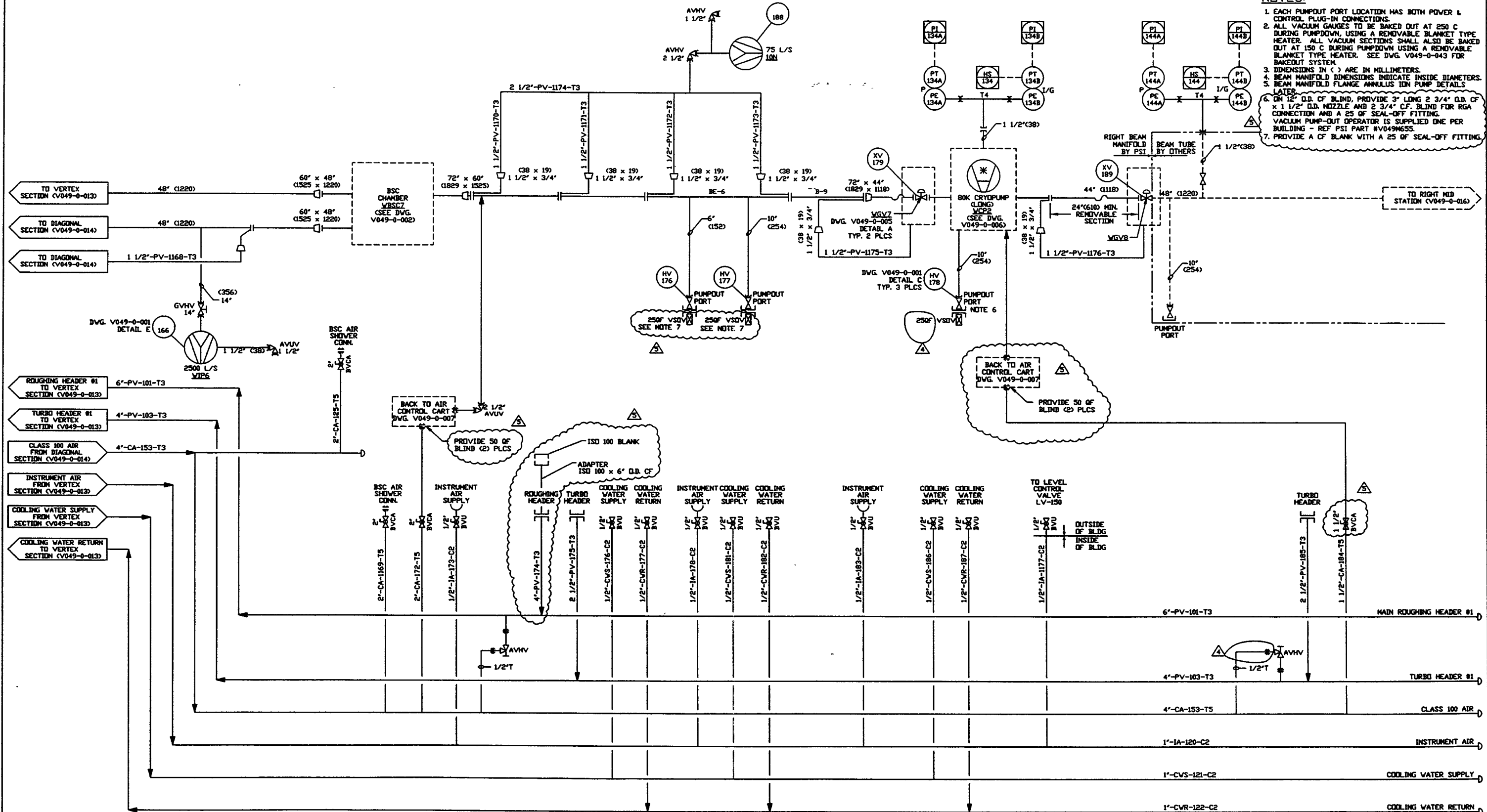


- NOTES:**
1. EACH PUMPOUT PORT LOCATION HAS BOTH POWER & CONTROL PLUG-IN CONNECTIONS.
 2. ALL VACUUM GAUGES TO BE BAKED OUT AT 250 C DURING PUMPDOWN, USING A REMOVABLE BLANKET TYPE HEATER. ALL VACUUM SECTIONS SHALL ALSO BE BAKED OUT AT 150 C DURING PUMPDOWN USING A REMOVABLE BLANKET TYPE HEATER. SEE 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. ON 12" O.D. OF BLIND, PROVIDE 3" LONG 2 3/4" O.D. CF x 1 1/2" I.D. NOZZLE AND 2 3/4" CF BLIND FOR RGA CONNECTION AND A 25 OF SEAL-OFF FITTING. VACUUM PUMP-OUT OPERATOR IS SUPPLIED ONE PER BUILDING - REF PSI PART #V049N655.
 7. PROVIDE A CF BLANK WITH A 25 OF SEAL-OFF FITTING.



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DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION
V049-0-016	P & ID RIGHT MID STATION		
V049-0-014	P & ID DIAGONAL SECTION		
V049-0-013	P & ID VERTEX SECTION		
V049-0-006	P & ID 80K CRYOPUMP PUMP		
V049-0-002	P & ID BEAM SPLITTER CHAMBER		
V049-0-001	P & ID LEGEND		

EQUIP. THIS DWG.	SYMBOL	DESCRIPTION
VBSCT	[Symbol]	GVV7
VIP6	[Symbol]	GVV8
	[Symbol]	VCP2

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FINISHED &
 UNFINISHED SURFACES:
 1/16" ± 0.002" (30" NOM. &
 1/32" ± 0.001" (30" NOM. &
 1/16" ± 0.002" (30" NOM. &
 1/32" ± 0.001" (30" NOM. &
 FINISHED SURFACE DIM.
 DIMENSIONS SHALL BE
 INDICATED AS SHOWN.

DO NOT SCALE THIS DRAWING

REV	DESCRIPTION	CHKD	DRWN	DATE	DESN
5	REISSUED FOR FDR UPDATE			6/11/97	0499
4	REVISED	SM	DMCV	02.14.97	0435
3	REVISED	SM	DMCV	01.03.97	0394
2	ISSUE FOR FDR UPDATE	TS	RT	10.25.96	0309
1	ISSUE FOR FDR	REB	TS	04.26.96	0134
0	ISSUE FOR DESIGN	REB	TS	01.03.96	0031
P1	PRELIMINARY DESIGN UPDATE	REB		09.26.95	0003


PROCESS SYSTEMS INTERNATIONAL, INC.
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PIPING & INSTRUMENTATION DIAGRAM
LIGO VACUUM EQUIPMENT
WASHINGTON SITE
RIGHT BEAM MANIFOLD

CAD FILE	DWG. NO.	REV.
V0490015	V049-0-015	5

SCALE: NONE SHEET: 1 OF 1