

THIS DRAWING IS AN INDICATIVE LAYOUT ONLY, DEMONSTRATING CORRELATING WITH THE AGREED SCHEMATIC SOLUTIONS, THE PURPOSE OF THIS DRAWING IS TO DEMONSTRATE DESIGN INTENT, FOR FURTHER DEVELOPMENT BY THE RELEVANT SERVICES DESIGNER ONLY.

THIS DRAWING SHALL BE PRINTED IN COLOUR TO FULLY UNDERSTAND CONCEPTUAL REQUIREMENTS SHOWN WITHIN

NEW MITSUBISHI HEAT PUMPS TO REPLACE EXISTING CONDENSER UNITS AT LOW LEVEL ON FLOOR MOUNTED WITH ANTI-VIBRATION MATTING ON EXISTING BASE.
POWER SUPPLIES TO HEAT PUMPS.
1 x 3 CORE 10 mm ALPESWALZSH HANDED CABLES TO EACH HEAT PUMP.
CABLES ARE TO BE ROUTED FROM FIRST FLOOR DB REFERENCE DB GR010011612 AND 1112 CABLES TO DROP FROM FIRST FLOOR DB LOCATION TO THE BASSEMENT AREA ROUTE THROUGH THE BASSEMENT AREA AND TO THE PROPOSED HEAT PUMP LOCATION WITHIN THE GINNEL.
ALLOW 300mm OF 100mm RIGID 90% RANDED MEDIUM DUTY CABLE FOR CH BUNDLES.

ALLOW 4 CAT 6A 1ST DATA CABLES FROM THE GROUND FLOOR COMMUNICATION ROOM (G ROOMS) TO EACH FLOOR BOX LOCATION IN TOTAL.
CABLES TO BE ROUTED THROUGH EXISTING CONTAINMENT AS SHOWN ON DRAWING.
200mm TOLERANCE PROVIDED FOR FLOOR BOX LOCATION.
ADDITIONAL SECONDARY CONTAINMENT PROVIDED TO FLOOR BOX LOCATION.
ALLOW FIBRE METAL CORE CONDUIT FOR FINAL CONNECTION THROUGH FLOOR TO THE DATA COMPARTMENT OF THE FLOOR BOX.
100mm TOLERANCE PROVIDED FOR FLOOR BOX LOCATION - SEE DETAIL ON DRAWING 230543-CPW-XX-01-DR-A4-301003

NEW 15mm CONTAINMENT FOR REPERIMENT PHS.
NEW 15mm CONTAINMENT FOR REPERIMENT PHS.
CONDUITED THROUGH SERVICES ON SITE.

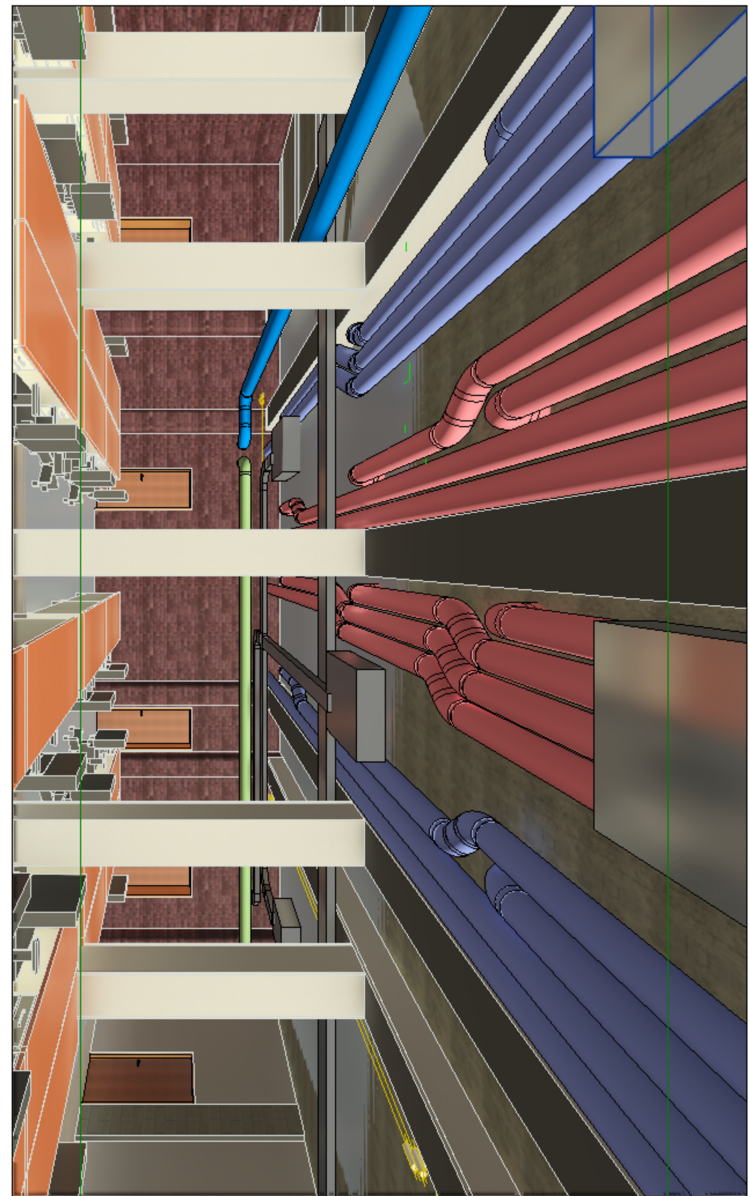
1 x 3 SUPPLY FROM THE HEAT PUMP HP-02.
4mm 4 CORE 10mm ALPESWALZSH HANDED CABLE.
CABLEING TO BE ROUTED THROUGH THE BASEMENT UTILISING THE EXISTING CONTAINMENT SYSTEM TO THE INDOOR UNITS.
ALLOW 12m OF 100mm BASKET FROM THE PRIMARY CONTAINMENT TO THE INDOOR UNIT LOCATION.
BASKET ON METAL DIVIDING FLETT TO ALLOW THE LV AND CONTROL CABLES TO BE SEPERATED.

1 x 3 SUPPLY FROM THE HEAT PUMP HP-01.
4mm 4 CORE 10mm ALPESWALZSH HANDED CABLE.
CABLEING TO BE ROUTED THROUGH THE BASEMENT UTILISING THE EXISTING CONTAINMENT SYSTEM TO THE INDOOR UNITS.
ALLOW 12m OF 100mm BASKET FROM THE PRIMARY CONTAINMENT TO THE INDOOR UNIT LOCATION.
BASKET ON METAL DIVIDING FLETT TO ALLOW THE LV AND CONTROL CABLES TO BE SEPERATED.

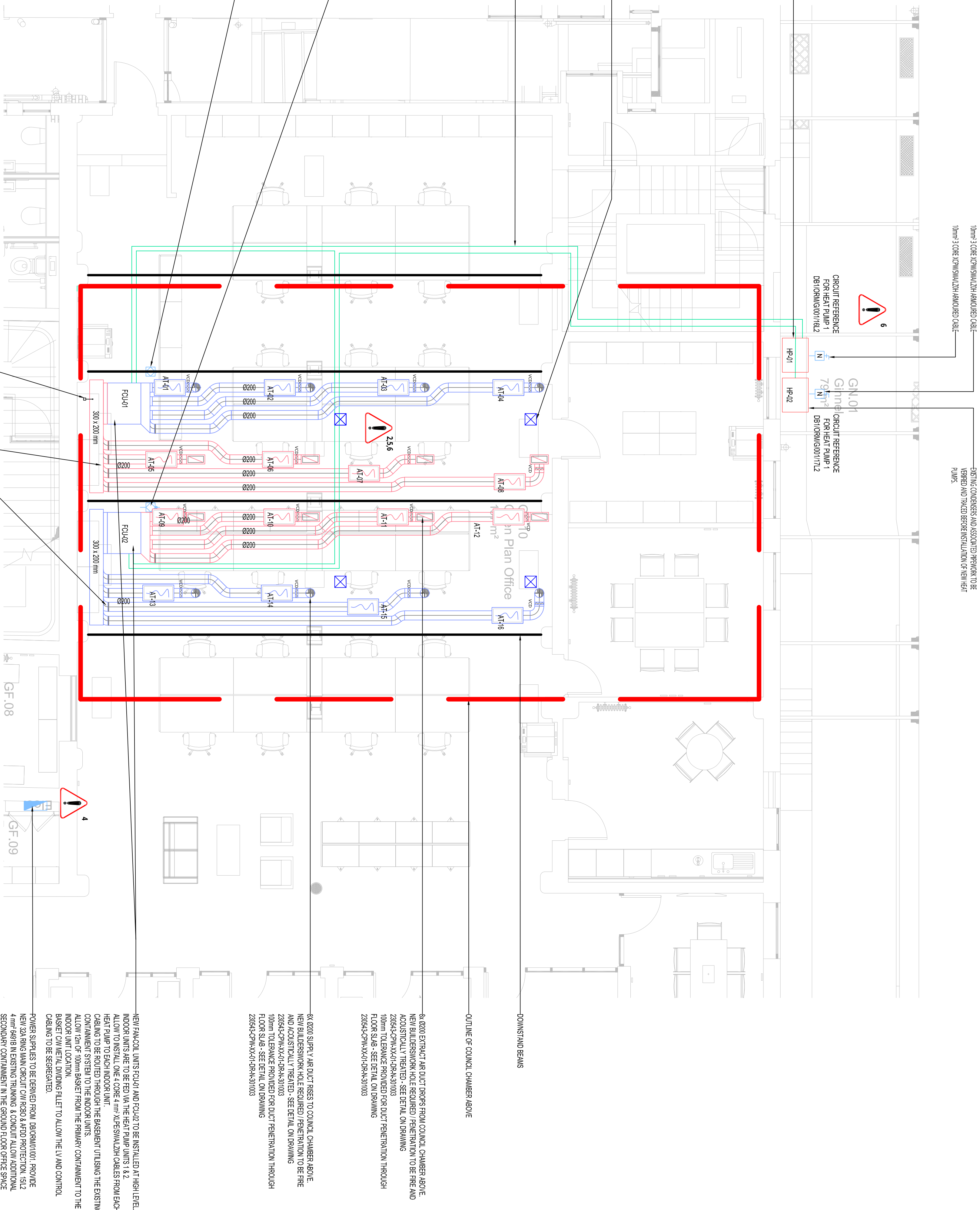
ATTENUATOR SCHEDULE			
REF. NO	MANUFACTURER	MODEL	INTERNAL Ø (mm) EXTERNAL Ø (mm) LENGTH (mm)
AT-01	CAICE	CG	200 305 600
AT-02	CAICE	CG	200 305 600
AT-03	CAICE	CG	200 305 600
AT-04	CAICE	CG	200 305 600
AT-05	CAICE	CG	200 305 600
AT-06	CAICE	CG	200 305 600
AT-07	CAICE	CG	200 305 600
AT-08	CAICE	CG	200 305 600
AT-09	CAICE	CG	200 305 600
AT-10	CAICE	CG	200 305 600
AT-11	CAICE	CG	200 305 600
AT-12	CAICE	CG	200 305 600
AT-13	CAICE	CG	200 305 600
AT-14	CAICE	CG	200 305 600
AT-15	CAICE	CG	200 305 600
AT-16	CAICE	CG	200 305 600

HEAT PUMP SCHEDULE				
REF. NO	MANUFACTURER	MODEL	ELECTRICAL SUPPLY	Weight (kg) DIMENSIONS (mm)
HP-01	MITSUBISHI	PUZ-ZN50VKA	220-240V, 50Hz	46 809 x 300 x 630
HP-02	MITSUBISHI	PUZ-ZN50VKA	220-240V, 50Hz	46 809 x 300 x 630

FCU SCHEDULE				
REF. NO	MANUFACTURER	MODEL	FLOW RATE (L/S)	COOLING CAPACITY (KW)
FCU-01	MITSUBISHI	PEAD-M50A	283	5.15
FCU-02	MITSUBISHI	PEAD-M50A	283	5.15



VIEW OF PROPOSED SERVICES



10mm 3 CORE 10mm ALPESWALZSH HANDED CABLE
10mm 3 CORE 10mm ALPESWALZSH HANDED CABLE
EXISTING CONDENSER AND ASSOCIATED PIPING TO BE REMOVED AND TAKEN BEFORE INSTALLATION OF NEW HEAT PUMPS



CIRCUIT REFERENCE FOR HEAT PUMP 1 DB10RM/G0011612
CIRCUIT REFERENCE FOR HEAT PUMP 2 DB10RM/G0011712

DOWNSTAND BEAMS

OUTLINE OF CONTROL CHAMBER ABOVE

6x 20mm EXTRACT AIR DUCT RIGID FROM CONTROL CHAMBER ABOVE
NEW RIGID DUCTWORK NOT REQUIRED PENETRATION TO BE FIRE AND ACoustically TREATED - SEE DETAIL ON DRAWING 230543-CPW-XX-01-DR-A4-301003
100mm TOLERANCE PROVIDED FOR DUCT PENETRATION THROUGH FLOOR SLAB - SEE DETAIL ON DRAWING 230543-CPW-XX-01-DR-A4-301003

6x 20mm SUPPLY AIR DUCT RIGID TO CONTROL CHAMBER ABOVE
NEW RIGID DUCTWORK NOT REQUIRED PENETRATION TO BE FIRE AND ACoustically TREATED - SEE DETAIL ON DRAWING 230543-CPW-XX-01-DR-A4-301003
100mm TOLERANCE PROVIDED FOR DUCT PENETRATION THROUGH FLOOR SLAB - SEE DETAIL ON DRAWING 230543-CPW-XX-01-DR-A4-301003

NEW FANCOIL UNITS FCU-01 AND FCU-02 TO BE INSTALLED AT HIGH LEVEL.
INDOOR UNITS ARE TO BE FED VIA THE HEAT PUMP UNITS 1 & 2.
ALLOW TO INSTALL ONE 4 CORE 4mm ALPESWALZSH CABLES FROM EACH HEAT PUMP TO EACH INDOOR UNIT.
CABLEING TO BE ROUTED THROUGH THE BASEMENT UTILISING THE EXISTING CONTAINMENT SYSTEM TO THE INDOOR UNITS.
ALLOW 12m OF 100mm BASKET FROM THE PRIMARY CONTAINMENT TO THE INDOOR UNIT LOCATION.
BASKET ON METAL DIVIDING FLETT TO ALLOW THE LV AND CONTROL CABLEING TO BE SEPERATED.

POWER SUPPLIES TO BE DERIVED FROM DISCOMBINATION PROVIDE NEW 32A RING MAIN CIRCUIT CON RCB2 & F&ED PROTECTION, 1512 4mm 50/60 IN EXISTING TRUNKING & CONDUIT ALLOW ADDITIONAL SECONDARY CONTAINMENT IN THE GROUND FLOOR OFFICE SPACE FROM THE PRIMARY CONTAINMENT IN THE FLOOR BOX LOCATIONS TO MATCH EXISTING.

HEALTH AND SAFETY INFORMATION

Standard hazards and risks may not necessarily be identified on the drawing. The caution symbols that are identified, but not limited to, related to specific hazards and risks associated with the type of project.
Reference should be made to the data for further details.

Data Ref No.	Description
2	Risk of asbestos exposure.
5	Working in a live building.
6	Exposure to live electrical parts.
It is assumed that all works shall be undertaken by a competent contractor working where appropriate, to an approved method statement.	

NOTES

- DISCOMBINATION CHANGES ARE INDICATED ONLY AND ARE TO BE COORDINATED WITH EXISTING SERVICES ON SITE.
- ALL FLOOR PENETRATIONS TO BE FIRE AND ACoustically TREATED.
- ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH BUILDING STANDARDS.
- FLOOR BOX CAT 6A DATA CABLEING TO BE ROUTED FROM GROUND FLOOR DATA CABLE LOCATION, FOR TENDER PURPOSES ALLOW TO PROVIDE ADDITIONAL PATCH PANEL TO EXISTING RACK.

LEGEND	
	SUPPLY DUCTWORK
	EXTRACT DUCTWORK
	REFRIGERANT PIPEWORK
	SUPPLY DUCT RISE
	EXTRACT DUCT DROP
	UNDERSIDE OF FLOOR BOX ABOVE
	SINGLE PHASE ISOLATOR
	SWITCHED FUSE CONNECTION UNIT

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1st Floor, Leicester

Project
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230543-CPW-XX-01-DR-A4-301001

STAGE 4

TENDER



Ormond Building Council Chamber

GROUND FLOOR PROPOSED MECHANICAL & ELECTRICAL SERVICES LAYOUT

Scale (A1)	Date	By	Ve
1:50	AUG 23	UA	JH
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