

LEGEND:

- CASSETTE
MIDWALL
INVERTER TYPE OUTDOOR UNIT
INLINE TUBE FAN
CEILING FAN
DISC VALVE
DOOR GRILLE
COLD WATER SUPPLY PIPING
WARM WATER SUPPLY PIPING

1. GENERAL NOTES:

- THIS DRAWING FORMS PART OF THE SPECIFICATION AND MUST BE READ IN CONJUNCTION WITH THE SAME.
- ALL DUCTWORK TO BE MANUFACTURED IN ACCORDANCE WITH SANS-1238-2005 & ANS-10173-2003. LOW VELOCITY DUCT STANDARDS.
- ALL DUCT SIZES SHOWN ARE ACTUAL SHEETMETAL SIZES.
- ALL SUPPLY & RETURN DUCTS TO BE EXTERNALLY INSULATED WITH 25mm FRK INSULATION UNLESS OTHERWISE SPECIFIED.
- ALL VENTILATION DUCTS TO BE UNINSULATED UNLESS SPECIFIED.
- ALL EXPOSED DUCTS TO BE PAINTED TO SPECIFICATIONS.
- ALL BENDS TO HAVE MINIMUM INTERNAL RADIUS 150mm, AND SPLITTERS UNLESS OTHERWISE SPECIFIED.
- ALL ROUND DUCT BENDS UP TO Ø500mm - RADIUS 200mm AND OVER Ø500mm - RADIUS 300mm.
- ALL DUCT SHOES TO BE 150mm LONG @ 45°.
- ALL SPIGOTS TO BE 100mm LONG, UNLESS OTHERWISE STATED.
- REFRIGERANT PIPING TO BE COPPER AND INSULATED.
- ALL REFRIGERANT PIPING TO BE NEATLY ROUTED AND INSTALLED ON GALVANIZED CABLE TRAYS, UNLESS OTHERWISE SPECIFIED.
- ALL DRAINS TO BE Ø32mm RIGID PVC WITH A 1:100 MINIMUM FALL.
- ALL SMOKE EXTRACT DUCTING TO BE 1mm MINIMUM THICKNESS.
- ALL DUCTING ENTERING THE BUILDING WILL BE LEVELED IN SUCH A WAY THAT THE DUCTING SLOPES AWAY FROM THE BUILDING AT A FALL OF 1:100.

2. BUILDERSWORK NOTES:

- ALL OPENINGS TO BE 100mm BIGGER THAN DUCT SIZES SHOWN AND TO BE MADE GOOD AFTER DUCTING HAS BEEN INSTALLED - BY BUILDER.
- ALL OPENINGS TO BE 50mm BIGGER THAN GRILLE SIZES WHICH INCLUDES A 20mm THICK TIMBER FRAME ALL ROUND OPENING - BY BUILDER.
- SLEEVES IN WALLS, IN SLABS AND BEAMS FOR REFRIGERANT PIPES AND DRAINS TO BE MADE GOOD AFTER SERVICES HAVE BEEN INSTALLED - BY BUILDER.
- ALL PLANTROOMS TO HAVE FLOOR DRAIN AND WATER POINT.

REVISIONS				APP
Rev	Date	By	Description	
1	2022/07/20	W.D.K.	ISSUED FOR TENDER	K.D.J.

DRAWING STATUS:

FOR TENDER

PLANTECH
ELECTRICAL, MECHANICAL & FIRE CONSULTING ENGINEERS

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473 LYNNWOOD ROAD
PRETORIA
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CLIENT: SARS (BROOKLYN)
PROJECT ADDRESS: 570 FEHRSEN STREET
BROOKLYN
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0181

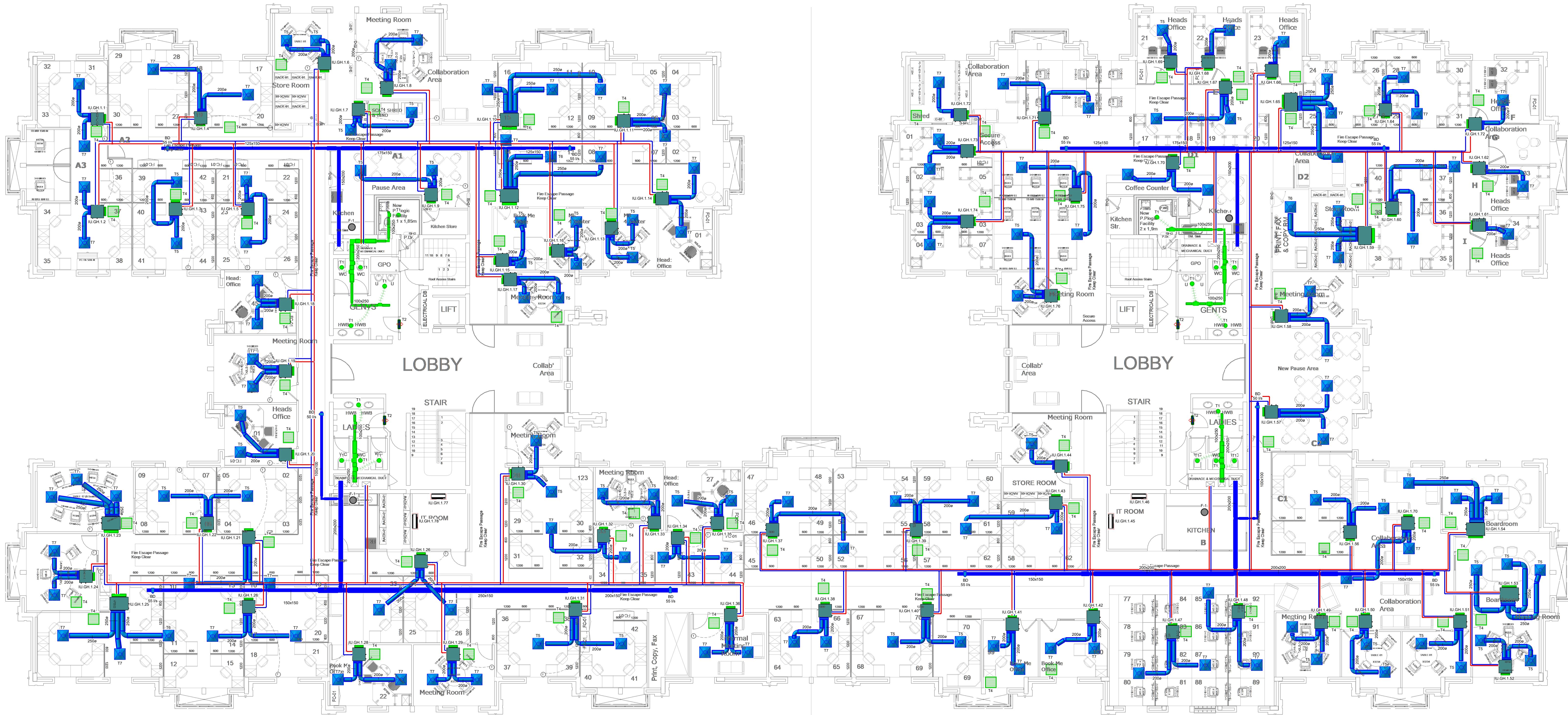
PROJECT: BROOKLYN SARS HVAC SERVICES

TITLE: BLOCK G & H - FIRST FLOOR HVAC LAYOUT

PROJECT No: DWG No: A2121 MH-010- G & H- L1C

SCALE: N.T.S. DESIGNED: K. DE JAGER
DRAWN: W. DE KLERK CHECKED: K. DE JAGER

DATE: 2022/08/02 APPROVED: M. DU PLESSIS
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Lvl 01 - Block G & H - First Floor
SCALE: 1 : 100

GH First Floor Constant Volume Terminals						
Item No.	QTY	Description	Nominal Size LxW / Ø	Flexible Size Ø	Air Volume	Volume Control Damper
T1	18	METAL EXTRACT AIR DISC VALVE	Ø 200	-	-	Yes
T4	74	RAG 45°	600x600	-	400 max	Yes
T3	-	METAL SUPPLY AIR DISC VALVE	600x600	150	60	Yes
T5	59	METAL SUPPLY AIR DISC VALVE	600x600	200	86	Yes
T6	4	METAL SUPPLY AIR DISC VALVE	600x600	200	120	Yes
T7	43	METAL SUPPLY AIR DISC VALVE	600x600	250	140	Yes

GH First Floor Extract Air Fans						
Item No.	QTY	Description	Size Ø	Airflow (l/s)	Static Pressure (Pa)	Speed (RPM)
EAF-01	3	Expelair PX6 Ceiling Extract Fan	200 mm	68	10 Pa	1

Block GH First Floor Split Units					Notes	
Item No.	QTY	Description	Supply Air (l/s)	Cooling Capacity (kW)	Input Power (V/PH/Hz)	
IU.GH.1.45	1	Midwall Split (Smart Inverter)	290 l/s	3.5 kW	230/1/50	1. Power supplied to condenser on roof 2. Complete with stainless steel emergency drip tray, 3. WRF Connectivity.
IU.GH.1.46	1	Midwall Split (Smart Inverter)	290 l/s	3.5 kW	230/1/50	
IU.GH.1.77	1	Midwall Split (Smart Inverter)	290 l/s	3.5 kW	230/1/50	1. Power supplied to condenser on roof 2. Complete with stainless steel emergency drip tray, 3. WRF Connectivity.
IU.GH.1.78	1	Midwall Split (Smart Inverter)	290 l/s	3.5 kW	230/1/50	

Block GH First Floor In-Ceiling Fan Coil Units (Table 2)					Notes	
Item No.	QTY	Description	Supply Air (l/s)	Cooling Capacity (kW)	Input Power (V/PH/Hz)	
IU.GH.1.39	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.40	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.41	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.42	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.43	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.44	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.47	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.48	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.49	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.50	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.51	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.52	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.53	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.54	1	Concealed ceiling mounted	175 l/s	6.8 kW	230/1/50	
IU.GH.1.55	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.56	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.57	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.58	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.59	1	Concealed ceiling mounted	175 l/s	6.8 kW	230/1/50	
IU.GH.1.60	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.61	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.62	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.63	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.64	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.65	1	Concealed ceiling mounted	175 l/s	6.8 kW	230/1/50	
IU.GH.1.66	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.67	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.68	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.69	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.70	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.71	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.72	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.73	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.74	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.75	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.76	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	

Block GH First Floor In-Ceiling Fan Coil Units (Table 1)					Notes	
Item No.	QTY	Description	Supply Air (l/s)	Cooling Capacity (kW)	Input Power (V/PH/Hz)	
IU.GH.1.1	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.2	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.3	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.4	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.5	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.6	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.7	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.8	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.9	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.10	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.11	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.12	1	Concealed ceiling mounted	175 l/s	6.8 kW	230/1/50	
IU.GH.1.13	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.14	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.15	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.16	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.17	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.18	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.19	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.20	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.21	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.22	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.23	1	Concealed ceiling mounted	175 l/s	6.8 kW	230/1/50	
IU.GH.1.24	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.25	1	Concealed ceiling mounted	175 l/s	6.8 kW	230/1/50	
IU.GH.1.26	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.27	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.28	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.29	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.30	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.31	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.32	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.33	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.34	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.35	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.36	1	Concealed ceiling mounted	87 l/s	3.0 kW	230/1/50	
IU.GH.1.37	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	
IU.GH.1.38	1	Concealed ceiling mounted	140 l/s	4.8 kW	230/1/50	