

INDOOR UNIT SCHEDULE						
ITEM	QTY	DESCRIPTION	COOLING CAPACITY	POWER SUPPLY	SYSTEM SERVED	
CCU-01	2	4Way Ceiling Cassette Unit	3.60 kW	230V/1Ph/50Hz	AHU	
CCU-02	2	4Way Ceiling Cassette Unit	5.35 kW	230V/1Ph/50Hz	AHU	
CCU-03	4	4Way Ceiling Cassette Unit	7.10 kW	230V/1Ph/50Hz	AHU	
CCU-04	7	4Way Ceiling Cassette Unit	10.50 kW	230V/1Ph/50Hz	AHU	
CCU-A-01	2	4Way Ceiling Cassette Unit	3.90 kW	230V/1Ph/50Hz	VRF	
CCU-C-01	1	4Way Ceiling Cassette Unit	2.00 kW	230V/1Ph/50Hz	VRF	
CCU-C-02	3	4Way Ceiling Cassette Unit	3.90 kW	230V/1Ph/50Hz	VRF	
CCU-D-01	2	4Way Ceiling Cassette Unit	5.60 kW	230V/1Ph/50Hz	VRF	
CCU-D-02	3	4Way Ceiling Cassette Unit	3.90 kW	230V/1Ph/50Hz	VRF	
CCU-D-03	1	4Way Ceiling Cassette Unit	13.80 kW	230V/1Ph/50Hz	VRF	
CCU-D-04	1	4Way Ceiling Cassette Unit	16.10 kW	230V/1Ph/50Hz	VRF	
CCU-FAA-01	1	4Way Ceiling Cassette Unit	3.90 kW	230V/1Ph/50Hz	DX	
CCU-RCR-01	1	4Way Ceiling Cassette Unit	3.90 kW	230V/1Ph/50Hz	DX	
CCU-RR-01	1	4Way Ceiling Cassette Unit	3.90 kW	230V/1Ph/50Hz	DX	
CCU-TR-01	1	4Way Ceiling Cassette Unit	2.60 kW	230V/1Ph/50Hz	DX	
HCU-01	2	Ceiling Concealed Unit	10.60 kW	230V/1Ph/50Hz	AHU	
HCU-02	1	Ceiling Concealed Unit	14.10 kW	230V/1Ph/50Hz	AHU	
MWU-01	6	Midwall AC Unit	2.90 kW	230V/1Ph/50Hz	AHU	
MWU-02	3	Midwall AC Unit	3.60 kW	230V/1Ph/50Hz	AHU	
MWU-03	1	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	AHU	
MWU-A-01	1	Midwall AC Unit	4.80 kW	230V/1Ph/50Hz	VRF	
MWU-A-02	1	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	VRF	
MWU-A-03	1	Midwall AC Unit	4.80 kW	230V/1Ph/50Hz	VRF	
MWU-AM-01	1	Midwall AC Unit	4.80 kW	230V/1Ph/50Hz	DX	
MWU-AD-01	1	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	DX	
MWU-B-01	3	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	VRF	
MWU-B-02	1	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	VRF	
MWU-C-01	4	Midwall AC Unit	3.60 kW	230V/1Ph/50Hz	VRF	
MWU-COU-01	1	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	DX	
MWU-D-01	1	Midwall AC Unit	4.80 kW	230V/1Ph/50Hz	VRF	
MWU-D-02	5	Midwall AC Unit	6.00 kW	230V/1Ph/50Hz	VRF	
MWU-DC-01	1	Midwall AC Unit	3.60 kW	230V/1Ph/50Hz	DX	
MWU-FO-01	1	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	DX	
MWU-FS-01	1	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	DX	
MWU-OF-01	1	Midwall AC Unit	3.60 kW	230V/1Ph/50Hz	DX	
MWU-OF-01	1	Midwall AC Unit	4.80 kW	230V/1Ph/50Hz	DX	
MWU-RRR-01	1	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	DX	
MWU-T-01	1	Midwall AC Unit	3.60 kW	230V/1Ph/50Hz	DX	
MWU-TR-01	1	Midwall AC Unit	6.70 kW	230V/1Ph/50Hz	AHU	
UCU-B-01	1	Underciling Indoor Unit	7.10 kW	230V/1Ph/50Hz	VRF	
Grand total:	74					

OUTDOOR UNIT SCHEDULE (DX SYSTEM)						
ITEM	QTY	DESCRIPTION	POWER SUPPLY	Mark	Count	
ODU-AM-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-AO-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-COU-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-DC-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-FAA-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-FO-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-FS-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-OF-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-R-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-RCR-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-RR-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-RRR-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-T-02	1	Heat Pump	230V/1Ph/50Hz			
ODU-TR-01	1	Heat Pump	230V/1Ph/50Hz			
ODU-UR-01	1	Heat Pump	230V/1Ph/50Hz			
Grand total:	15					

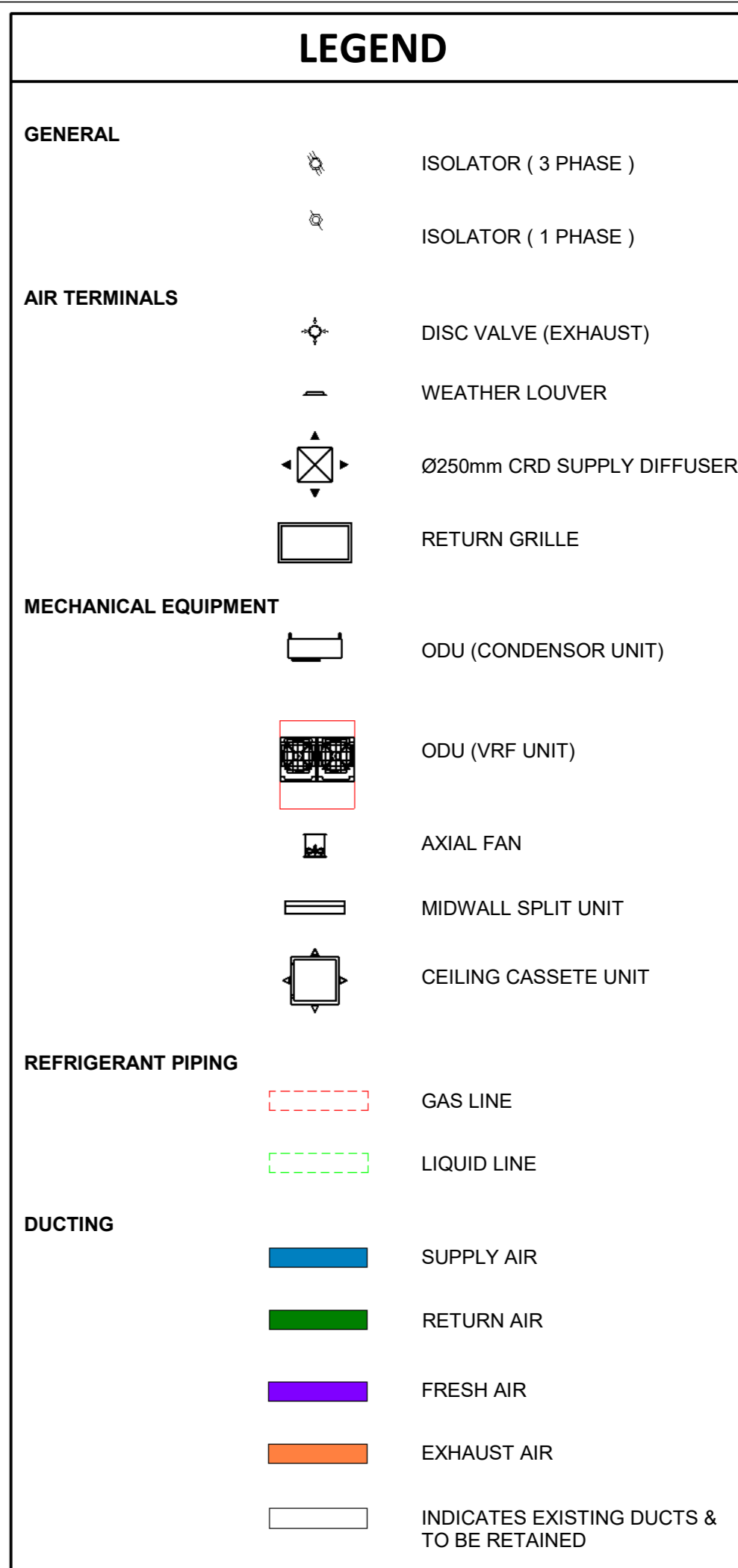
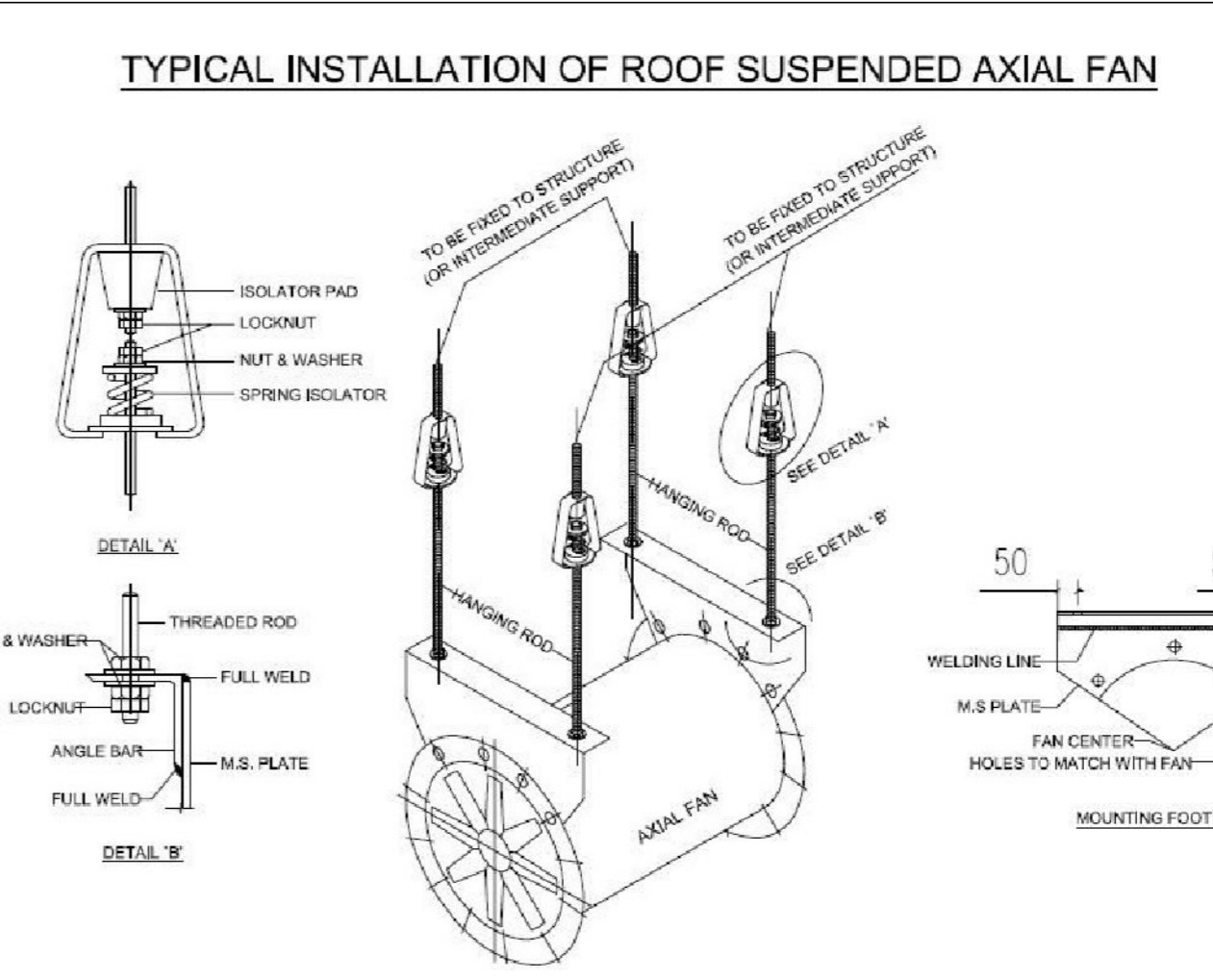
AIR TERMINAL SCHEDULE						
ITEM	QTY	DESCRIPTION	Size	Flow		
Disc Valve						
DV-01	1	Disc Valve	200ø	20.0 L/s		
DV-01	1	Disc Valve	200ø	45.0 L/s		
DV-01	10	Disc Valve	200ø	50.0 L/s		
DV-01	2	Disc Valve	200ø	55.0 L/s		
DV-01	5	Disc Valve	200ø	65.0 L/s		
DV-01	9	Disc Valve	200ø	71.0 L/s		
Grand total:	21					

PUMP SCHEDULE						
ITEM	QTY	DESCRIPTION	INPUT POWER	POWER SUPPLY		
PUMP-01	1	Flexible Coupled Regenerative Turbine Process Pump	230V/1Ph/50Hz			
PUMP-02	1	Flexible Coupled Regenerative Turbine Process Pump	230V/1Ph/50Hz			
Grand total:	2					

EXTRACTION FANS SCHEDULE						
ITEM	QTY	DESCRIPTION	AIR FLOW	POWER SUPPLY		
EF-01	1	Fire Rated Cased Axial Fan				
EF-02	1	Fire Rated Cased Axial Fan				
EF-03	1	Fire Rated Cased Axial Fan				
EF-04	2	Propeller Wall Fan Size 18	50.0 L/s			
EF-05	1	Fire Rated Cased Axial Fan				
EF-06	1	Fire Rated Cased Axial Fan				
EF-07	1	Fire Rated Cased Axial Fan				
EF-08	1	Fire Rated Cased Axial Fan				
EF-09	1	Fire Rated Cased Axial Fan				
EF-10	1	Fire Rated Cased Axial Fan				
EF-11	1	Fire Rated Cased Axial Fan				
EF-12	1	Fire Rated Cased Axial Fan				
EF-13	1	Fire Rated Cased Axial Fan				
Grand total:	14					

VENTILATION FANS SCHEDULE						
ITEM	QTY	DESCRIPTION	AIR FLOW	POWER SUPPLY		
SF-01	2	Fire Rated Cased Axial Fan				
SF-02	1	Fire Rated Cased Axial Fan				
SF-03	1	Fire Rated Cased Axial Fan				
SF-05	1	Fire Rated Cased Axial Fan				
SF-06	1	Fire Rated Cased Axial Fan				
SF-07	1	Fire Rated Cased Axial Fan				
SF-08	1	Fire Rated Cased Axial Fan				
SF-09	1	Fire Rated Cased Axial Fan				
SF-10	1	Fire Rated Cased Axial Fan				
SF-11	1	Fire Rated Cased Axial Fan				
SF-12	1	Fire Rated Cased Axial Fan				
SF-13	1	Fire Rated Cased Axial Fan				
Grand total:	13					

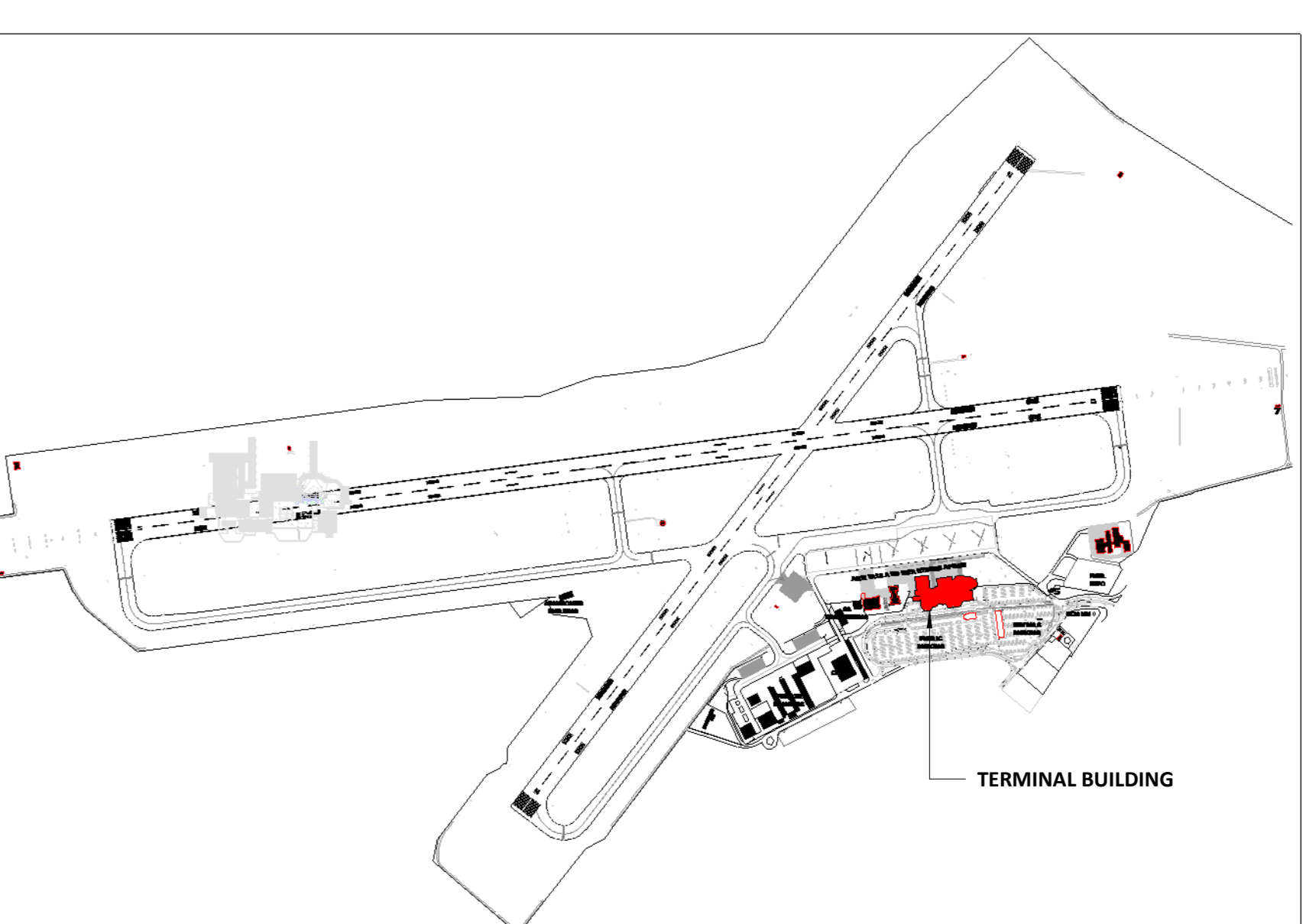
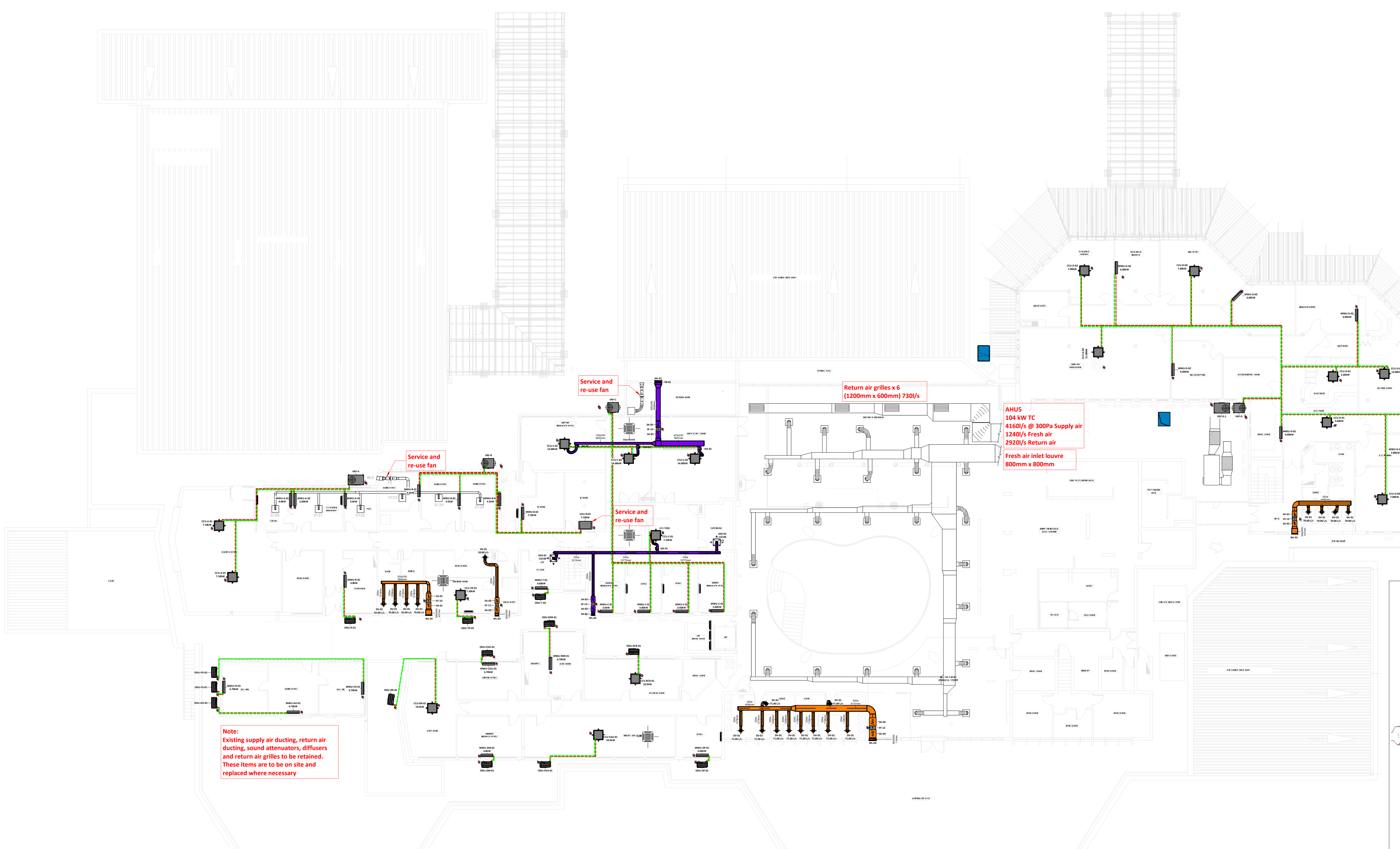
CHILLER UNITS SCHEDULE						
ITEM	QTY	Description	POWER SUPPLY			
CHILLER-01	1	AQUASNAP 30RB	400V/50Hz/3Ph			
CHILLER-02	1	AQUASNAP 30RB	400V/50Hz/3Ph			
Grand total:	2					



- NOTES:**
- ALL WORKS TO BE EXECUTED STRICTLY IN ACCORDANCE WITH THE HEALTH AND SAFETY ACT, ACT 85 OF 1993 AS AMENDED.
 - THE CONSTRUCTION REGULATIONS SHALL BE ADHERED TO IN THE EXECUTION AND PLANNING OF WORKS
 - WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPROVED SHOP DRAWINGS.
 - SHOP DRAWINGS SHALL BE ISSUED FOR APPROVAL A MINIMUM OF 14 DAYS PRIOR TO CONSTRUCTION COMMENCEMENT, SUCH SHOP DRAWINGS SHALL BE COMPLETED WITH THE ASSISTANCE OF THE MAIN CONTRACTOR AND VARIOUS TRADES AS REQUIRED TO ENSURE CO-ORDINATION PROVISIONS ARE MADE.
 - THIS DRAWING SHALL NOT BE SCALED, FIGURED DIMENSIONS ONLY SHALL BE USED.
 - THE PROVISION OF SIGNAGE AND INSTALLATION OF EXPOSED SERVICES SHALL BE IN ACCORDANCE WITH ARCHITECTS DRAWINGS.
 - EXPOSED SERVICES COLORS SHALL BE TO ARCHITECTS SPECIFICATION, CLIENT SPECIFICATION AND NATIONAL STANDARDS.
 - THIS DRAWING IS TO BE READ AND WORKS ARE TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT PROJECT SPECIFICATIONS, ENGINEERING CODES AND GOOD ENGINEERING PRACTICE. PIPING SHALL BE SABS 62 MEDIUM WEIGHT. PIPING DIAMETER 200 AND LARGER MAY BE SABS 719 4.5L.
 - PIPING Ø65mm AND ABOVE SHALL BE WELDED, FLANGED OR CLAMRON COUPLED, PIPING BELOW Ø65mm SHALL BE BS SCREWED, ALL IN ACCORDANCE WITH PROJECT SPECIFICATIONS, NATIONAL REGULATIONS AND GOOD ENGINEERING PRACTICE.
 - PIPING INSULATION ON PIPING Ø200mm AND ABOVE SHALL BE HIGH DENSITY POLYSTYRENE, 30mm THICK, PIPING INSULATION ON PIPING BELOW Ø200mm SHALL BE HIGH DENSITY POLYSTYRENE, 25mm THICK.
 - MEAN SWEAT VAPOUR BARRIER TO BE EMPLOYED.
 - ALL CHILLED PIPING IN ACCESS FLOOR VOID AND CEILING VOID TO BE INSULATED AND CLAD IN GALVANISED SHEET 0.6mm T.
 - ALL EXPOSED CHILLED WATER PIPE AND CONDENSATE DRAINS IN CORRIDORS AND PASSAGES TO BE IN A BRUSHED STAINLESS STEEL CONDUIT
 - ALL PIPING AND TO BE INSULATED AND CLAD IN SHINY STAINLESS STEEL 0.6mm.
 - PIPING SUPPORTS SHALL BE PROVIDED AT ALL CHANGES IN PIPING DIRECTION AND AT A MAXIMUM SPACING AS INDICATED IN THE PIPING SUPPORT TABLE BELOW.
 - "ROUGH-IN" (TACK AND LOOSELY SUPPORT) ALL PIPING AND FITTINGS FOR THE APPROVAL OF THE ENGINEER PRIOR TO FULL WELDING AND FIRM FIXING.
 - ALL DISCREPANCIES BETWEEN THIS DRAWING AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE RESPONSIBLE ENGINEER.
 - FIRE STOPPING SHALL BE PROVIDED AT ALL FIRE BARRIERS AND FIRE WALLS BY THE RESPONSIBLE FIRE PROOFING CONTRACTOR.
 - THE APPROVAL OF THE STRUCTURAL ENGINEER SHALL BE SOUGHT FOR ALL PIPING SUPPORT METHODS WHERE STRUCTURAL FIXING IS EMPLOYED.

ADD UNDERCUTS TO ALL DOORS IN ROOMS CONTAINING EXTRACTION

- Note:**
- Existing supply air ducting, return air ducting, sound attenuators, diffusers and return air grilles to be retained. These items are to be assessed on site and replaced where necessary.
 - Where condensers are not shown on the drawing, there positions are to be confirmed on site with the project manager.
 - All refrigerant piping to run with in the ceiling voids.
 - Condensate drain pipes to connect to nearest waste water outlet.



1 FIRST FLOOR SCALE 1 : 150

2 KEY PLAN SCALE 1 : 5000

NO.	DATE	BY	ISSUED FOR TENDER	DESCRIPTION
1	2025-09-19	PG	ISSUED FOR TENDER	DESCRIPTION
NO.	DATE	BY	ISSUED FOR TENDER	DESCRIPTION
101 MANZONI STREET, NEWTON PARK, FORT ELIZABETH, EAST LONDON. TEL: 021-300 8000. E-MAIL: PEG@CARIFRO.COM 4 BELLEVUE ROAD, SOUTHERNDOWN, EAST LONDON. TEL: 021-743 7000. E-MAIL: EL@CARIFRO.COM				
CLIENT: AIRPORTS COMPANY SOUTH AFRICA				
PROJECT TITLE: ACSA EAST LONDON HVAC				
DISCIPLINE: MECHANICAL				
DRAWING TITLE: TERMINAL BUILDING FIRST FLOOR HVAC LAYOUT				
DESIGNED	DRAWN	APPROVED		
Designer	Author	Approver		
SCALE:	COPYRIGHT PROTECTED	DATE:		
As indicated	2024-06-18			
Drawing number:	2413-M-HVAC-TB-02	REV:	T	
project status:	TENDER			