOV SHALL BE PROVIDED WITH TRAFFICABLE SAFETY GUARD. THE GUARD SHALL BE FITTED OFFSITE SO THAT THE AOV IS PROTECTED FROM THE TIME OF FIRST INSTALLATION
- BASEMENT SMOKE CLEARANCE TO BE PROVIDED VIA NATURAL MEANS WITH NATURAL SMOKE OUTLETS WITH BREAK-OUT COVERS PROVIDED AT GROUND FLOOR.
- MVHR UNIT LOCATED WITHIN SERVICES RISER, SERVING THE CORRIDOR. REFER TO COMBINED SERVICES LAYOUTS FOR FURTHER DETAILS



GENERAL NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE LAYOUT DRAWINGS AND STAGE 2 REPORT

Rev	Description	Date	Rev	Description	Date	Rev	Description	Date
P01	STAGE 2 DRAFT ISSUE	15.09.20						
P02	STAGE 2 DRAFT ISSUE	04.11.20						
P03	STAGE 2 ISSUE	03.12.20						
P04	VENTILATION & EXTRACT STATEMENT UPDATE	14.05.21						

CDM NOTES

DURING THE DESIGN PHASE, CONSIDERATION HAS BEEN GIVEN TO SITE SPECIFIC HAZARD IDENTIFICATION. A SCHEDULE OF CDM RISK ITEMS IS INCLUDED WITHIN THESE DOCUMENTS HOWEVER IT SHOULD BE NOTED THAT ONLY SIGNIFICANT AND UNUSUAL RISKS HAVE BEEN IDENTIFIED. THE CONTRACTOR MUST CARRY OUT THEIR OWN RISK ASSESSMENT AS OTHER UNIDENTIFIED RISKS MAY EXIST. WHERE RISK(S) HAVE BEEN IDENTIFIED ON THIS DRAWING PLEASE REFER TO THE CDM SCHEDULE LOCATED ON THE LEGEND SHEET FOR DETAILS

NDY QA SYSTEM

Reason For Issue

STAGE 2

Authorisation

By : GS : 14 MAY 2021

Verification Or Latest Amendment

By : AM : 14 MAY 2021



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Project
TOTTENHAM MEWS
14-19 Tottenham Mews, London

Title
**MECHANICAL SERVICES
RESIDENTIAL AND B1 OFFICE
VENTILATION SYSTEM SCHEMATIC**

Drawing No.
1419TM-NDY-XX-XX-SC-M-5702

Scale N.T.S.	Drawn ICE	Design GS	Revision P04
Project No. U14072-001	Project Commencement JUL. 2020		



Revised Version
2019
DRAWING IN COLOUR



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NDY QA SYSTEM

Revision No: 3.0
Revision Date: 14 May 2021
Reason Description: FINAL

File Location:
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Reports

Filename: rp201104u0001

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