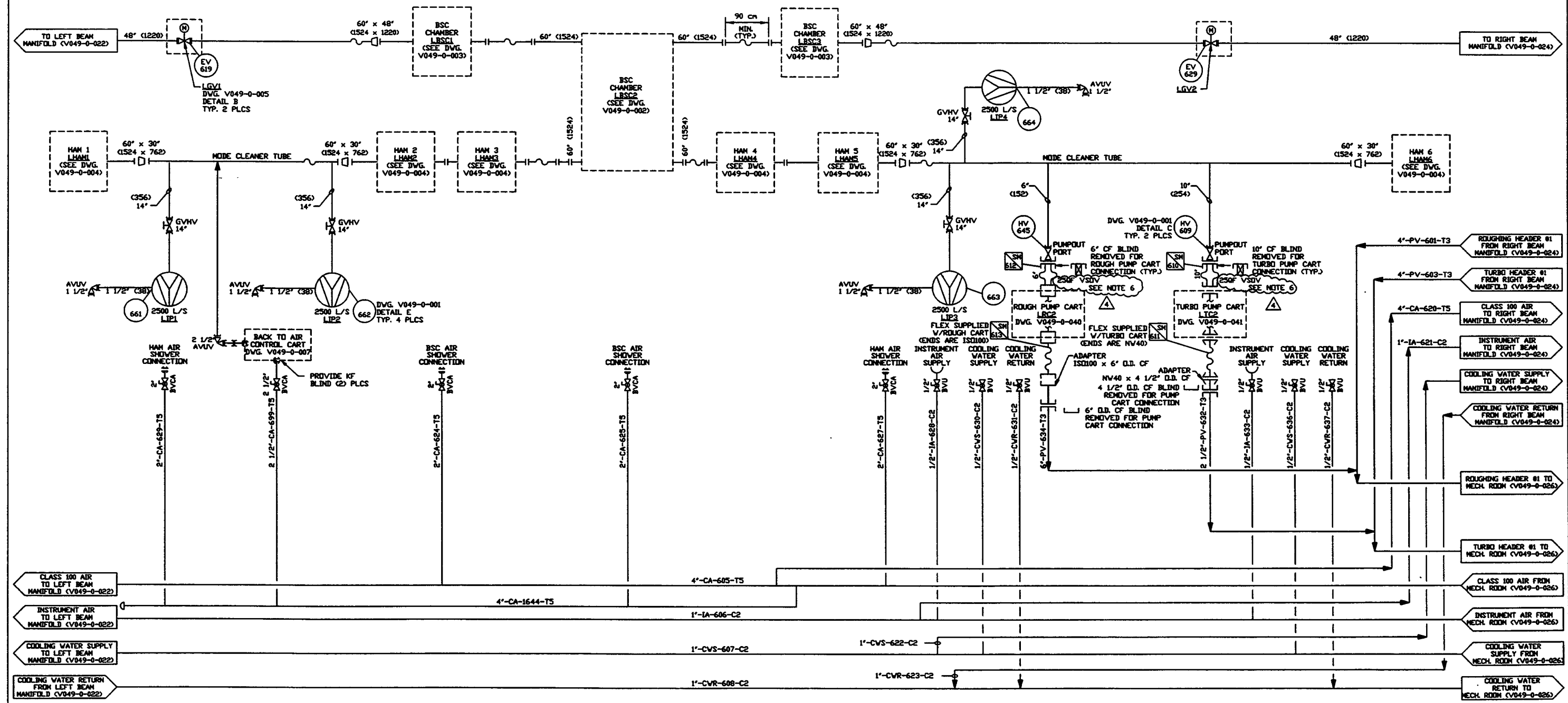


- NOTES:**
1. EACH PUMPOUT PORT LOCATION HAS BOTH POWER & CONTROL PLUG-IN CONNECTIONS.
 2. ALL VACUUM GAUGES TO BE BAKED OUT AT 250 C DURING PUMPDOWN, USING A REMOVABLE BLANKET TYPE HEATER. ALL VACUUM SECTIONS SHALL ALSO BE BAKED OUT AT 150 C DURING PUMPDOWN USING A REMOVABLE BLANKET TYPE HEATER. SEE DWG. V049-0-043 FOR BAKEDOUT SYSTEM.
 3. DIMENSIONS IN () ARE IN MILLIMETERS.
 4. BEAM MANIFOLD DIMENSIONS INDICATE INSIDE DIAMETERS.
 5. BEAM MANIFOLD FLANGE ANNULUS IDN PUMP DETAILS LATER.
 6. PROVIDE A CF BLANK WITH A 25 OF SEAL-OFF FITTING.



DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	EQUIP. THIS DWG.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES FRACTIONAL & DECIMAL 00'-00" BEH 40" THE PLACE DECIMAL & 0.05 FINISHED SURFACE PER BREAK CONVENTION REMOVE ALL BURRS	REV	DESCRIPTION	CHKD	DRWN	DATE	DESN	
V049-0-024	P & ID RIGHT BEAM MANIFOLD			LGV1	LBSL1	4	REISSUED FOR FOR UPDATE	SH	IMcV	RJV	6/16/97	0499
V049-0-022	P & ID LEFT BEAM MANIFOLD			LGV2	LBSL2	3	REVISED COVERALL GENERAL REVISIONS				02.14.97	0435
V049-0-004	P & ID HORIZONTAL ACCESS MODULE			LHAM1	LBSL3	2	ISSUE FOR FOR UPDATE				10.25.96	0309
V049-0-003	P & ID BEAM SPLITTER CHAMBER	V049-0-041	P & ID TURBO PUMP CART	LHAM2	LIP1	1	ISSUE FOR FOR				04.26.96	0134
V049-0-002	P & ID BEAM SPLITTER CHAMBER	V049-0-040	P & ID MAIN ROUGHING PUMP CART	LHAM3	LIP2							
V049-0-001	P & ID LEGEND	V049-0-026	P & ID MECHANICAL ROOM	LHAM4	LIP3							
				LHAM5	LIP4							
				LHAM6	LTC2							

PROCESS SYSTEMS INTERNATIONAL INC.
 20 WALPOLE DR. WESTBOROUGH, MASSACHUSETTS 01581 USA

PIPING & INSTRUMENTATION DIAGRAM
LIGO VACUUM EQUIPMENT
LOUISIANA SITE
VERTEX SECTION

CAD FILE: V0490023
 SHEET: D
 DWG. NO.: V049-0-023
 REV: 4

SCALE: NONE
 SHEET: 1 OF 1

LIGO-D961087-04-V