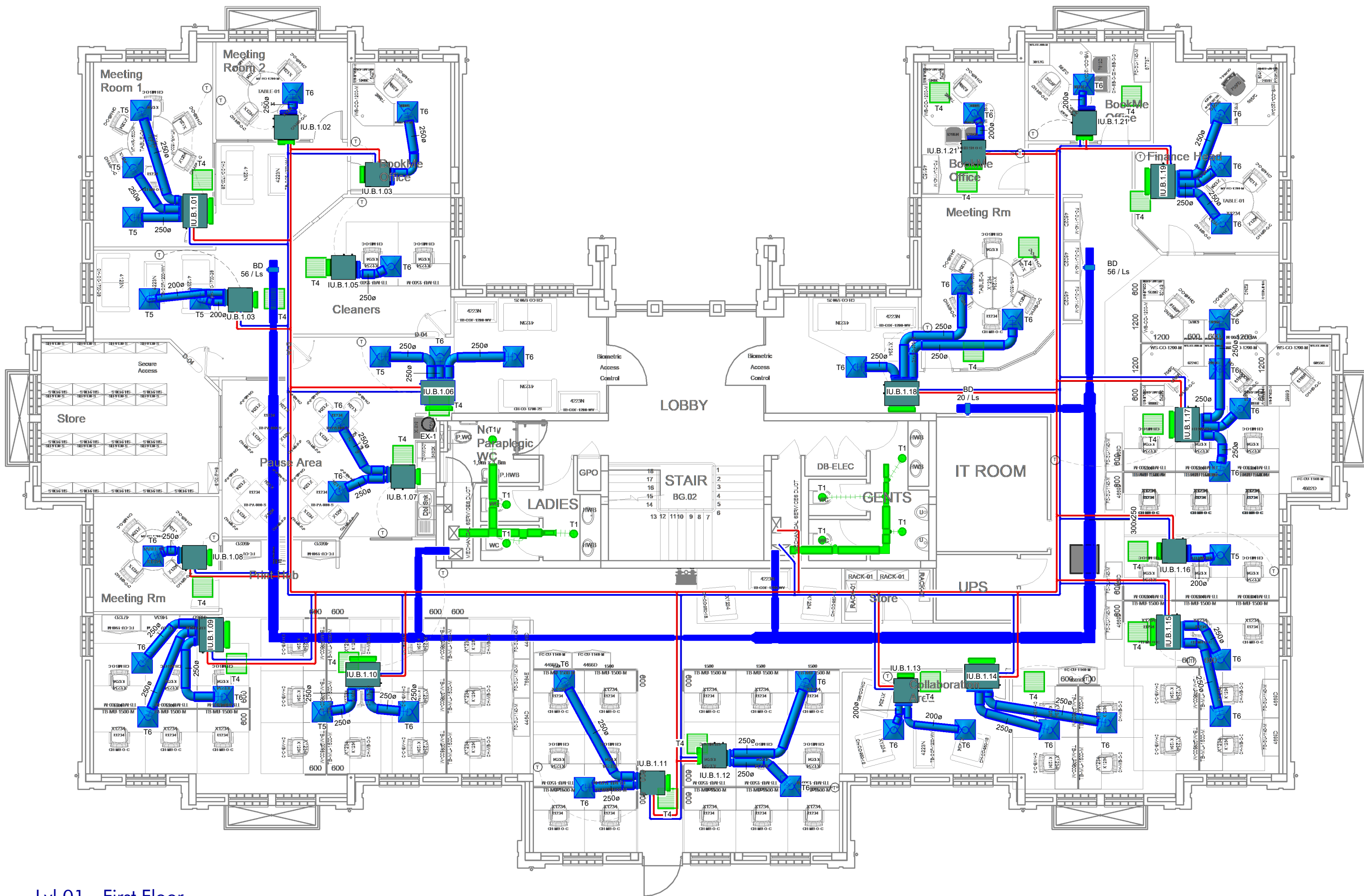


Lvl 00 - Ground Floor
SCALE : 1 : 100



Lvl 01 - First Floor
SCALE : 1 : 100

Ground Floor Constant Volume Terminals						
Irem No.	QTY	Description	Nominal Size LxW / Ø	Flexible Size Ø	Air Volume	Volume Control Damper
T1	8	METAL EXTRACT AIR DISC VALVE	Ø 200	-	-	Yes
T4	23	RAG 45°	600x600	-	400 max	Yes
T3	3	METAL SUPPLY AIR DISC VALVE	600x600	150	60	Yes
T5	4	METAL SUPPLY AIR DISC VALVE	600x600	200	88	Yes
T6	8	METAL SUPPLY AIR DISC VALVE	600x600	200	120	Yes
T7	29	METAL SUPPLY AIR DISC VALVE	600x600	250	140	Yes

Ground Floor Extract Air Fans								
Item No.	QTY	Description	Size Ø	Airflow (l/s)	Static Pressure (Pa)	Speed (RPM)	Phase	Motor Size (W)
EAF-01	1	Expelair PX6 Ceiling Extract Fan	200 mm	68	10 Pa		1	35 W

Block B Ground Floor In-Ceiling Fan Coil Units				
Item No	QTY	Description	Supply Air (l/s)	Cooling Capacity (kW)
IU.B.0.1	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.0.2	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.0.3	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.0.4	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.0.5	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.0.6	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.0.7	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.0.8	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.0.9	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.0.10	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.0.11	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.0.12	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.0.13	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.0.14	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.0.15	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.0.16	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.0.17	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.0.18	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.0.19	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.0.20	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.0.21	1	Concealed ceiling mounted	87 l/s	3.0 kW

Block B Ground Floor Split Units				
Item No	QTY	Description	Supply Air (l/s)	Cooling Capacity (kW)
IU.B.0.22	1	Midwall Split (Smart Inverter)	170 l/s	2.5 kW
IU.B.0.23	1	Midwall Split (Smart Inverter)	290 l/s	3.5 kW
IU.B.0.24	1	Midwall Split (Smart Inverter)	290 l/s	3.5 kW

First Floor Constant Volume Terminals						
Irem No.	QTY	Description	Nominal Size LxW / Ø	Flexible Size Ø	Air Volume (l/s)	Volume Control Damper
T1	8	METAL EXTRACT AIR DISC VALVE	Ø 200	-	-	Yes
T4	21	RAG 45°	500x500	-	400 max	Yes
T5	8	METAL SUPPLY AIR DISC VALVE	500x500	200	88	Yes
T6	33	METAL SUPPLY AIR DISC VALVE	500x500	200	120	Yes
T7	-	METAL SUPPLY AIR DISC VALVE	500x500	250	140	Yes

Block B First Floor In-Ceiling Fan Coil Units				
Item No	QTY	Description	Supply Air (l/s)	Cooling Capacity (kW)
IU.B.1.1	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.1.2	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.1.3	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.1.4	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.1.5	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.1.6	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.1.7	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.1.8	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.1.9	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.1.10	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.1.11	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.1.12	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.1.13	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.1.14	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.1.15	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.1.16	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.B.1.17	1	Concealed ceiling mounted	140 l/s	4.8 kW
IU.B.1.18	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.1.19	1	Concealed ceiling mounted	175 l/s	6.8 kW
IU.B.1.20	1	Concealed ceiling mounted	87 l/s	3.0 kW
IU.D.1.21	1	Concealed ceiling mounted	87 l/s	3.0 kW

First Floor Extract Air Fans								
Item No.	QTY	Description	Size Ø	Airflow (l/s)	Static Pressure (Pa)	Speed (RPM)	Phase	Motor Size (W)
EAF-01	1	Expelair PX6 Ceiling Extract Fan	200 mm	68	10 Pa		1	35 W

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.

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LEGEND:

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

REVISIONS

Rev	Date	By	Description	App
A	2021/05/25	WRR	ISSUE FOR APPROVAL	K.DJ
B	2022/06/13	WDK	UPDATED AS PER LATEST ARCHITECTURAL LAYOUT	K.DJ
C	2022/07/19	WDK	ISSUE FOR APPROVAL	K.DJ
D	2022/07/26	WDK	DRAWING STANDARDS REVISED	K.DJ

DRAWING STATUS:

FOR TENDER

PLANTECH
ELECTRICAL, MECHANICAL & FIRE CONSULTING ENGINEERS

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473 LYNNWOOD ROAD
LYNNWOOD
PRETORIA
GAUTENG

CESA GREEN BUILDING COUNCIL

TEL: (012) 349-2253

E-MAIL: plantech@plantech.co.za

CLIENT:
SARS (BROOKLYN)

PROJECT ADDRESS:
570 FEHRSEN STREET
BROOKLYN
PRETORIA
0181

PROJECT:
BROOKLYN SARS HVAC SERVICES

TITLE:
BLOCK B - GROUND & FIRST FLOOR HVAC LAYOUT

PROJECT No. DWG No. REV: SHEET SIZE
A2121 MH- 010- H- L0-L1C D A1

SCALE: 1 : 100 DESIGNED: K. DE JAGER

DRAWN: K. DE JAGER CHECKED: K. DE JAGER

DATE: 2022/05/25 APPROVED: K. DU PLESSIS

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