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Revision

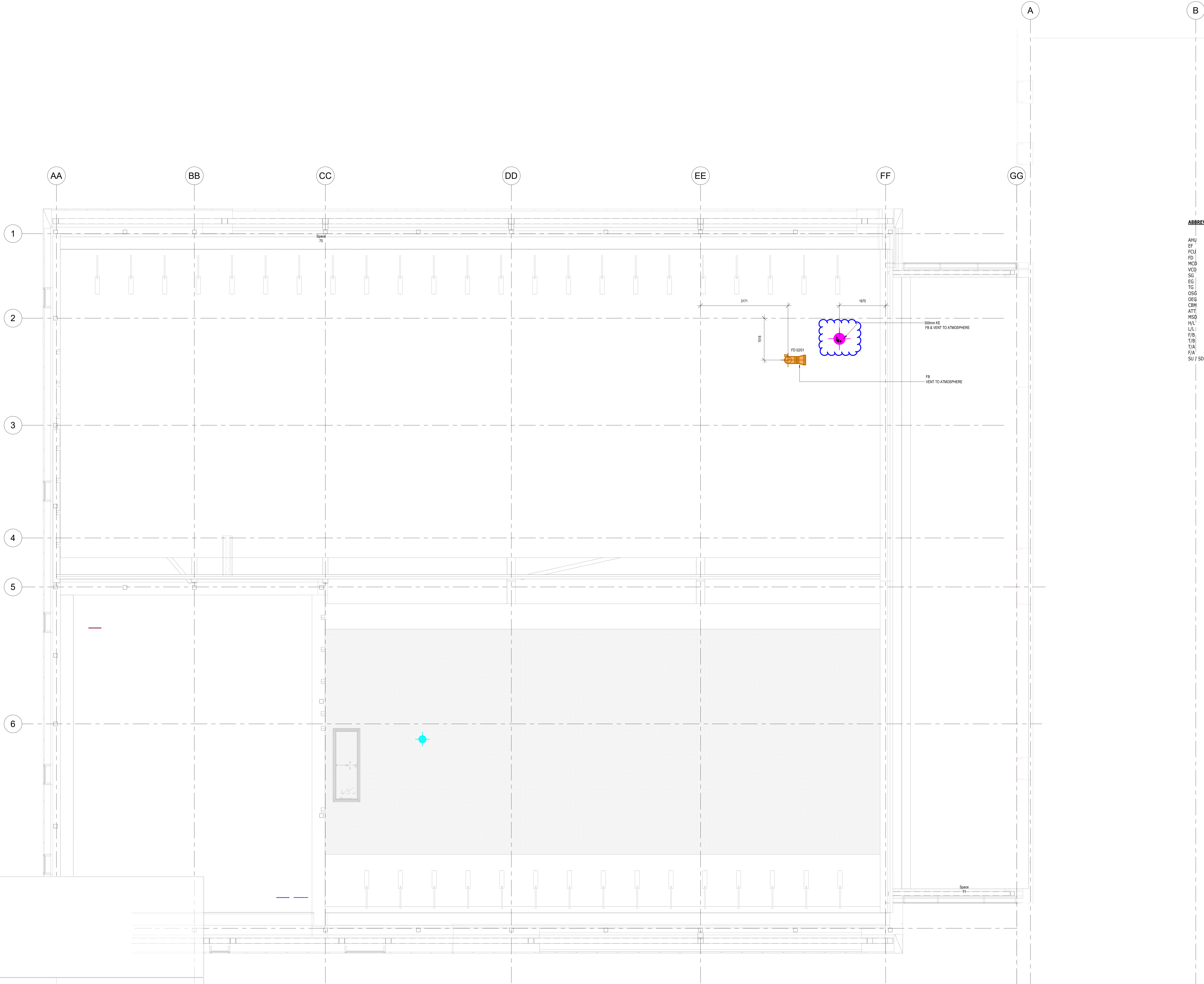
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Mr Ray Wheeler - ISG Ltd

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SERVICE INFORMATION ONLY TO BE TAKEN FROM THIS DRAWING. Where Architects details are shown these are indicative and reference should be made to the relevant Architects drawing. To be read in conjunction with all Consultants drawings, specifications and regulations. USE FIGURE DIMENSIONS ONLY. DO NOT SCALE



ABBREVIATIONS

AHU	AIR HANDLING UNIT
EF	EXTRACT FAN
FCU	FAN COIL UNIT
FD	FIRE DAMPER
MCD	MOTORISED CONTROL DAMPER
VCD	VOLUME CONTROL DAMPER
SG	SUPPLY GRILLE
EG	EXTRACT GRILLE
TG	TRANSFER GRILLE
OSG	OUTDOOR SUPPLY GRILLE
OEG	OUTDOOR EXTRACT GRILLE
CBM	CHILLED BEAM
ATT	ATTENUATOR
MSD	MEASURING DEVICE
H/L	HIGH LEVEL
L/L	LOW LEVEL
F/B	FROM BELOW
T/B	TO BELOW
T/A	TO ABOVE
SU / SD	SET UP / SET DOWN

- NOTES
1. THIS DRAWING IS FOR SPATIAL CO-ORDINATION PURPOSES ONLY. ALL CONTRACTORS TO CHECK THEIR SERVICES BEFORE PROCEEDING WITH SITE INSTALLATION. ANY DISCREPANCIES OR QUERIES PLEASE CONTACT THE CAD CO-ORDINATOR.
 2. THIS DRAWING SHOWS ALL HL CO-ORDINATED SERVICES ONLY. FOR FINAL CONNECTIONS TO ITEMS OF SANITARY WARE, PLANT & LOW LEVEL SERVICES SEE RELEVANT DESIGN DRAWINGS.
 3. UNLESS STATED OTHERWISE ALL INVERT LEVELS ARE FROM FINISHED FLOOR LEVEL TO BOTTOM OF DUCT (L) OR CENTER OF PIPE (C) UP TO UNDERSIDE OF LUMINAIRE (U/S-")
 4. DO NOT SCALE FROM THIS DRAWING. ALL CRITICAL DIMENSIONS ARE SHOWN. FOR ALL OTHER DIMENSIONS PLEASE CONTACT THE CAD CO-ORDINATOR.

- GENERAL
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, STRUCTURAL AND ENGINEERING SERVICES DRAWINGS, SPECIFICATIONS AND ALL OTHER DOCUMENTS ISSUED WITH THIS CONTRACT.
 2. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE WBS MECHANICAL WORKMANSHIP SPECIFICATION AND THE MECHANICAL PARTICULAR SPECIFICATION ISSUE WITH THIS PROJECT.

MECHANICAL VENTILATION INSTALLATION

1. THE VENTILATION INSTALLATION SHALL BE INSTALLED IN ACCORDANCE WITH WBS MECHANICAL SPECIFIC SPECIFICATION, MECHANICAL WORKMANSHIP SPECIFICATION AND THE CURRENT BS/BS EN STANDARDS.
2. DUCTWORK SHALL GENERALLY BE GALVANISED STEEL WITH CIRCULAR PROFILE AND SPIRAL SEAMS OR RECTANGULAR.
3. ACCESS SHALL BE PROVIDED TO ALL DUCTWORK AND DUCT MOUNTED EQUIPMENT TO ALLOW FOR INSPECTION, MAINTENANCE AND COMMISSIONING IN ACCORDANCE WITH THE HVAC DW CURRENT STANDARDS AND CURRENT BS/BS EN STANDARDS.
4. VOLUME CONTROL DAMPERS SHALL BE INSTALLED TO ALL MAIN RUNS, BRANCHES ETC TO ALLOW FOR SYSTEM BALANCING. THE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH THE HVAC DW CURRENT STANDARDS AND CURRENT BS/BS EN STANDARDS.
5. ALL FINAL DUCTWORK CONNECTIONS TO DIFFUSERS AND GRILLES SHALL BE VIA FLEXIBLE DUCTING. MAXIMUM LENGTH FOR THIS CONNECTION SHALL BE 300MM.
6. THERMAL INSULATION SHALL BE APPLIED TO ALL DUCTWORK SERVING WARM / COOLED SUPPLY AIR AND WHERE RETURN AIR IS UTILISED FOR HEAT RECOVERY, THE THERMAL INSULATION SHALL BE OF A THICKNESS, TYPE AND FINISH AS OUTLINED IN THE WBS MECHANICAL WORKMANSHIP SPECIFICATION.
7. ALL DUCTWORK AND EQUIPMENT SHALL BE ADEQUATELY SUPPORTED AS OUTLINED IN THE WBS MECHANICAL WORKMANSHIP SPECIFICATION. THE MECHANICAL CONTRACTOR SHALL ALLOW FOR ALL NECESSARY SECONDARY SUPPORT STEEL WORK AND BRACKETS ETC REQUIRED TO FULLY INSTALL ALL THE DUCTWORK AND EQUIPMENT ASSOCIATED WITH THE INSTALLATION.
8. DUCTWORK INSTALLATIONS SERVING THE KITCHEN ARE TO COMPLY WITH THE HVAC DW CURRENT STANDARDS AND CURRENT BS/BS EN STANDARDS.
9. ALL KITCHEN EXTRACT DUCTWORK SHALL BE FIRE RATED FOR 60 MINUTES FOR INTEGRITY AND STABILITY. DUCTWORK PASSING THROUGH FIRE COMPARTMENTS SHALL BE INSTALLED WITH FIRE&SMOKE DAMPER. THE FIRE&SMOKE DAMPER SHALL BE EQUAL TO OR EXCEED THE RATING OF THE ELEMENT THE DUCTWORK PASSES THROUGH.
11. UNLESS SPECIFIED OTHERWISE FIRE DAMPERS SHALL BE OF THE MORTISE TYPE WITH A LINK TO THE FIRE ALARM SYSTEM. THE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH THE BUILDING CONTROL REQUIREMENTS, THE FIRE STRATEGY FOR THE BUILDING, WITH THE HVAC DW CURRENT STANDARDS AND CURRENT BS/BS EN STANDARDS.
12. THE USE OF DOOR TRANSFER GRILLES WITHIN FIRE PARTITIONS SHALL BE CONFIRMED WITH BUILDING CONTROL PRIOR TO THE ORDERING OF MATERIALS AND THEIR INSTALLATION.
13. UNLESS OTHERWISE INDICATED IN NONE FIRE RATED ELEMENTS GENERALLY DOORS TO TOILET AND STORE ROOM SHALL BE UNDERCUT TO ALLOW FOR THE PASSAGE OF MAKE-UP AIR INTO THE ROOM.
14. ALL FRESH AIR INLETS ARE TO BE COMPLETE WITH A REMOVABLE INSET MESH.
15. THE MECHANICAL CONTRACTOR SHALL INCLUDE FOR FULLY COMMISSIONING THE COMPLETE VENTILATION SERVICES INSTALLATION AS OUTLINED IN THE WBS MECHANICAL WORKMANSHIP SPECIFICATION. THIS SHALL INCLUDE BUT NOT LIMITED TO THE LEAK TESTING OF ALL DUCTWORK AND BALANCING OF THE COMPLETED INSTALLATION, INCLUDING A SEASONAL RE COMMISSIONING.
16. WHERE ATTENUATORS ARE SHOWN THESE SHALL BE SIZED TO MEET THE REQUIRED NR VALUES OUTLINED IN THE MECHANICAL PARTICULAR SPECIFICATION.
17. ALL DUCT MOUNTED FANS SHALL BE INSTALLED WITH FLEXIBLE CONNECTIONS ON THE INLET AND DISCHARGE SIDES.
18. ALL DUCT FANS SHALL BE INSTALLED WITH AAV MOUNTINGS.
19. CONTRACTOR SHALL INCLUDE FOR ALL TRANSITION PIECES FROM DUCTWORK TO THE LOUVRES



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