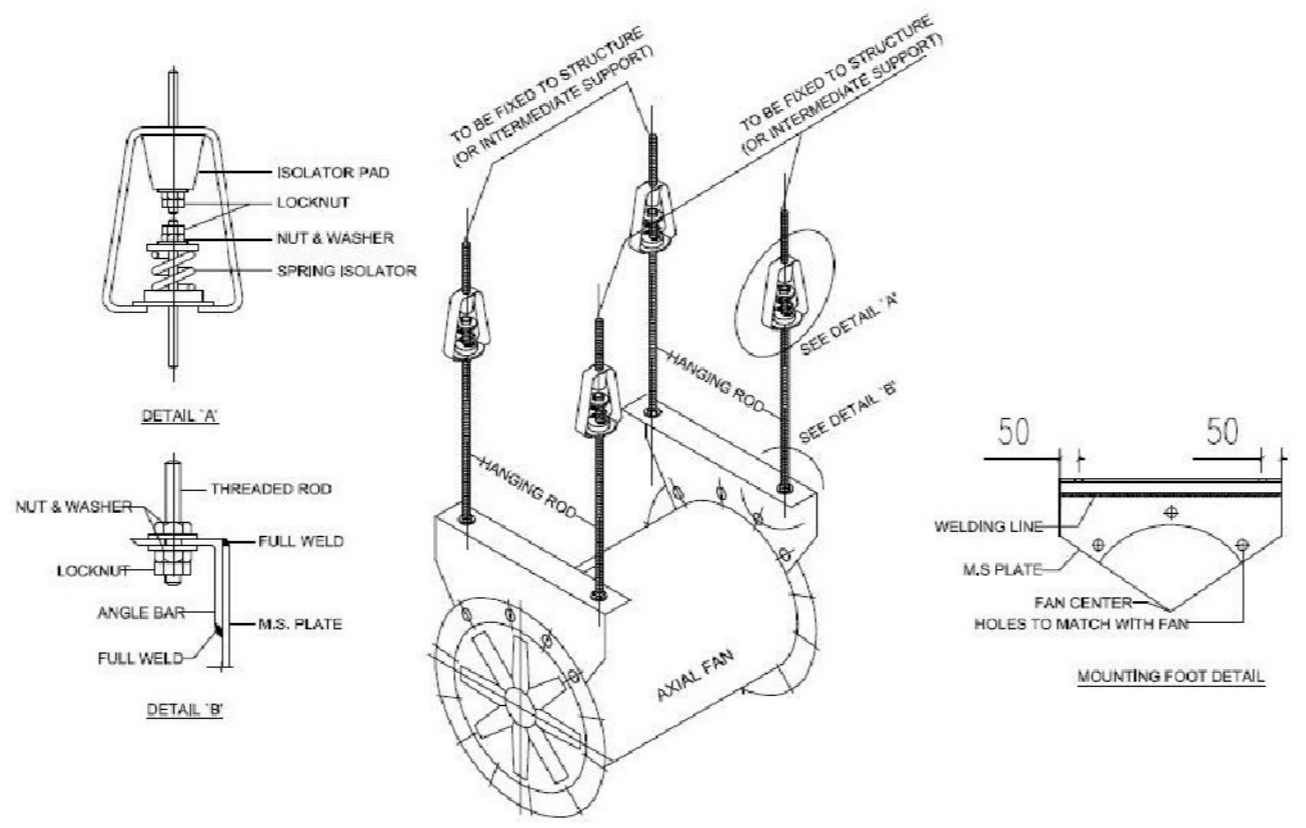
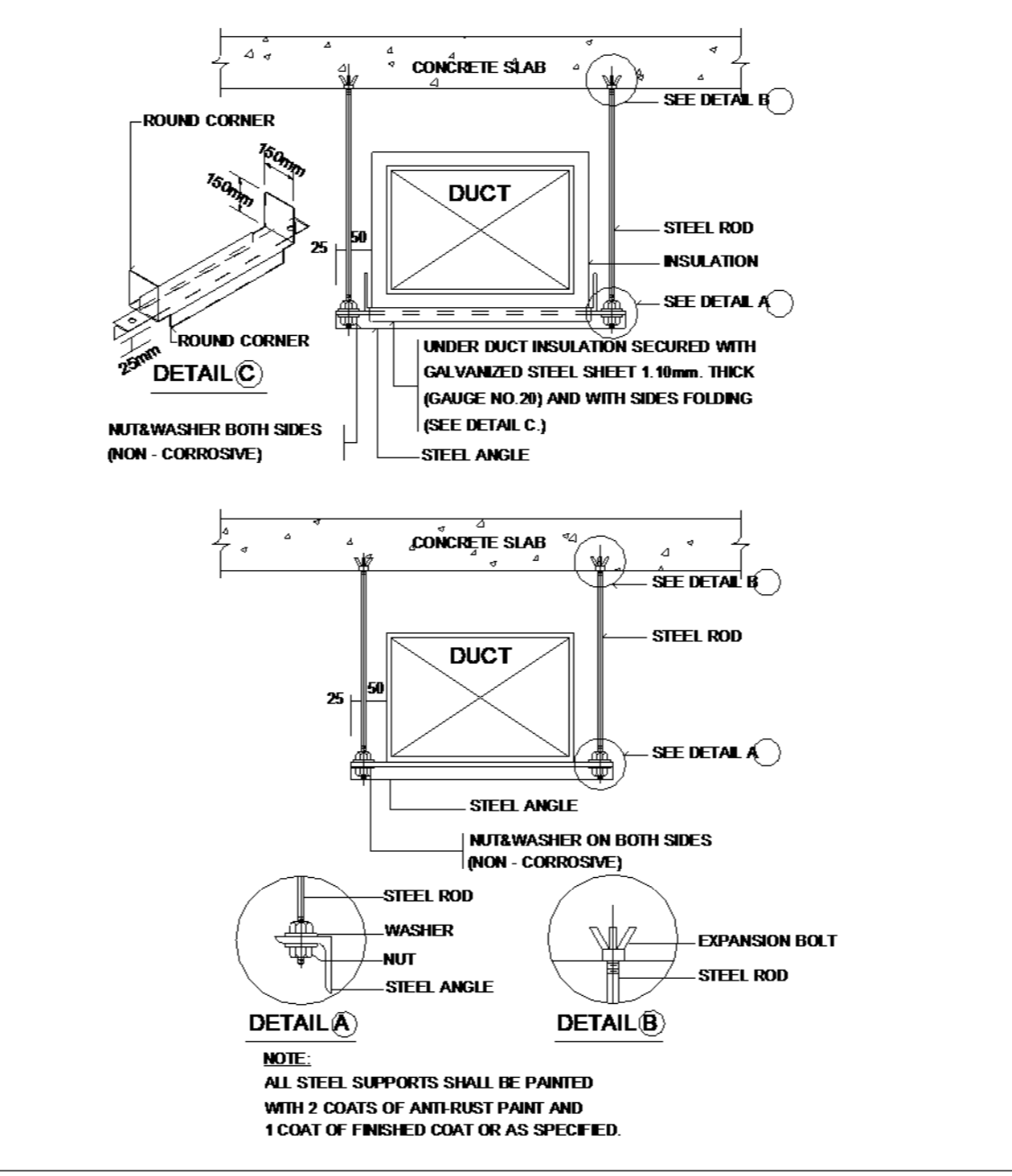


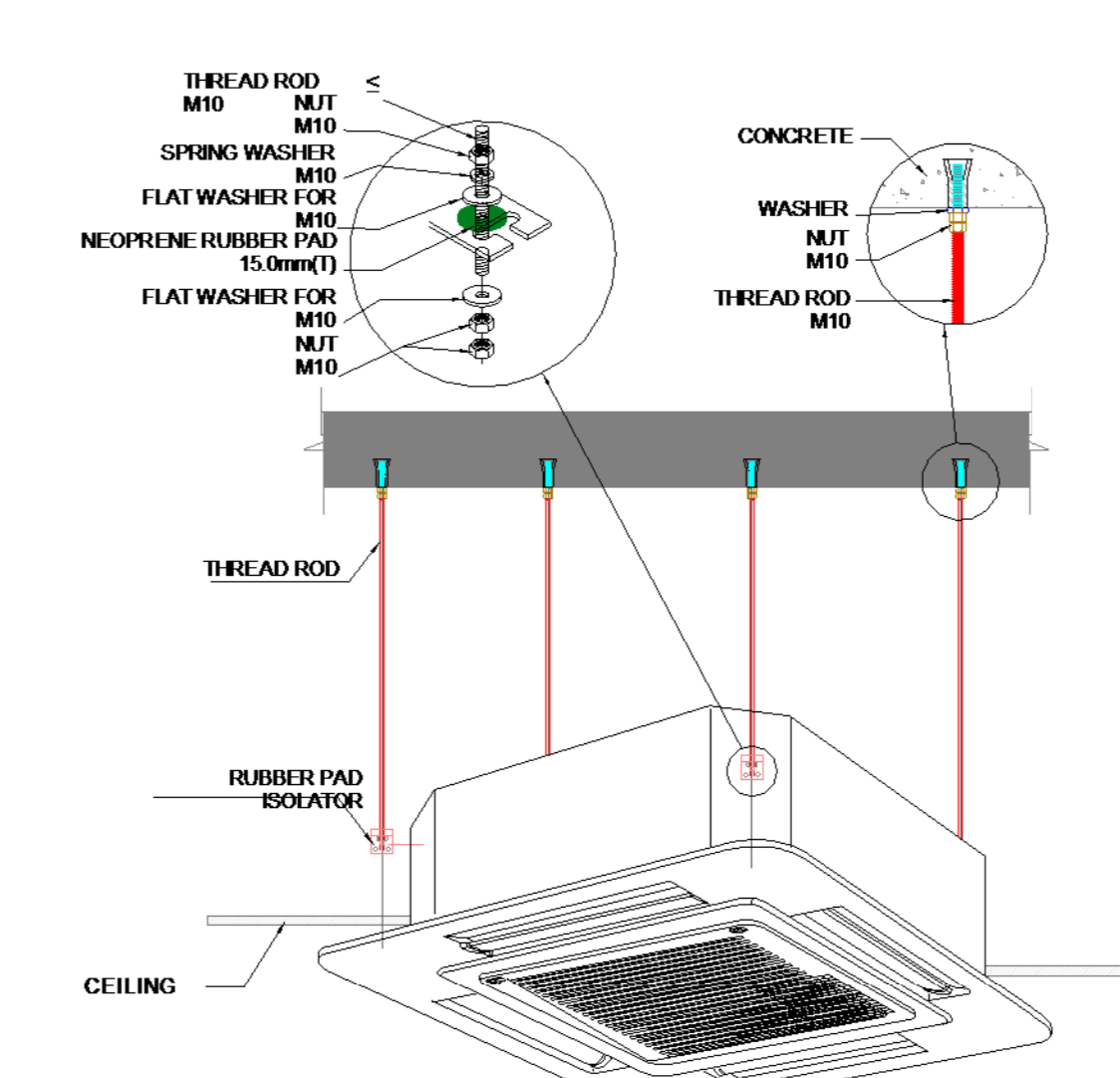
TYPICAL INSTALLATION OF ROOF SUSPENDED AXIAL FAN



DUCT HANGER AND SUPPORTS



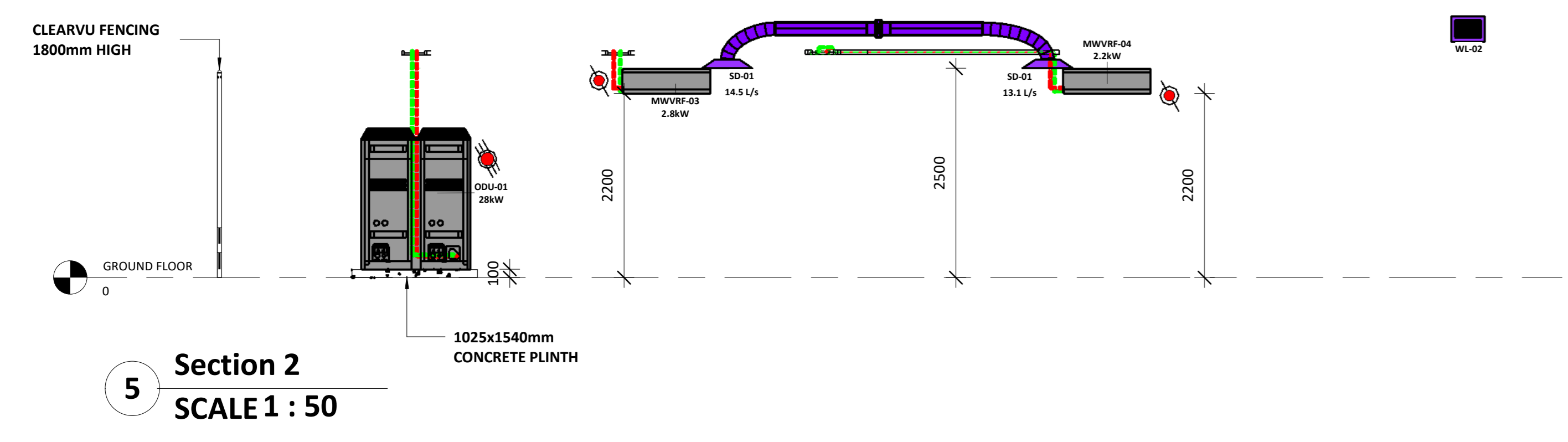
TYPICAL CEILING CASSETTE UNIT MOUNT DETAIL



LEGEND

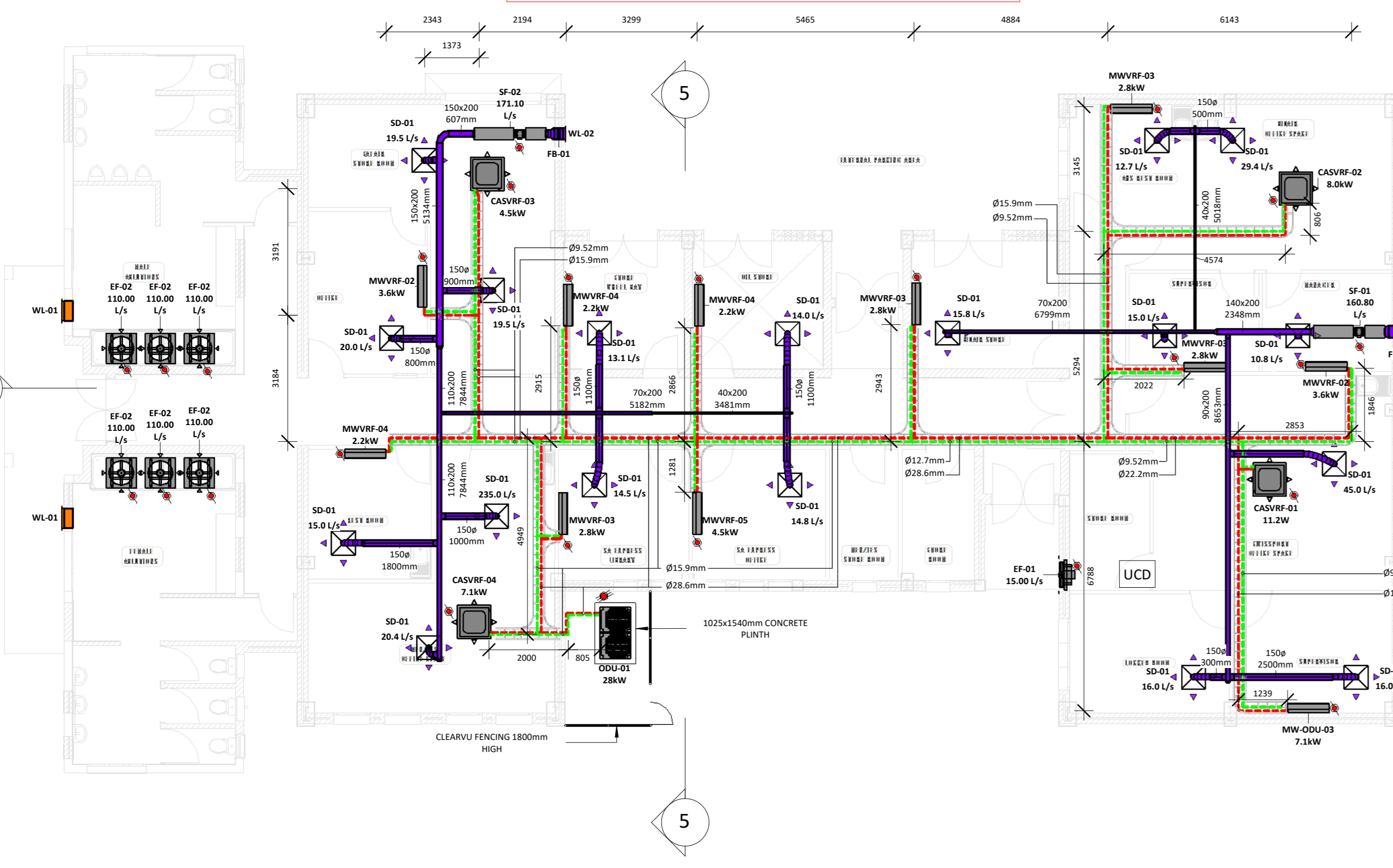
GENERAL	ISOLATOR (3 PHASE)
ISOLATOR (1 PHASE)	
AIR TERMINALS	
DISC VALVE (EXHAUST)	
WEATHER LOUVER	
SUPPLY DIFFUSER	
RETURN GRILLE	
MECHANICAL EQUIPMENT	
ODU (CONDENSOR UNIT)	
ODU (VRF UNIT)	
AXIAL FAN	
WALL MOUNTED AXIAL FAN	
CEILING MOUNTED AXIAL FAN	
MIDWALL SPLIT UNIT	
CEILING CASSETTE UNIT	
THERMOSTAT (AC UNIT)	
REFRIGERANT PIPING	
GAS LINE	
LIQUID LINE	
CONDENSATE	
DUCTING	
SUPPLY AIR	
EXHAUST AIR	
RETURN AIR	
FRESH AIR	
INDICATES EXISTING DUCTS & TO BE RETAINED	

- 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 G2 MEDIUM WEIGHT, PIPING DIAMETER 200 AND LARGER MAY BE SABS 739 4.5L.
  - PIPING Ø65mm AND ABOVE SHALL BE WELDED, FLANGED OR CLAMSON 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.
  - MYLAR SHEATH 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 t
  - 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.



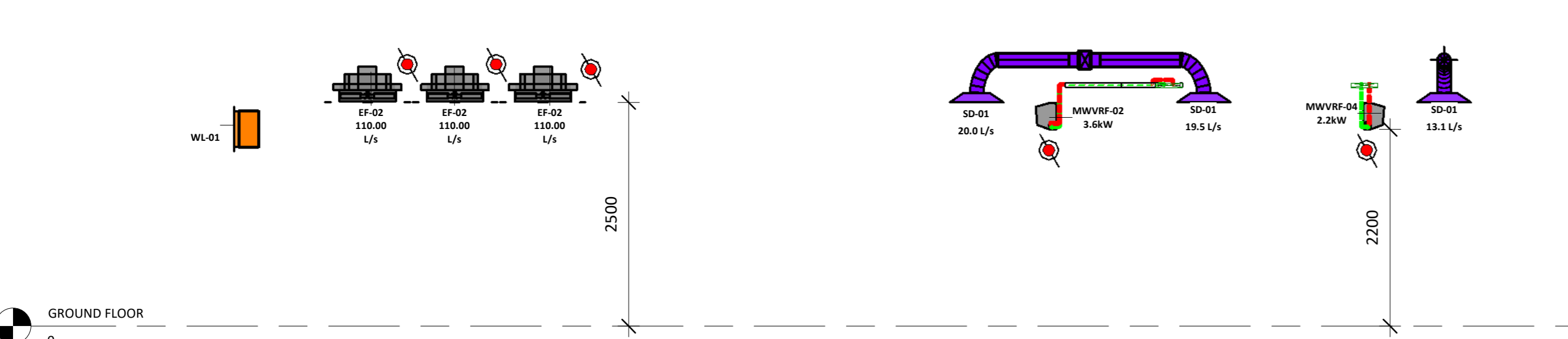
Section 2  
SCALE 1 : 50

Note: Condensate to be piped to nearest waste water connection point

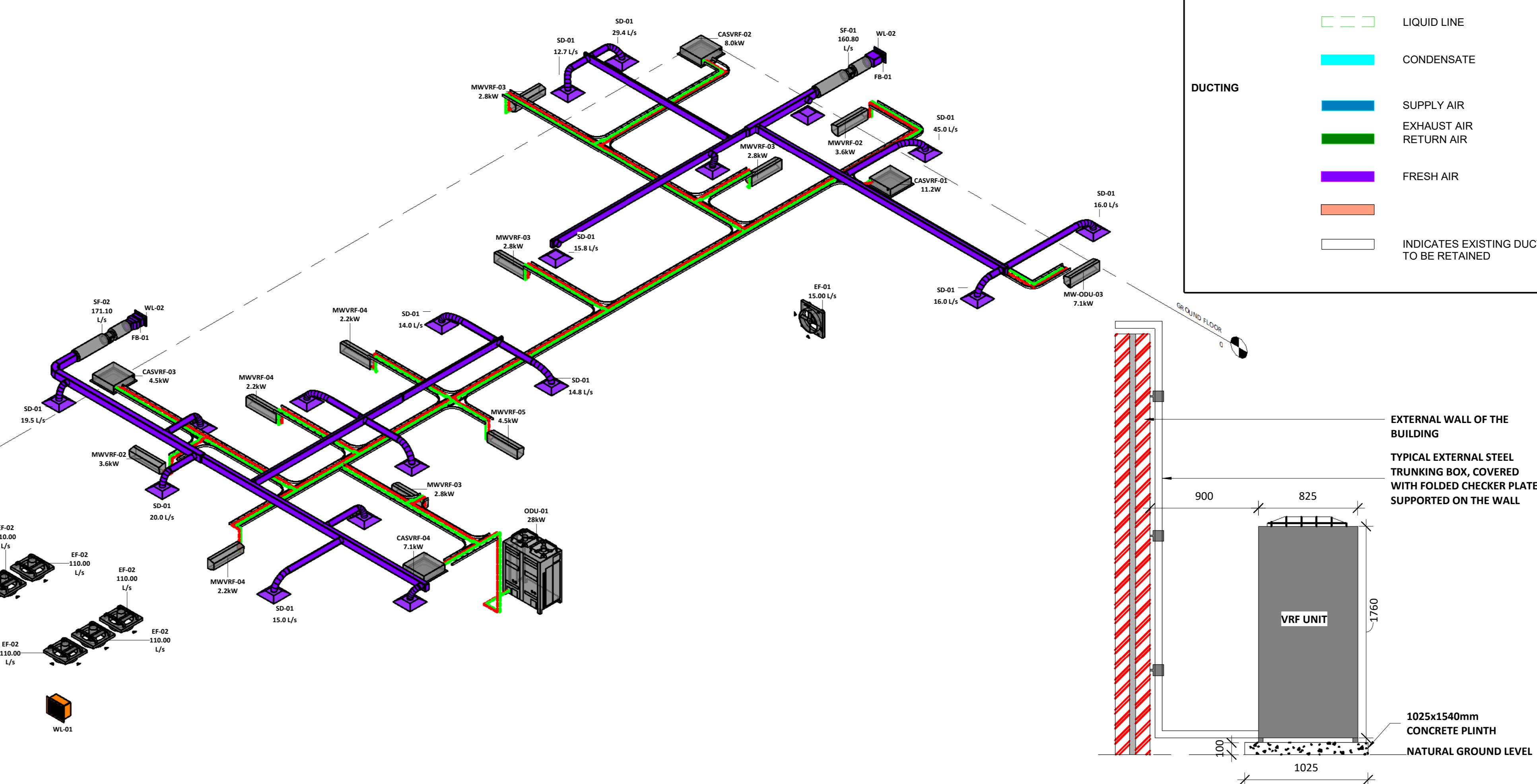


GROUND FLOOR  
SCALE 1 : 100

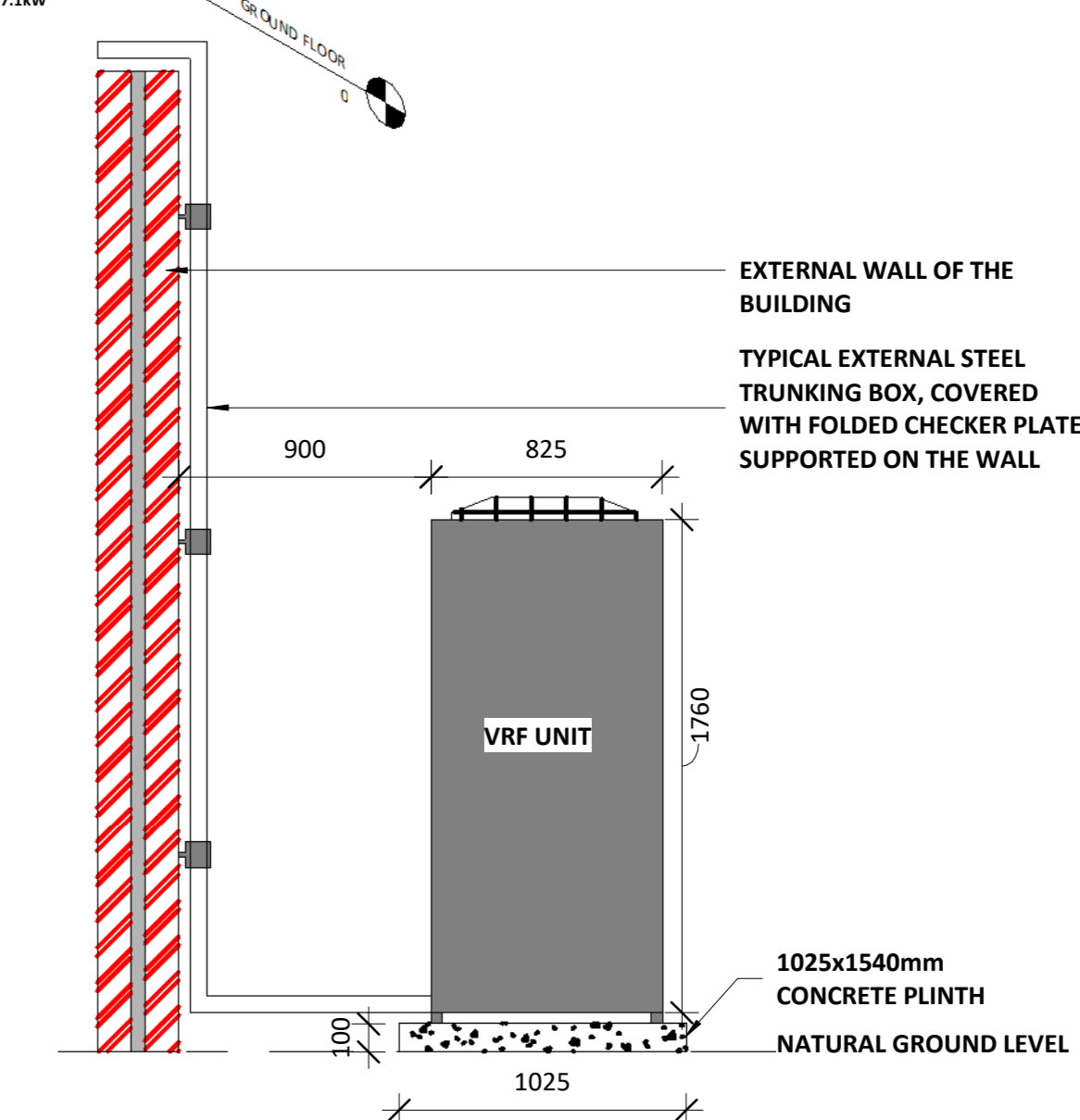
RAMP HANDLERS 3D VIEW  
SCALE



Section 1  
SCALE 1 : 50



Typical Detail Of Outdoor VRF Units  
SCALE 1 : 25



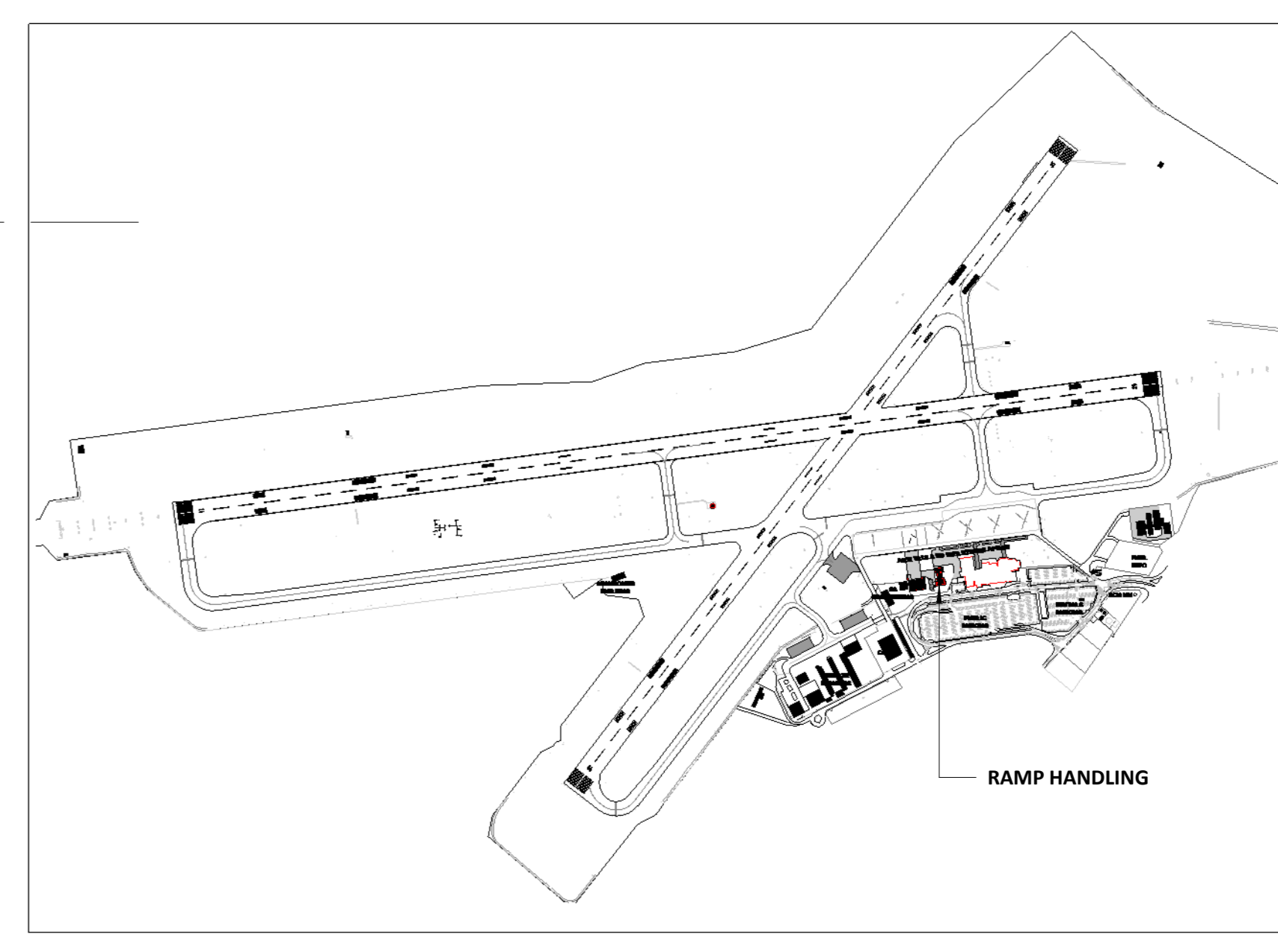
Mark	Count	Description	Size	Flow
<b>Air Terminal Schedule</b>				
SD-01	1	Ceiling diffusers with square diffuser face	1500	10.8 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	12.7 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	13.1 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	14.0 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	14.5 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	14.8 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	15.0 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	15.8 L/s
SD-01	2	Ceiling diffusers with square diffuser face	1500	16.0 L/s
SD-01	2	Ceiling diffusers with square diffuser face	1500	19.5 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	20.0 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	20.4 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	29.4 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	45.0 L/s
SD-01	1	Ceiling diffusers with square diffuser face	1500	235.0 L/s
WL-01	2	Weather Louve	500x400	0.0 L/s
WL-02	2	Weather Louve	300x200	0.0 L/s
Grand total: 22				

ITEM	QTY	DESCRIPTION	COOLING CAPACITY	INPUT POWER	POWER SUPPLY	Refrigerant Liquid Connection Diameter	Refrigerant Suction Gas Connection Diameter
CASVRF-01	1	CEILING CASSETTE	11200 W	0.20 kW	230V/1Ph/50Hz	9.52mm	15.9mm
CASVRF-02	1	CEILING CASSETTE	8000 W	0.10 kW	230V/1Ph/50Hz	9.52mm	15.9mm
CASVRF-03	1	CEILING CASSETTE	4500 W	0.10 kW	230V/1Ph/50Hz	6.35mm	12.7mm
CASVRF-04	1	CEILING CASSETTE	7100 W	0.10 kW	230V/1Ph/50Hz	9.52mm	15.9mm
MW-ODU-03	1	MIDWALL UNIT	7100 W	0.10 kW	230V/1Ph/50Hz	9.52mm	15.9mm
MWVRF-02	2	MIDWALL UNIT	3600 W	0.10 kW	230V/1Ph/50Hz	6.35mm	12.7mm
MWVRF-03	4	MIDWALL UNIT	2800 W	0.20 kW	230V/1Ph/50Hz	6.35mm	12.7mm
MWVRF-04	3	MIDWALL UNIT	2200 W	0.10 kW	230V/1Ph/50Hz	6.35mm	12.7mm
MWVRF-05	1	MIDWALL UNIT	4500 W	0.10 kW	230V/1Ph/50Hz	6.35mm	12.7mm
ODU-01	1	VRF	90 000 W	7.60 kW	400V/3Ph/50Hz	16.9mm	28.6mm
Grand total: 16							

Mark	Count	Description	Size		
<b>Duct Accessory Schedule</b>					
FB-01	1	Air Filter Box	300x200-300x200		
FB-01	1	Air Filter Box	300x200-300x200		
<b>Fan Schedule</b>					
ITEM	QTY	DESCRIPTION	AIR FLOW	INPUT POWER	POWER SUPPLY
EF-01	1	Wall Mounted Fan-HCFB/4-250/H	15.0 L/s	0.30 kW	230V/1Ph/50Hz
EF-02	6	Ceiling Mounted Fan-Decor-300s	110.0 L/s	0.30 kW	230V/1Ph/50Hz
SF-01	1	Fan Kit (WJ-200) Fan and Circular Silencer	160.8 L/s		
SF-02	1	Fan Kit (WJ-200) Fan and Circular Silencer	171.1 L/s		
Grand total: 9					

MARK	DESCRIPTION	SIZE	QTY
UCD	UNDER CUT DOOR	22mm	3

KEY PLAN  
SCALE 1 : 5000



ISSUED FOR TENDER	DATE: 2025-09-19	BY: PG	DESCRIPTION: MECHANICAL
<b>KING PHALO AIRPORT</b> AIRPORTS COMPANY SOUTH AFRICA			
PROJECT TITLE: <b>ACSA EAST LONDON HVAC</b>			
DISCIPLINE: <b>MECHANICAL</b>			
DRAWING TITLE: <b>RAMP HANDLERS HVAC LAYOUT</b>			
SCALE: As indicated	DRAWN: HK	DATE: 2024-06-18	APPROVED: PG
DRAWING NUMBER: 2413-M-HVAC-RH-01	COPYRIGHT PROTECTED	REV: T	
PROJECT STATUS: <b>TENDER</b>			