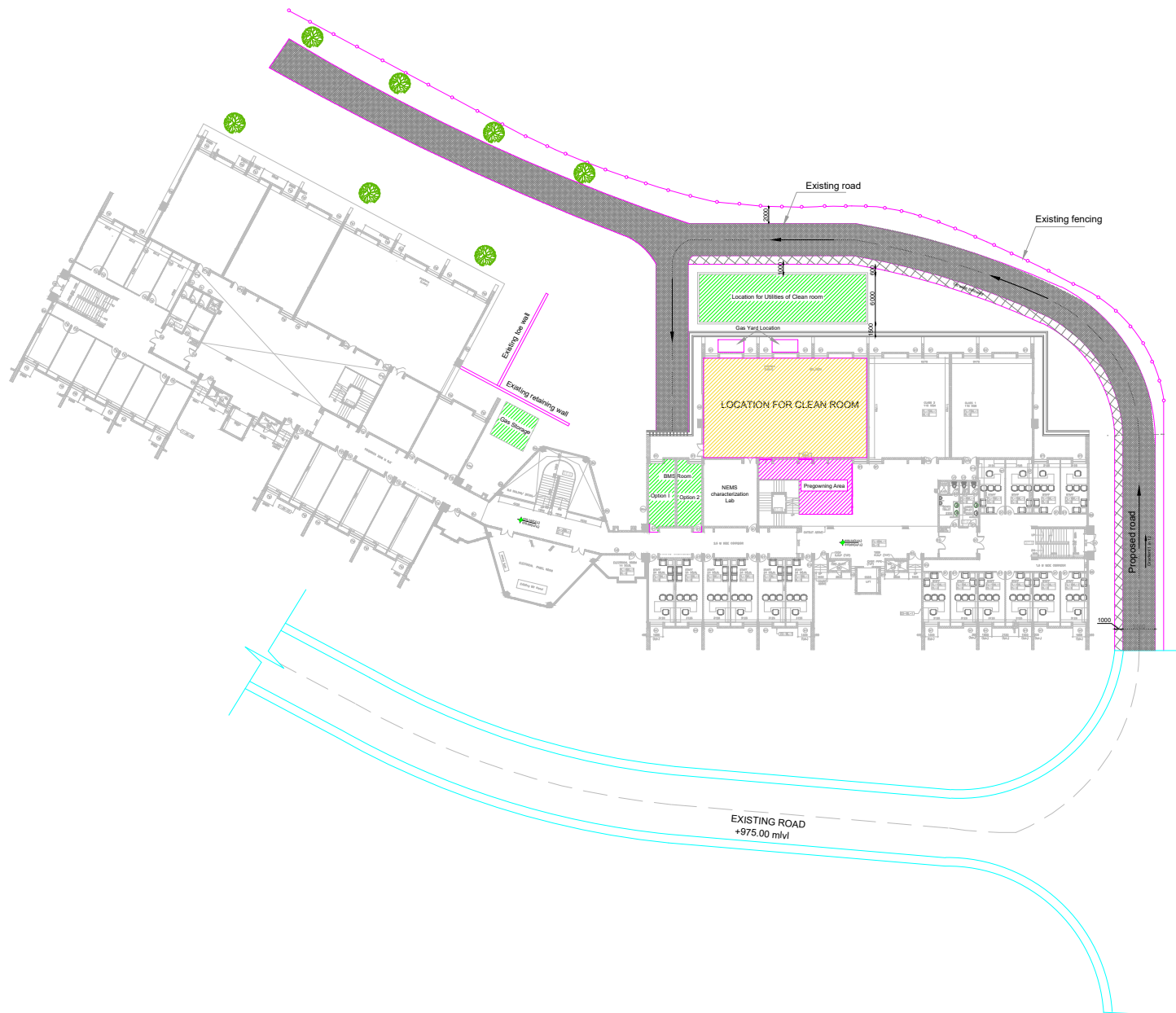


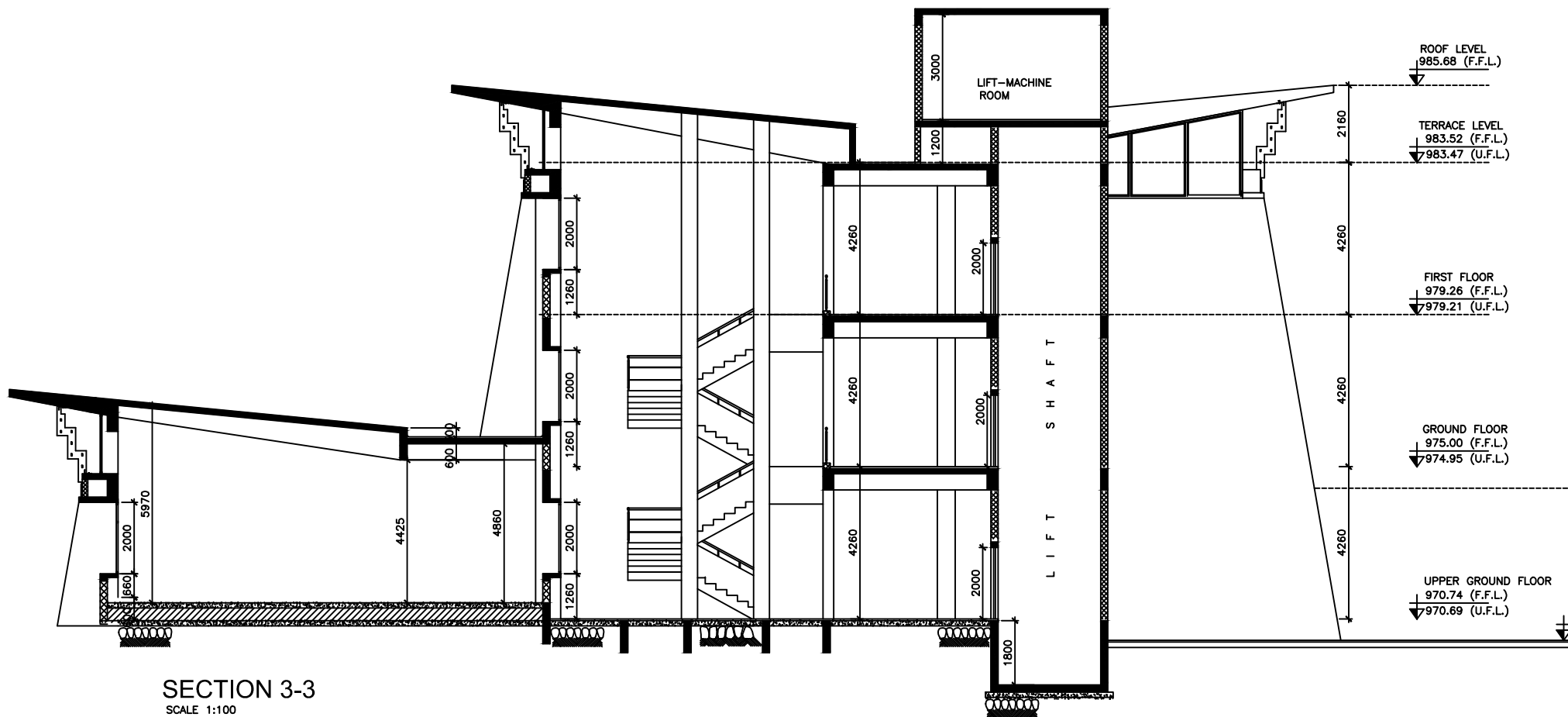
**REQUEST FOR PROPOSAL & SPECIFICATION DOCUMENT
MEMS & NANOFABRICATION SEMICONDUCTOR CLEANROOM
FACILITY**



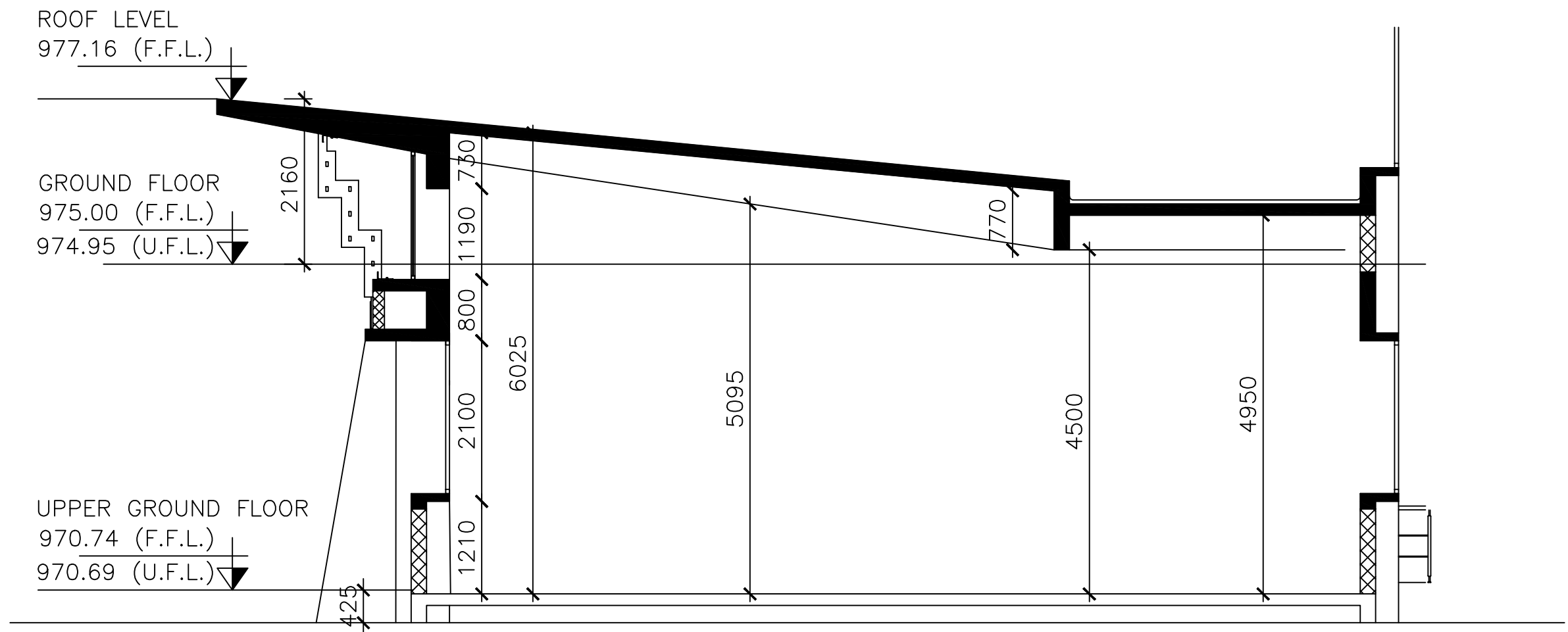
ANNEXURE 2

**Site details with relevant drawings,
conceptual P&ID drawings for gas,
provisional sketch for process extraction**





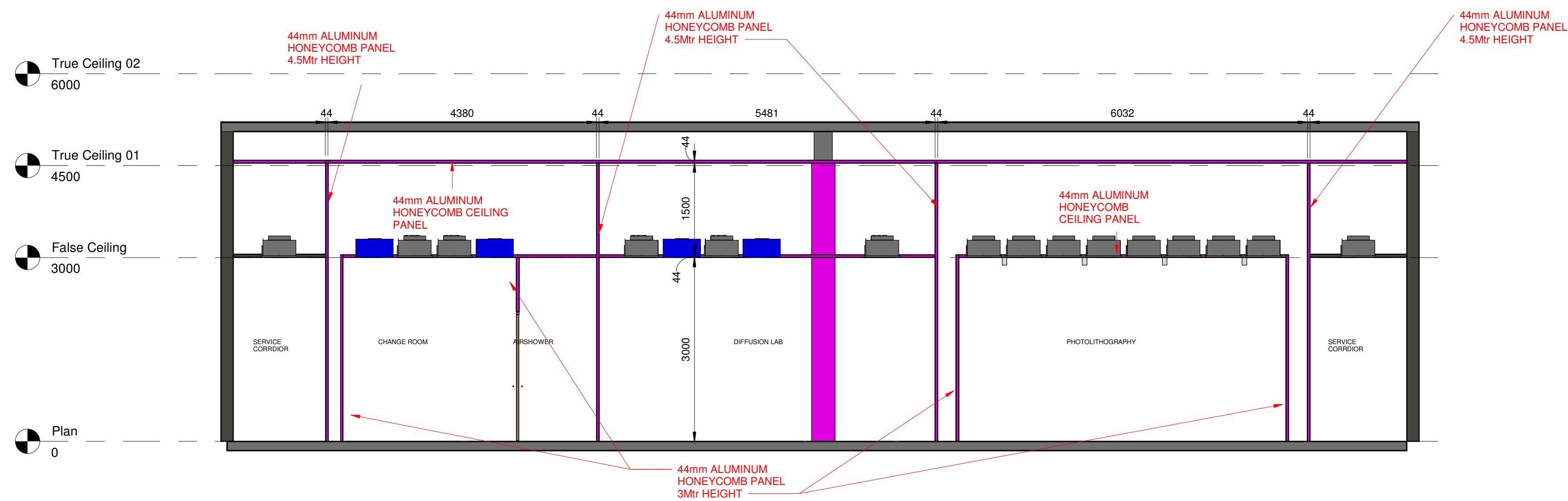
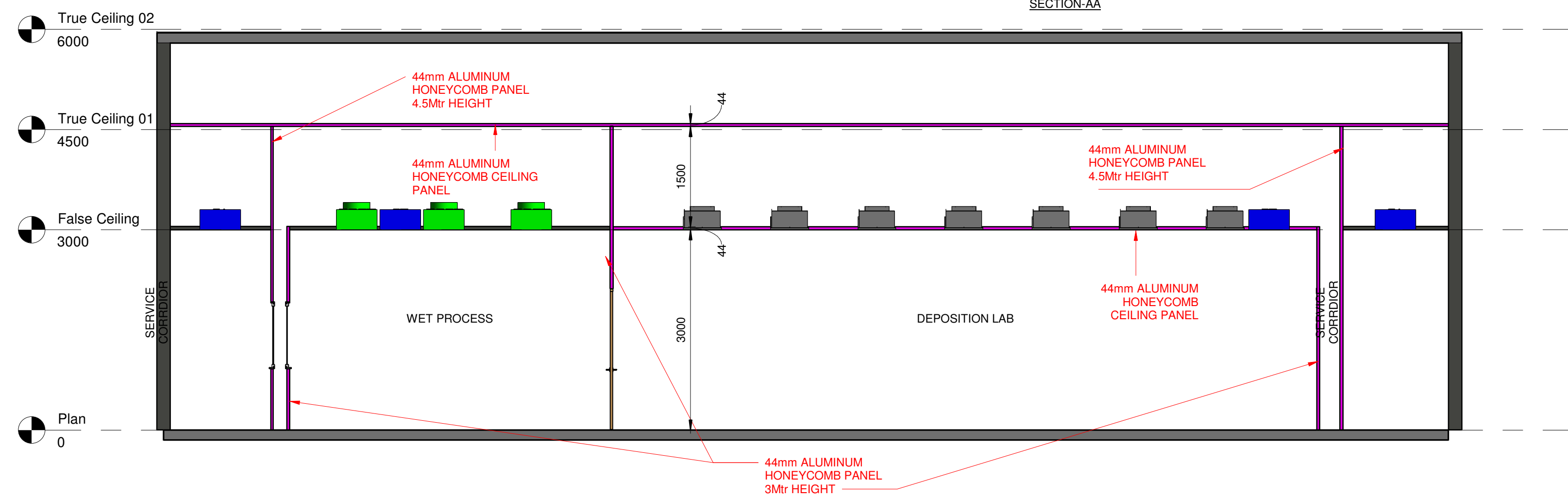
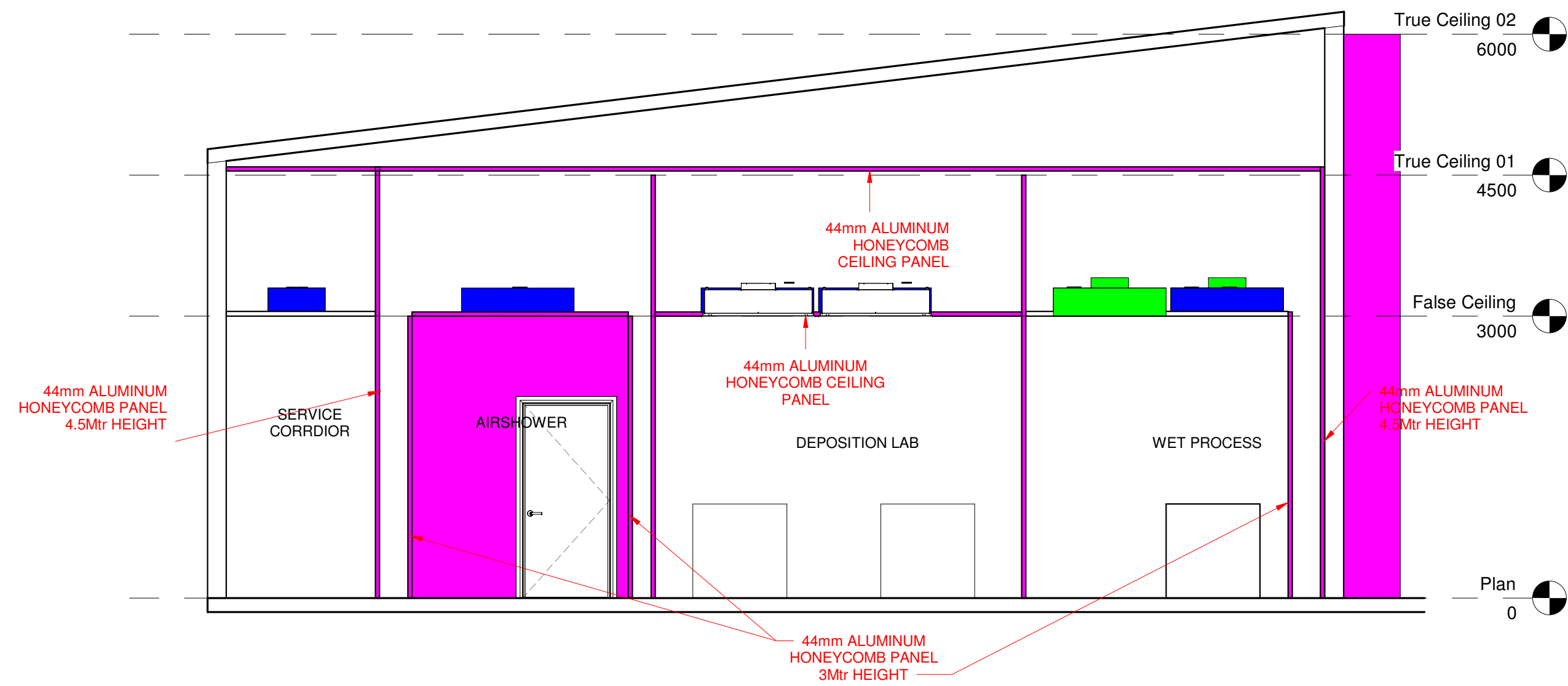
SECTION 3-3
SCALE 1:100



TYPICAL SECTION

All dimensions are in mm

CMD		
SCALE: NTS		DATE: 05.02.2020
DRAWN BY & DEALT BY		FILE NO.
Sheeba J, Sr. Tech. Asst.		
CHECKED AND APPROVED BY		SECTION
K.V.S.V.Ch.M.RAO HEAD.CMD		
CLEAN ROOM IN AVIONICS BLOCK, IIST		



PROJECT

MEMS & NANO FAB

TITLE

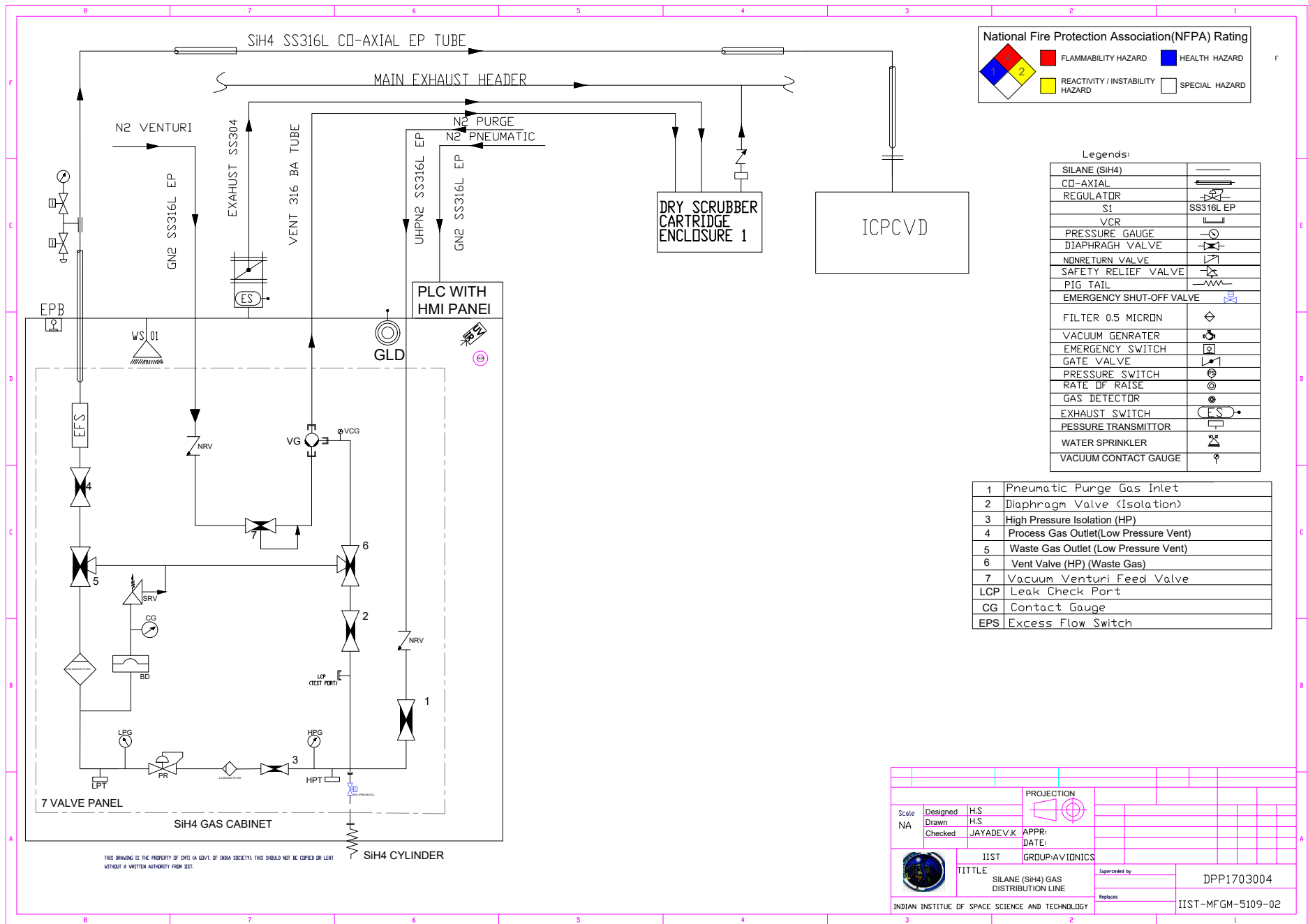
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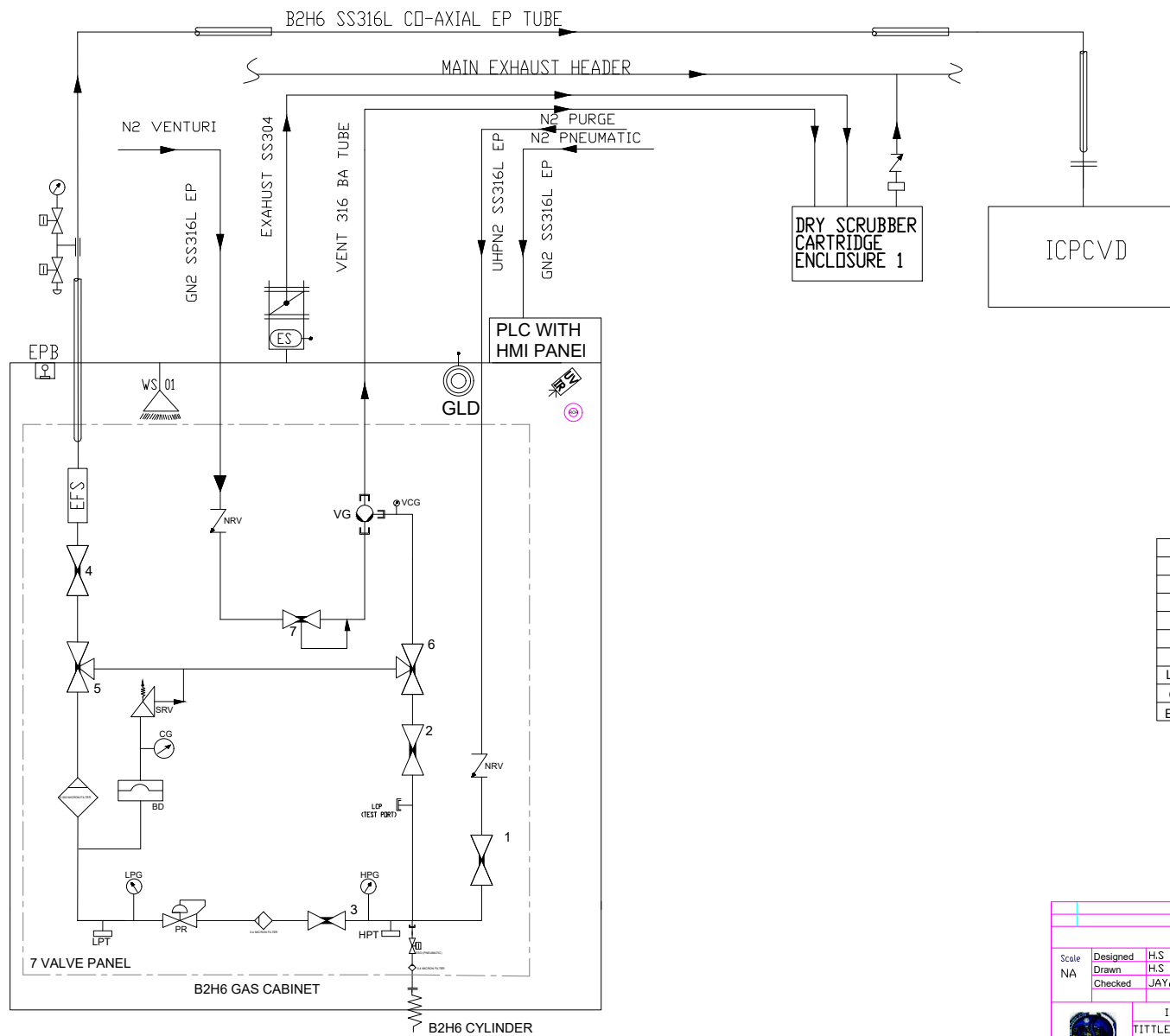
IIST THIRUVANANTHAPURAM

DRAWN BY CHECKED BY DATE

SCALE (@ A1) PROJECT NUMBER
N.T.S AFD001

DRAWING NUMBER REV
IIST-SEC-002 R0





National Fire Protection Association(NFPA) Rating			
FLAMMABILITY HAZARD	HEALTH HAZARD	REACTIVITY / INSTABILITY HAZARD	SPECIAL HAZARD
3			

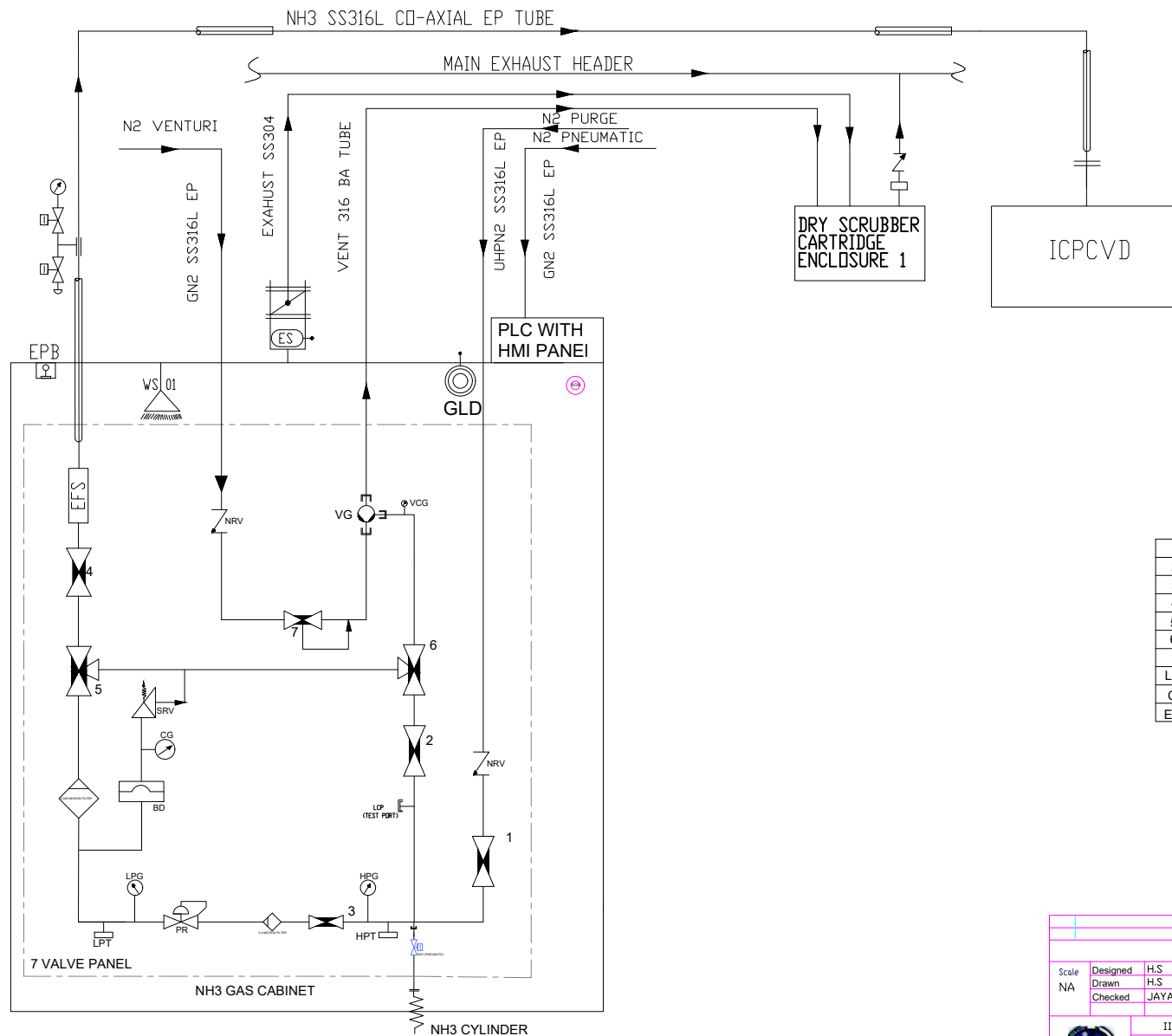
Legends:

DIBORANE (B2H6)	
CO-AXIAL	
REGULATOR	
S1	SS316L EP
VCR	
PRESSURE GAUGE	
DIAPHRAGM VALVE	
NONRETURN VALVE	
SAFETY RELIEF VALVE	
PIG TAIL	
EMERGENCY SHUT-OFF VALVE	
FILTER 0.5 MICRON	
VACUUM GENERATOR	
EMERGENCY SWITCH	
GATE VALVE	
PRESSURE SWITCH	
RATE OF RAISE	
GAS DETECTOR	
EXHAUST SWITCH	
PRESSURE TRANSMITTER	
WATER SPRINKLER	
VACUUM CONTACT GAUGE	

1	Pneumatic Purge Gas Inlet
2	Diaphragm Valve (Isolation)
3	High Pressure Isolation (HP)
4	Process Gas Outlet(Low Pressure Vent)
5	Waste Gas Outlet (Low Pressure Vent)
6	Vent Valve (HP) (Waste Gas)
7	Vacuum Venturi Feed Valve
LCP	Leak Check Port
CG	Contact Gauge
EPS	Excess Flow Switch

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PROJECTION			
Scale	Designed	H.S	
NA	Drawn	H.S	
	Checked	JAYADEV.K	APPR:
			DATE:
IIST		GROUP-AVIONICS	
TITLE		Superseded by	
Diborane (B2H6) GAS DISTRIBUTION LINE		DPP1703004	
INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY		Replaces	
		IIST-MFGM-5109-02	



National Fire Protection Association(NFPA) Rating

	FLAMMABILITY HAZARD		HEALTH HAZARD
	REACTIVITY / INSTABILITY HAZARD		SPECIAL HAZARD

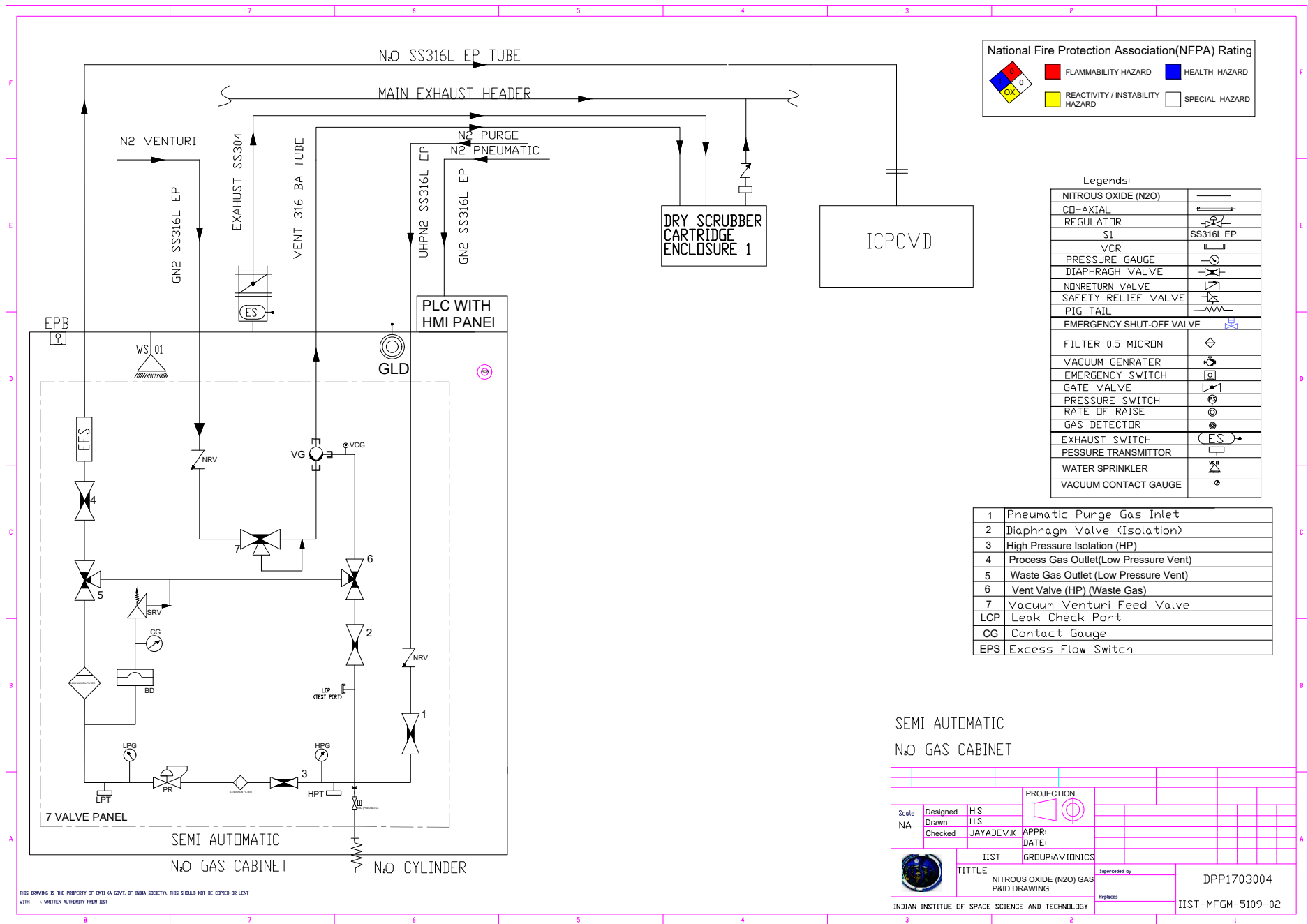
Legends:

AMMONIA (NH3)	
CO-AXIAL	
REGULATOR	
S1	SS316L EP
VCR	
PRESSURE GAUGE	
DIAPHRAGM VALVE	
NONRETURN VALVE	
SAFETY RELIEF VALVE	
PIG TAIL	
EMERGENCY SHUT-OFF VALVE	
FILTER 0.5 MICRON	
VACUUM GENRATER	
EMERGENCY SWITCH	
GATE VALVE	
PRESSURE SWITCH	
RATE OF RAISE	
GAS DETECTOR	
EXHAUST SWITCH	
PESSURE TRANSMITTOR	
WATER SPRINKLER	
VACUUM CONTACT GAUGE	

1	Pneumatic Purge Gas Inlet
2	Diaphragm Valve (Isolation)
3	High Pressure Isolation (HP)
4	Process Gas Outlet(Low Pressure Vent)
5	Waste Gas Outlet (Low Pressure Vent)
6	Vent Valve (HP) (Waste Gas)
7	Vacuum Venturi Feed Valve
LCP	Leak Check Port
CG	Contact Gauge
EPS	Excess Flow Switch

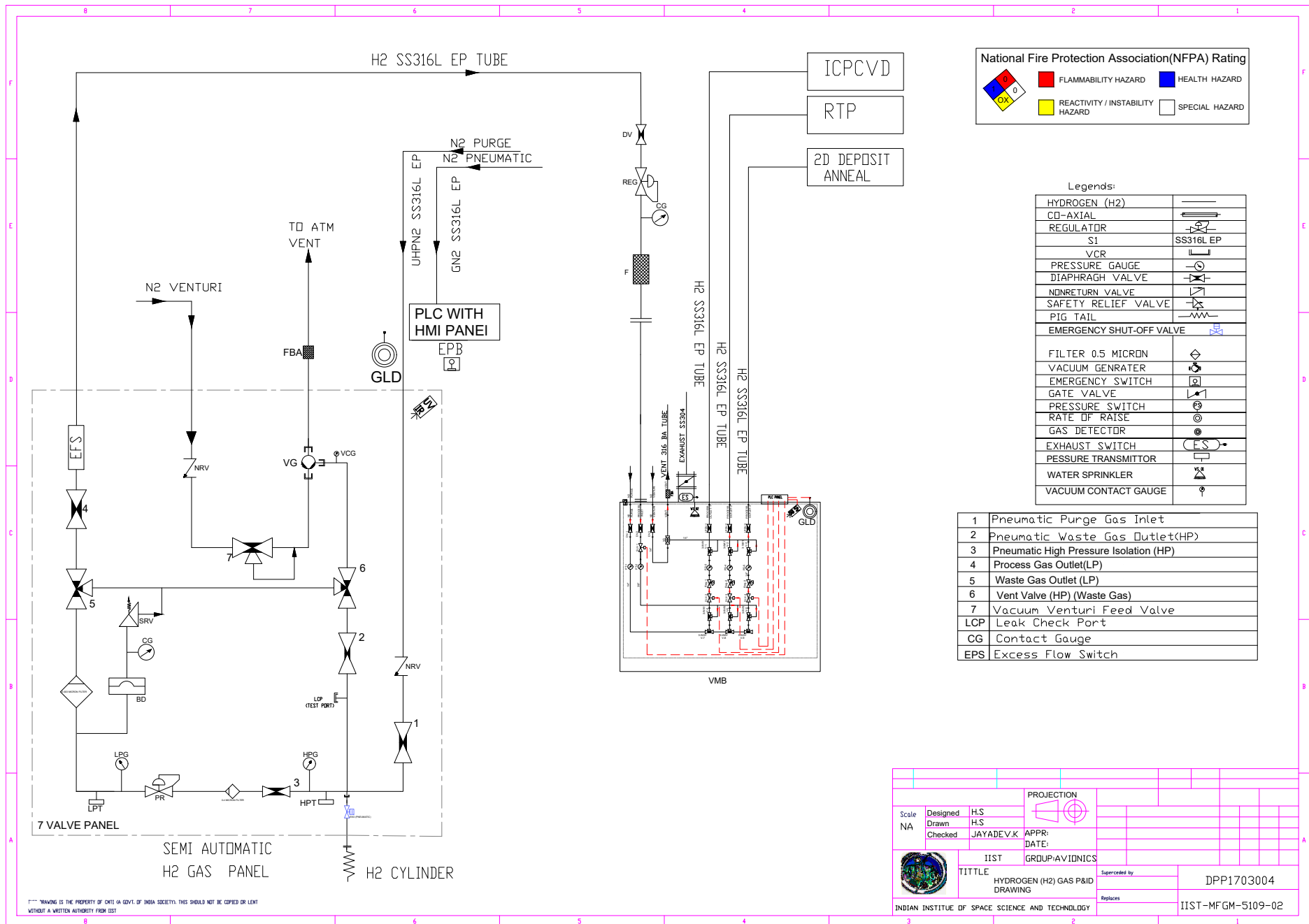
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Scale		Designed		H.S		PROJECTION	
NA		Drawn		H.S			
		Checked		JAYADEV.K		APPR: DATE:	
		IIST		GROUP:AVIONICS		Superseded by	
TITLE		AMMONIA (NH3) GAS DISTRIBUTION LINE				DPP1703004	
INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY				Replaces		IIST-MFGM-5109-02	



SEMI AUTOMATIC
N₂O GAS CABINET

Scale		Designed	H.S	PROJECTION	
NA		Drawn	H.S		
		Checked	JAYADEV.K		
				APPR:	
				DATE:	
		IIST GROUP-AVIONICS			
		TITLE			
		NITROUS OXIDE (N2O) GAS P&ID DRAWING			
		Superseded by			
		Replaces			
INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY		DPP1703004			
		IIST-MFGM-5109-02			



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