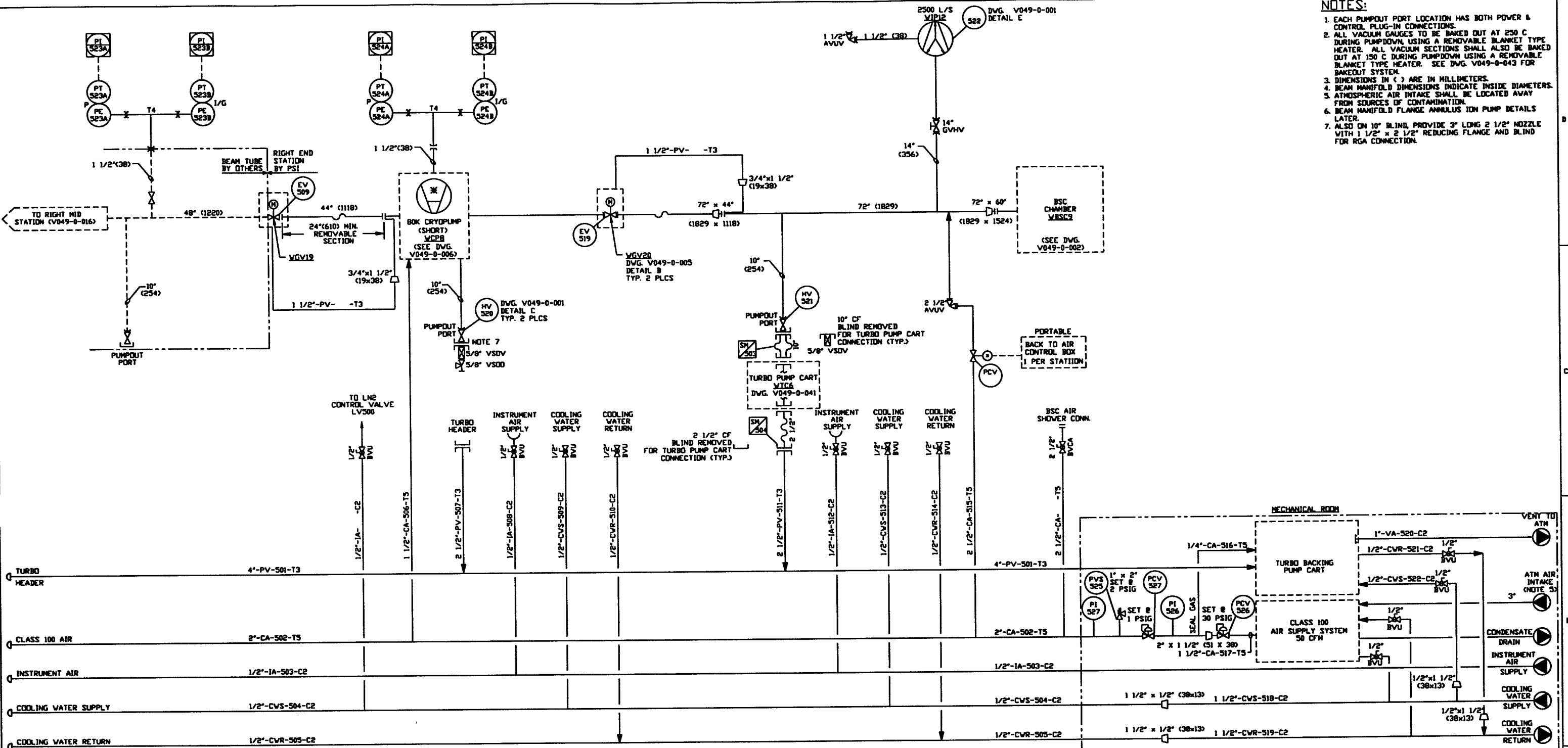


NOTES:

1. EACH PUMP/OUT 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. ATMOSPHERIC AIR INTAKE SHALL BE LOCATED AWAY FROM SOURCES OF CONTAMINATION.
6. BEAM MANIFOLD FLANGE ANNULUS ION PUMP DETAILS LATER.
7. ALSO ON 10" BLIND, PROVIDE 3" LONG 2 1/2" NOZZLE WITH 1 1/2" x 2 1/2" REDUCING FLANGE AND BLIND FOR RGA CONNECTION.



LIGO D961082-01-V

<p>LEGEND</p> <p>CLIENT CONTAINS PROPRIETARY INFORMATION BELONGING TO PROCESS SYSTEMS INTERNATIONAL, INC. OR ITS SUBSIDIARIES AND SHALL BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS SUPPLIED. IT SHALL NOT BE COPIED, REPRODUCED OR OTHERWISE TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN CONSENT OF PROCESS SYSTEMS INTERNATIONAL, INC. AND SHALL BE RETURNED UPON REQUEST.</p>		<p>REFERENCE DRAWINGS</p> <table border="1"> <tr> <th>DWG. NO.</th> <th>DESCRIPTION</th> </tr> <tr> <td>V049-0-041</td> <td>P & ID TURBO PUMP CART</td> </tr> <tr> <td>V049-0-016</td> <td>P & ID RIGHT MID STATION</td> </tr> <tr> <td>V049-0-006</td> <td>P & ID 60K CRYOPUMP</td> </tr> <tr> <td>V049-0-002</td> <td>P & ID BEAM SPLITTER CHAMBER</td> </tr> <tr> <td>V049-0-001</td> <td>P & ID LEGEND</td> </tr> </table>	DWG. NO.	DESCRIPTION	V049-0-041	P & ID TURBO PUMP CART	V049-0-016	P & ID RIGHT MID STATION	V049-0-006	P & ID 60K CRYOPUMP	V049-0-002	P & ID BEAM SPLITTER CHAMBER	V049-0-001	P & ID LEGEND	<p>EQUIP. THIS DWG.</p> <table border="1"> <tr> <td>WGV19</td> <td>WCPB</td> </tr> <tr> <td>WGV20</td> <td>VTC6</td> </tr> <tr> <td>WBSC3</td> <td>VIPI2</td> </tr> </table>	WGV19	WCPB	WGV20	VTC6	WBSC3	VIPI2	<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES: FRACTIONAL & DECIMALS: ±0.005 INCH TWO PLACE DECIMAL: ±0.003 INCH THREE PLACE DECIMAL: ±0.001 INCH FURNISHED SURFACE HAS BEVEL CORNERS TO REMOVE ALL BURRS</p> <p>DO NOT SCALE THIS DRAWING</p> <p>USED ON: _____</p> <p>NEXT ASS'Y: _____</p>	<table border="1"> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>CHKD</th> <th>DRWN</th> <th>DATE</th> <th>DESP</th> </tr> <tr> <td>1</td> <td>ISSUE FOR FOR</td> <td>RED</td> <td>TS</td> <td>RT</td> <td>SM</td> </tr> <tr> <td>0</td> <td>ISSUE FOR DESIGN</td> <td>RED</td> <td>TS</td> <td>RT</td> <td>SM</td> </tr> <tr> <td>PI</td> <td>PRELIMINARY DESIGN UPDATE</td> <td>RED</td> <td>TS</td> <td>RT</td> <td>SM</td> </tr> </table>	REV	DESCRIPTION	CHKD	DRWN	DATE	DESP	1	ISSUE FOR FOR	RED	TS	RT	SM	0	ISSUE FOR DESIGN	RED	TS	RT	SM	PI	PRELIMINARY DESIGN UPDATE	RED	TS	RT	SM	<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>CHKD</th> <th>DRWN</th> <th>DATE</th> <th>DESP</th> </tr> <tr> <td>04.26.96</td> <td>0134</td> <td>RED</td> <td>TS</td> <td>RT</td> <td>SM</td> <td>DHW</td> </tr> <tr> <td>01.03.96</td> <td>0031</td> <td>RED</td> <td>TS</td> <td>RT</td> <td>SM</td> <td>RJV</td> </tr> <tr> <td>09.26.95</td> <td>0003</td> <td>RED</td> <td>TS</td> <td>RT</td> <td>SM</td> <td>AFG</td> </tr> </table>	NO.	DATE	BY	CHKD	DRWN	DATE	DESP	04.26.96	0134	RED	TS	RT	SM	DHW	01.03.96	0031	RED	TS	RT	SM	RJV	09.26.95	0003	RED	TS	RT	SM	AFG	<p>PROCESS SYSTEMS INTERNATIONAL, INC. 20 WILKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA</p> <p>PIPING & INSTRUMENTATION DIAGRAM LIGO VACUUM EQUIPMENT WASHINGTON SITE RIGHT END STATION</p> <p>CAD FILE: V0490017 SIZE: D DWG. NO.: V049-0-017 REV: 1</p> <p>SCALE: NONE SHEET: 1 OF 1</p>
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