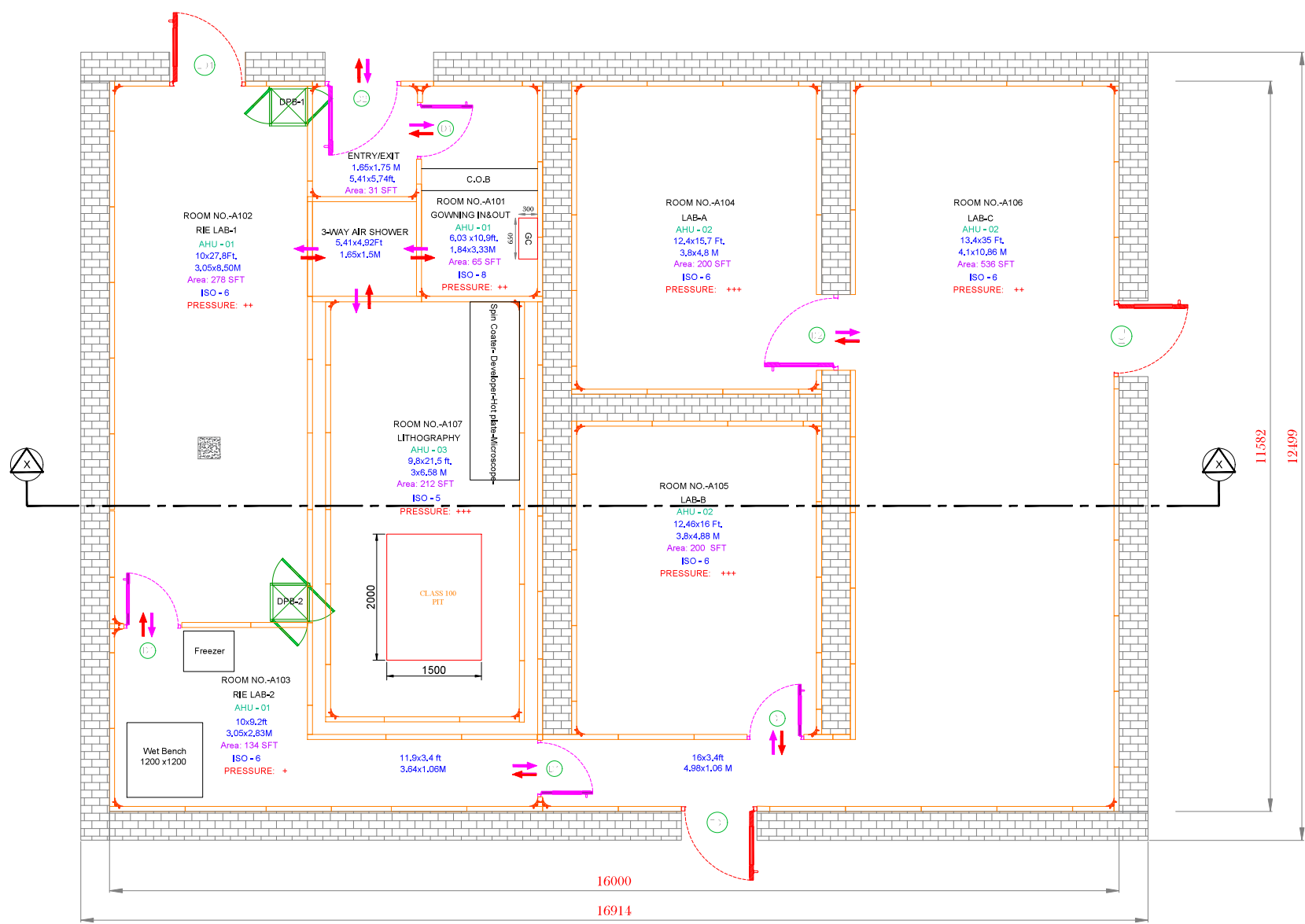
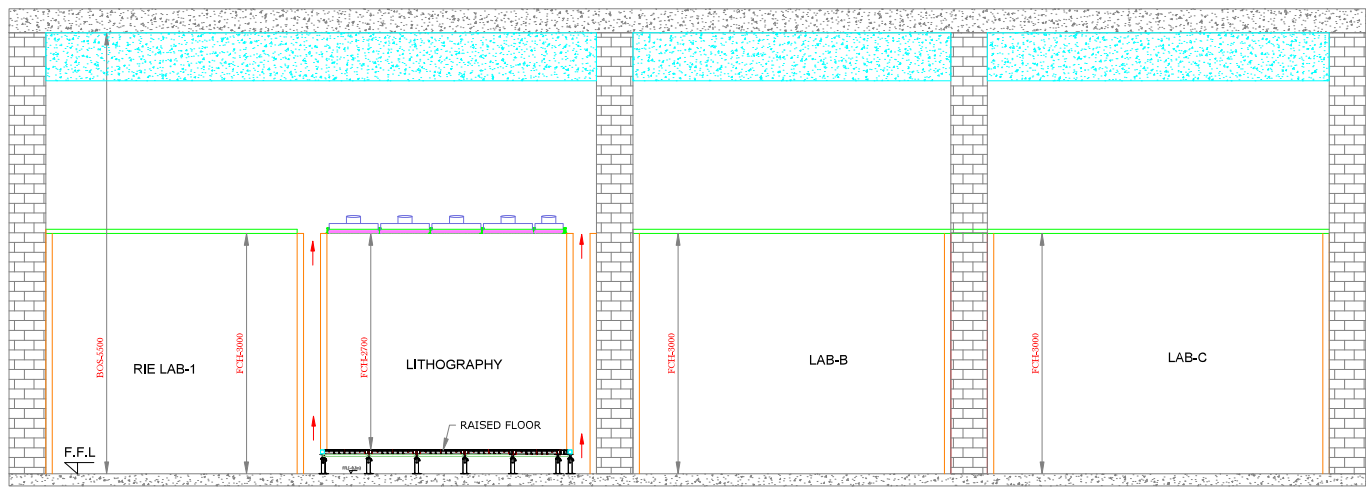


CONCEPTUAL LAYOUT



CROSS-SECTIONAL VIEW



SECTION :X-X

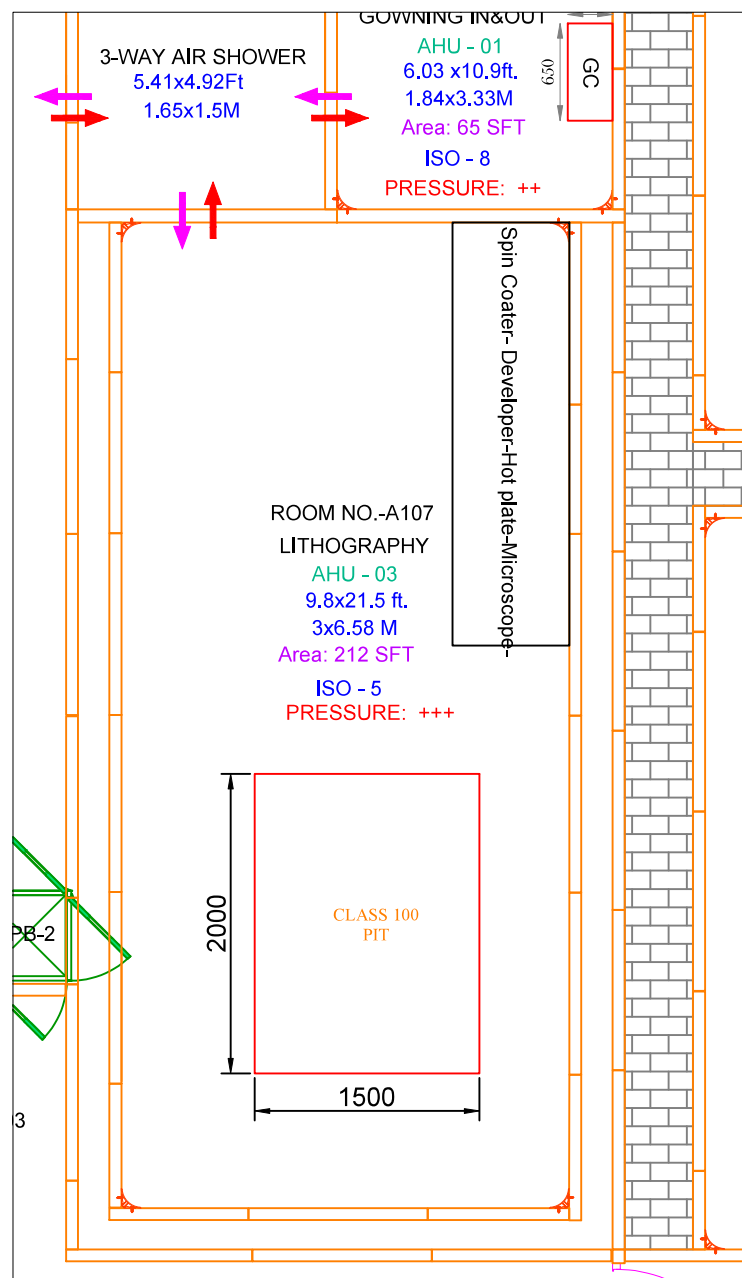
LEGEND:-	
	80 MM WALL PANEL - (PUF - Infill)
	900 x 2100 SINGLE LEAF DOOR
	1200 x 2100 SINGLE LEAF DOOR
	DYNAMIC PASS BOX (2 Way)
	DYNAMIC PASS BOX (3 Way)
	ENTRY AND EXIT

REF.AHU	TYPE	ROOM CONDITIONS (TEMPERATURE & HUMIDITY)	CLASSIFICATION
AHU-01	RECIRCULATION	TEMP: NMT 24 RH : NMT 60%	ISO-8&6
AHU-02	RECIRCULATION	TEMP: NMT 24, RH : NMT 60%	ISO-6
AHU-03	RECIRCULATION	TEMP: NMT 24, RH : NMT 60%	ISO-5

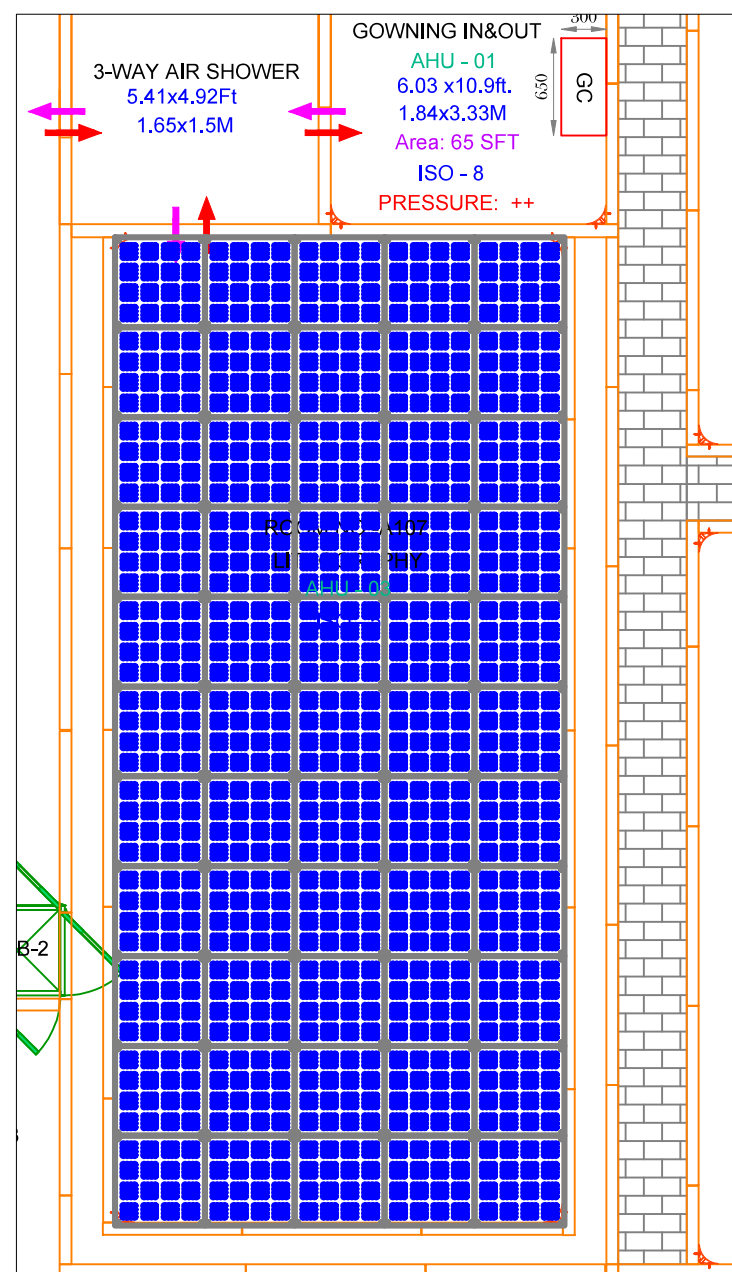
SITE AREA DETAILS:

INNER TO INNER AREA	1990 Sq.ft
OUTER TO OUTER AREA	2255 Sq.ft

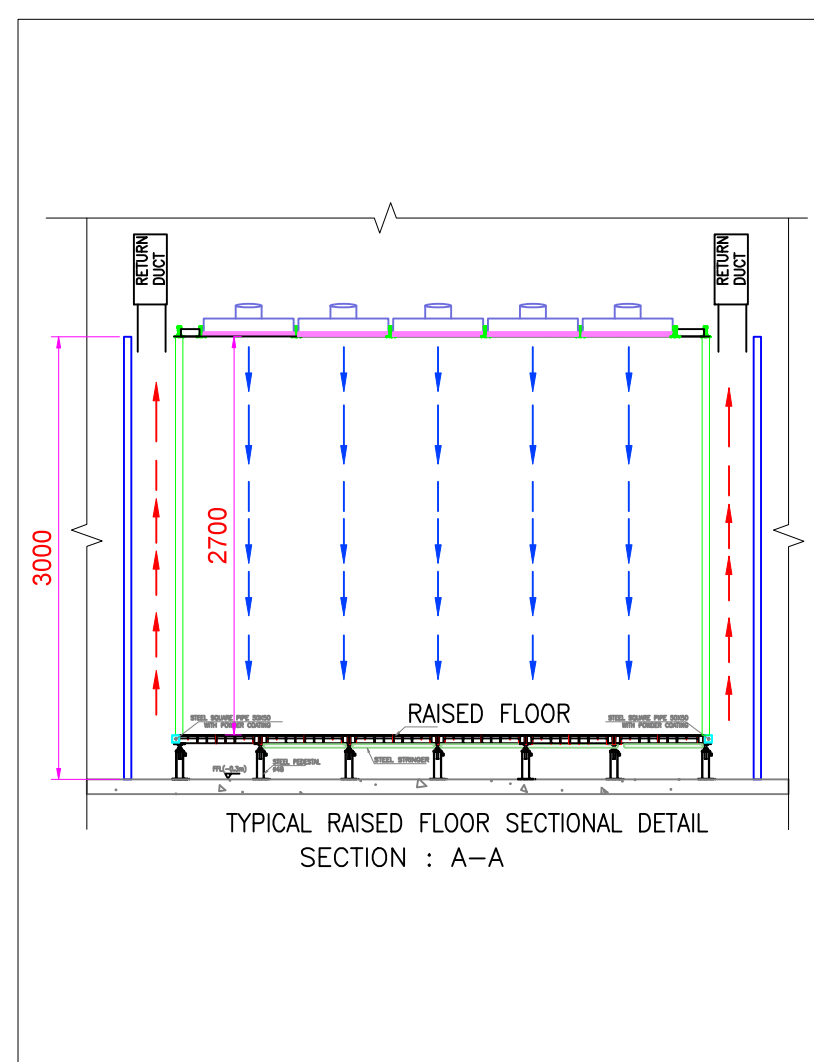
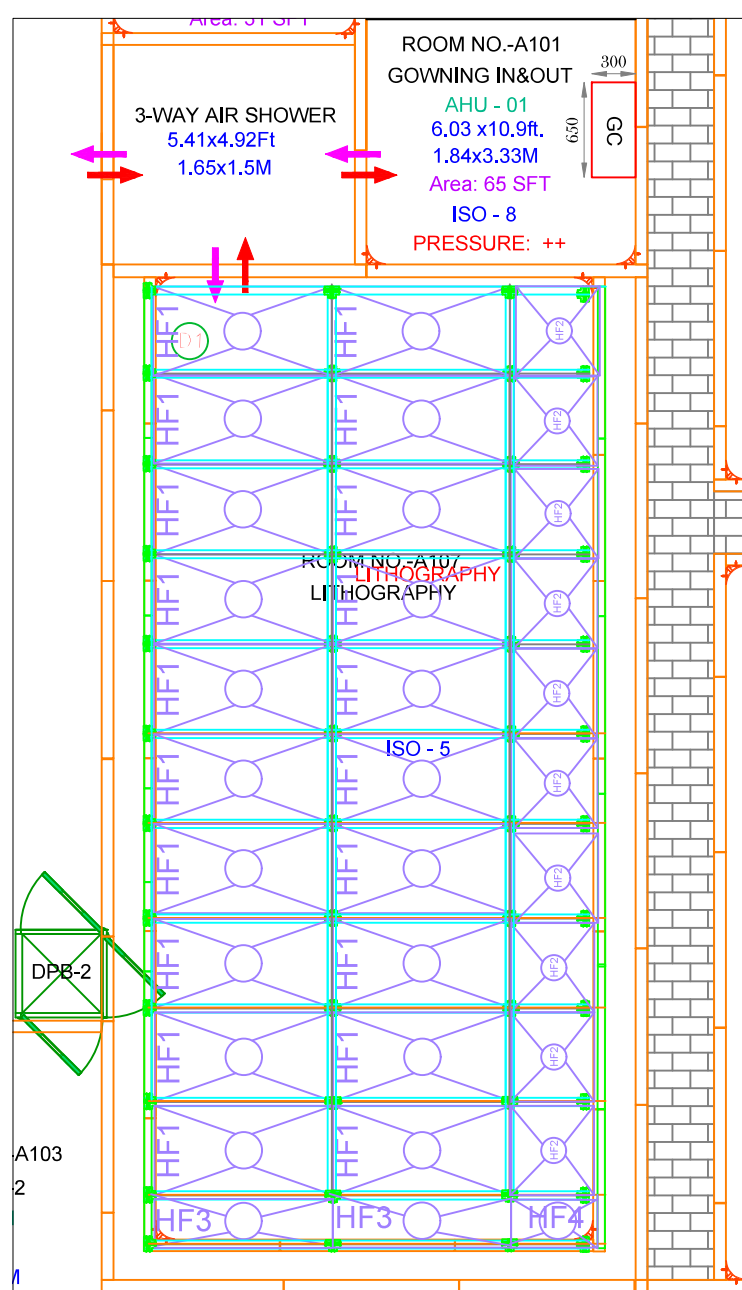
CLASS-100(ISO-5) AREA CONCEPTUAL LAYOUT



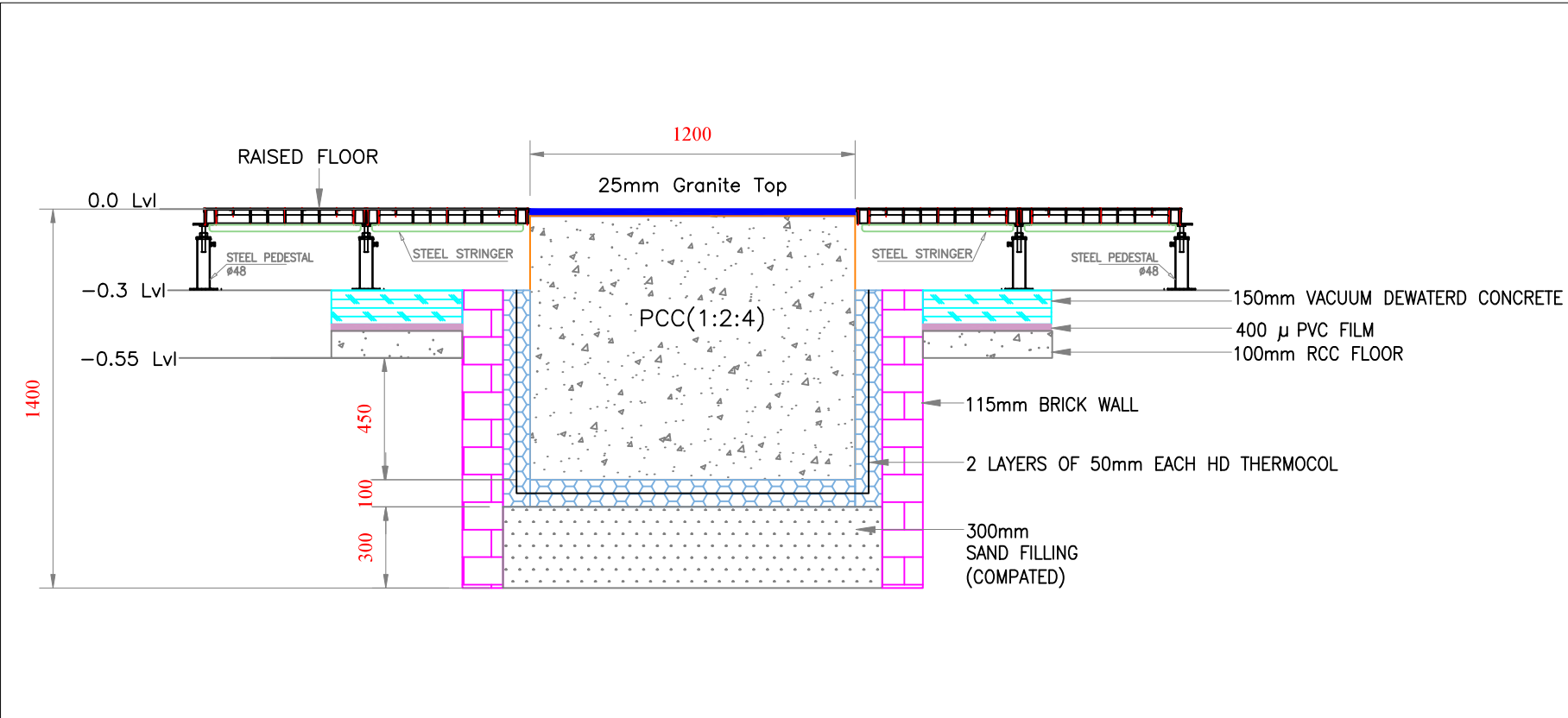
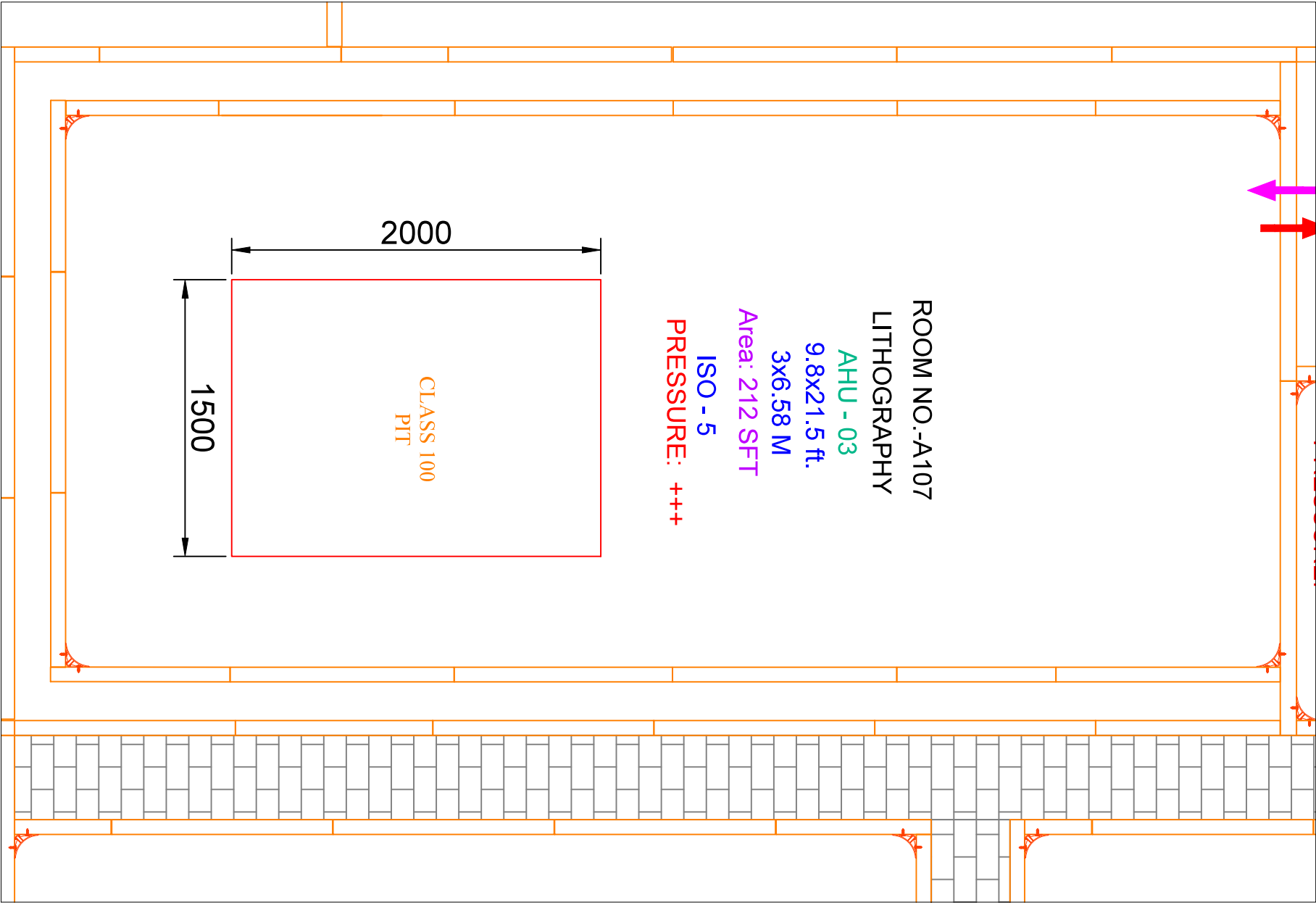
RAISED FLOOR ARRANGEMENT



FILTER GRID ARRANGEMENT



CLASS 100 LITHOGRAPHY VIBRATION ISOLATION PLATFORM



SECTIONAL DETAIL

IIT VARANASI-ROOM WISE ELECTRICAL AND UTILITY DETAILS																
S No	Equipment	Room Nos	Hvac Connected Heat Load	Power					Gass		Compressor	Vacuum	DI H2O	Cooling H2O	Drain	Process Exhaust
				Phase	Rating	Number	Earthing	UPS	Type	Number						
1.a	Direct Write Lithography	A 107	4kw	1ϕ	230V/16A	1	Yes	5 kVA	N2	1	No	No	No	No	No	500 cfm
1.b	Control Computers			1ϕ	230V/6A	2	No	1 kVA	No	No	No	No	No	No	No	
2.a	Spin Coating Unit											Yes				
2.b	Development Unit															
3	Bake Module (Hot-plate)															
4	Optical Microscope			1ϕ	230V/6A	2	No	1 kVA	No	No	No	No	No	No	No	
5	Fridge			1ϕ	230V/16A	1	No		No	No	No	No	No	No	No	
6	E-Beam Evaporation	A102	3kw	1ϕ	230V/16A	3	Yes	15 kVA	No	No	No	Yes (1E-7 mbar)	No	Yes	No	No
				3ϕ	400V/32A/10kW	1										
7	Magnetron RF Sputtering			1ϕ	230V/16A/10kW	2	Yes	15 kVA	N2, O2	1 each	No	Yes (1E-7 mbar)	No	No	No	
	ICPRIE			1ϕ	230V/16A/10kW	5	Yes	15 kVA	O2, Ar, SF6, N2, CHF3, Cl2, BCl3, CF4, He, H2	1 each	Yes	Yes (1E-7 mbar)	No	Yes	No	
8				3ϕ	400V/32A/10kW	2										
9	Wet bench	A103	3kw													500 cfm
10	Oven															
11	Hot-plate															
12	Fume Hood															
13	Oven															
14	300mm-Probe station	A 104	3kw	1ϕ	230V/16A	8	Yes	15 kVA	No	No	No					No
15	Cryogenic Probe station			1ϕ	230V/16A	8	Yes	15 kVA								
				3ϕ	400V/32A/10kW	1										
16	Wire bonder	A 105	3kw	1ϕ	230V/16A	3		10 kVA	No	No	No	No	No	No	No	
17	Substrate Bonder			1ϕ	230V/16A	3		10 kVA	No	No	No	No	No	No	No	
18	Optical Microscope			1ϕ	230V/16A	3		10 kVA	No	No	No	No	No	No	No	
19	Surface Profiler/AFM			1ϕ	230V/16A	3		10 kVA	No	No	No	No	No	No	No	
20	Optical & Photonics	A 106	3kw					20 kVA								500 cfm
21	Future Expantion									20 kVA						

3-stac Oxidation Furnace	Utility for outside Cleanroom Area							N2, O2, H2, Ar	1 each			No	
CVD Furnace								N2	1			No	
Wet-process Lab								N2	1			Yes	
Gas-sensing Lab								N2	1			No	