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Technical Note for Kitchen Ventilation Strategy	
Project Name	Manchester Grammar School – Sixth Form Centre
Project No:	2879
Date:	27/10/2025
Ref:	2879-CWC-XX-XX-TN-M-0001
Revision	1

1.0 Introduction

This design note has been produced to outline the kitchen ventilation strategy for the Manchester Grammar School sixth form Centre project. This document is to clarify the design of the kitchen ventilation to demonstrate there are no risks of odour or noise to surrounding properties.

The kitchen forms part of the dining hall to the new Sixth Form Centre, with the extract system serving the catering kitchen for this new block, operating primarily during school hours and no high intensity commercial cooking.

Detailed ventilation layout drawings have already been submitted during the planning stages, which outlines the ductwork route and termination location. This provides the design rationale of the ventilation strategy for the kitchen, including fan locations and appropriate filtration devices to mitigate any grease.

2.0 Design Requirements

The design of the kitchen extract system will comply with the following:

- All relevant British and European standards
- DW / 172 – Specification for Kitchen Ventilation Systems (2nd Edition, 2018, V2)
- EMAQ Guidance 'Control of Odour and Noise from Commercial Kitchen Exhaust Systems 2018'
- TR / 19 – HVCA Guide to Good Practice, Internal Cleanliness of Ventilation Systems
- British Standards BS EN 1366 - Fire Resistant Tests for Service Ducts and Shafts
- DEFRA Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems, 2005
- Non-Domestic Building Services Compliance Guild CLG 2010
- CIBSE Codes of Practice and Design Guidance Notes

3.0 Plant and Equipment

Ventilation ductwork will be supplied, manufactured, erected, supported and tested in accordance with the requirements of HVCA DW144 and DW172. All ductwork will be complete with access doors for cleaning in compliance with TR/19.

Filtration of the extract air is achieved at source through the kitchen canopy which is to be provided with an integrated filtration system consisting of Longar Type 2 Premium Baffle Filter within the canopy, Filter Class G2, UL Class 2.

Extract air is expelled through a high level louvre on the gable end of the building and is directed away from the existing school buildings. This location is approximately 180m away from any surrounding residential receptors.

Acoustic attenuation will be applied to mitigate acoustic impact on any sensitive noise receptors.

4.0 Cooking Operations

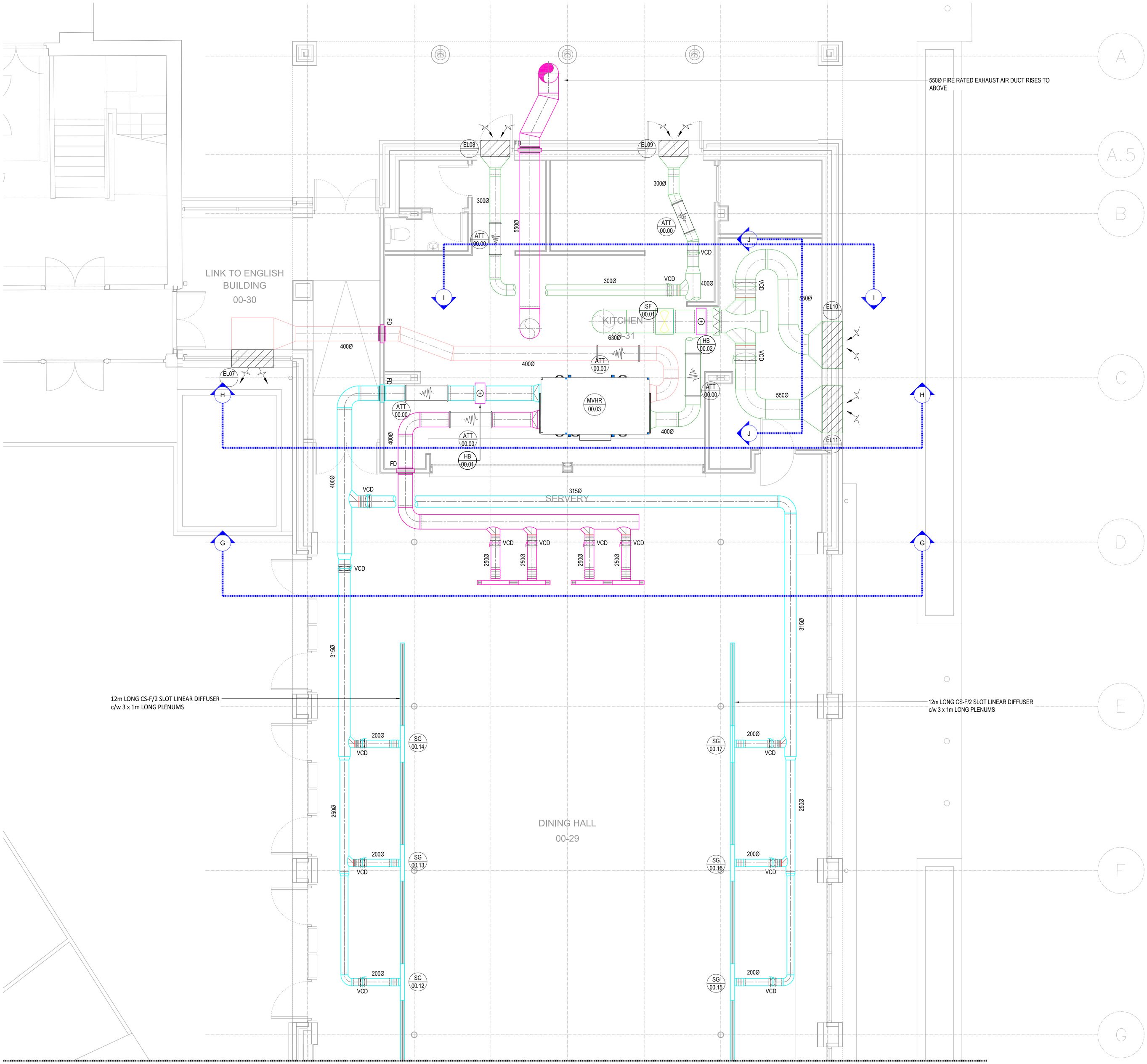
The kitchen itself will primarily operate during the standard hours of the sixth form college. There will be limited cooking out of hours, this includes evenings, weekends, or during term holidays. The kitchen extract system will be intermittent use during occupied hours in line with the kitchen use.

The cooking operations will be typical of a standard school, which will be light to medium cooking consisting of the following:

- Oven cooking and baking
- Boiling, steaming, shallow frying
- Reheating and light snack preparation

The kitchen will not be used for any heavy duty cooking or high intensity cooking such as large scale frying, flame grilling, or deep fat frying. The kitchen ventilation system has been designed in accordance with low to medium cooking operations as outlined above.

5.0 Appendix 1 – Kitchen Ventilation Layouts



SEE SHEET 2 of 3

VENTILATION SERVICES NOTES

1. ALL DIMENSIONS SHOWN ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
2. DO NOT SCALE FROM THIS DRAWING.
3. FIRE/SMOKE DAMPERS TO BE INSTALLED IN ALL VENTILATION DUCTWORK WHERE DUCTWORK PASSES THROUGH A FIRE COMPARTMENT WALL/FLOOR, AS APPLICABLE.
4. THE LAST 500mm OF DUCTWORK TO EACH GRILLE DIFFUSER TO BE CARRIED OUT IN ACOUSTIC FLEXIBLE DUCTWORK WHERE APPROPRIATE.
5. FINAL LOCATION OF ALL PLANT/EQUIPMENT AND ROOF PENETRATIONS TO BE AGREED WITH THE PROJECT MANAGER & STRUCTURAL ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
6. THE CONTRACTOR SHALL LIAISE WITH THE STRUCTURAL ENGINEER TO PROVIDE THE FINAL WEIGHTS & DIMENSIONS OF ALL PLANT & EQUIPMENT & GAUGING APPROVAL OF METHOD OF FIXING BY THE STRUCTURAL ENGINEER.
7. ALL DUCTWORK BENDS AND TEES ARE TO INCORPORATE DW144 APPROVED TURNING VANES.
8. ACCESS PANELS SHALL BE PROVIDED ADJACENT TO ALL VCD'S & FIRE/SMOKE DAMPERS, AS APPLICABLE.
9. ALL DUCTWORK TO BE IN ACCORDANCE WITH DW144 WITH ACCESS PROVIDED TO B&ES TR19.
10. PROVISION OF FIRE DAMPERS TO BE CONFIRMED BY FIRE STRATEGY COMPARTMENTATION DRAWING/REPORT, BY OTHERS.

LEGEND	
SYMBOL	DESCRIPTION
	SUPPLY DUCTWORK
	EXTRACT DUCTWORK
	INTAKE DUCTWORK
	EXHAUST DUCTWORK
	SUPPLY DUCTWORK
	BELLMOUTH
FD	FIRE DAMPER
FSD	FIRE & SMOKE DAMPER
	CROSS TALK ATTENUATOR
	ATTENUATOR
	VOLUME CONTROL DAMPER

CONSTRUCTION

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Contract
MANCHESTER GRAMMAR SCHOOL

MECHANICAL SERVICES
LEVEL 00 - VENTILATION SERVICES LAYOUT
SHEET 3 of 3

Scale	1 : 50 @ A1	MGS-ATH-XX-00-DR-M-5703	Rev
Date	MAR 2025		C02
Drawn by	GBSE		
Issue	Construction		

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