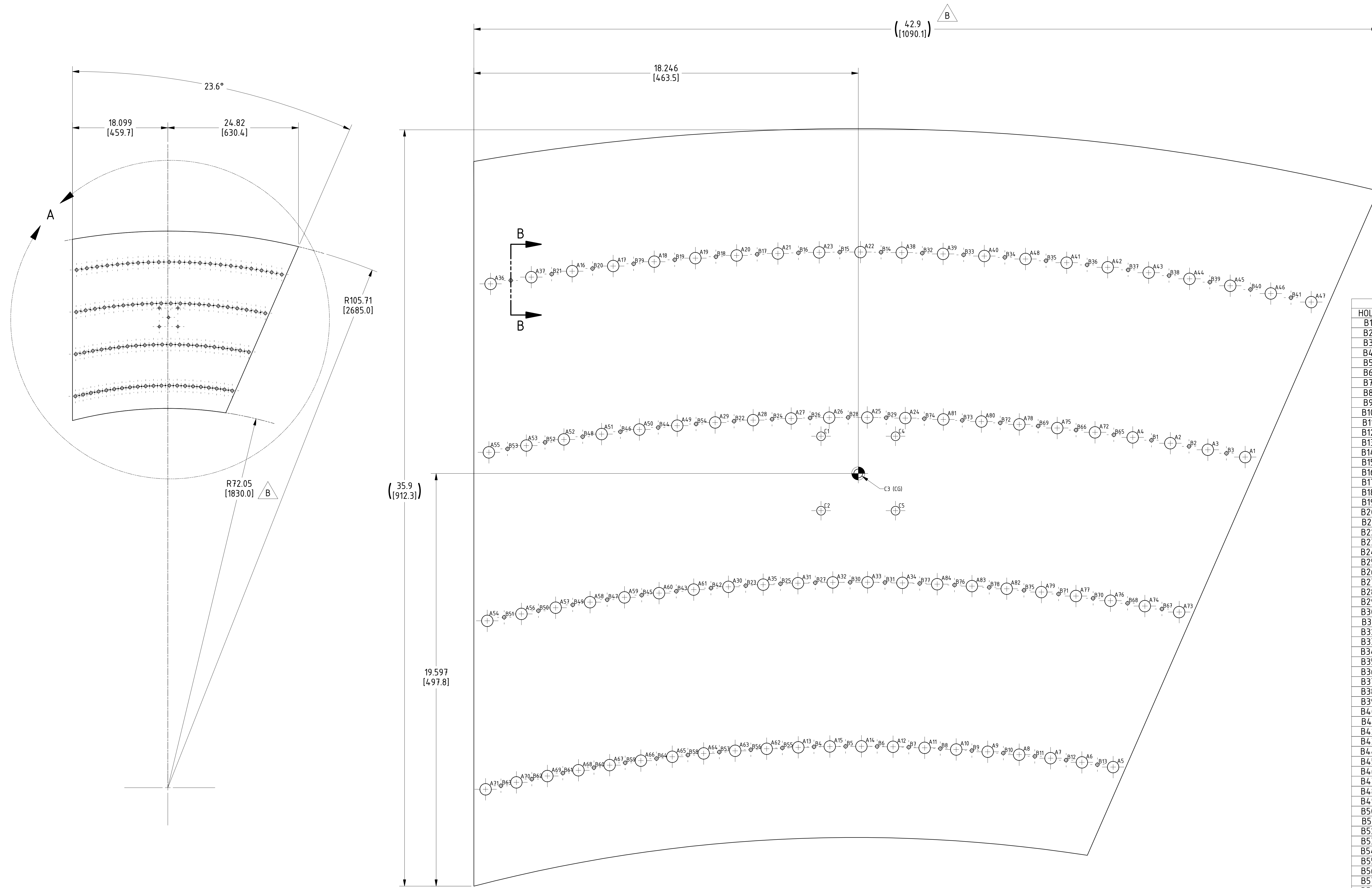


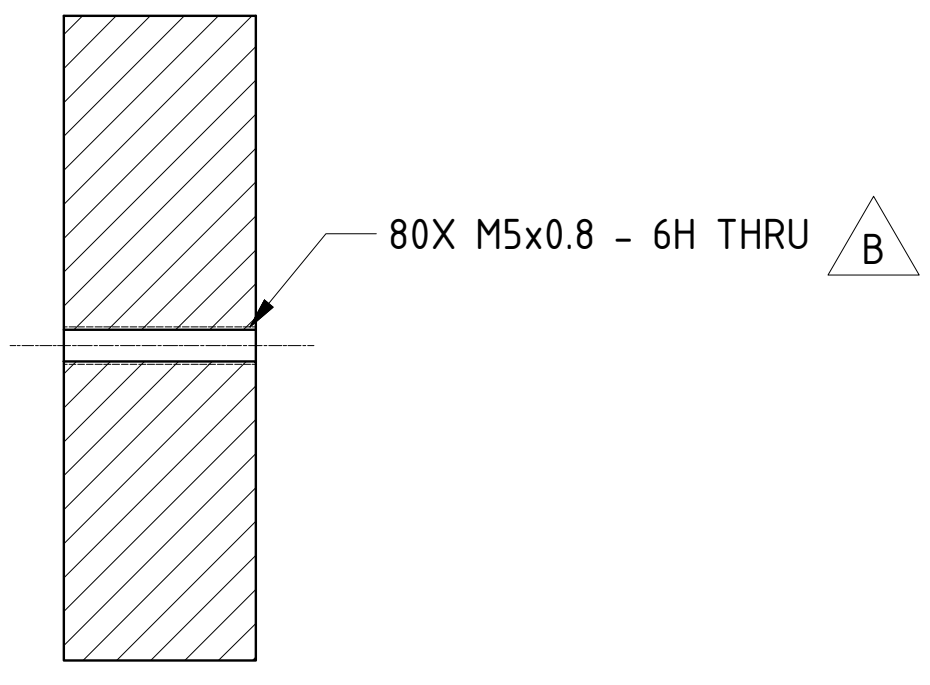
- NOTES:
1. Material: 6061-T6 ALUMINUM PLATE 1" THICK.
 2. All dimensions are in Inches[mm].
 3. Dimensions & tolerances in brackets are for reference only.

ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE	6/11/2015	
	B	RELOCATED HOLES CHANGED M5 HOLES DEPTH TO 'THRU' R1830 WAS R1820	7/2/2015	



Hole Table			
HOLE	XDIM	YDIM	DESCRIPTION
A1	18.362	0.778	
A2	14.810	1.436	
A3	16.589	1.125	
A4	13.025	1.712	
A5	12.094	-13.943	
A6	10.611	-13.718	
A7	9.125	-13.521	
A8	7.635	-13.354	
A9	6.141	-13.215	
A10	4.646	-13.107	
A11	3.148	-13.027	
A12	1.649	-12.977	
A13	-2.849	-13.004	
A14	0.150	-12.957	
A15	-1.350	-12.966	
A16	-3.578	9.605	
A17	-11.633	9.850	
A18	-9.684	10.056	
A19	-7.731	10.224	
A20	-5.774	10.354	
A21	-3.816	10.445	
A22	0.104	10.512	
A23	-1.856	10.498	
A24	2.233	2.629	
A25	0.427	2.658	
A26	-1.380	2.652	
A27	-3.185	2.610	
A28	-4.990	2.532	
A29	-6.793	2.419	
A30	-8.593	2.271	
A31	-10.390	2.088	
A32	-12.183	1.869	
A33	-13.971	1.615	
A34	-15.754	1.326	
A35	-17.531	0.998	
A36	-19.302	0.631	
A37	-21.067	0.229	
A38	-22.826	-0.215	
A39	-24.579	-0.706	
A40	-26.326	-1.141	
A41	-28.067	-1.516	
A42	-29.802	-1.831	
A43	-31.531	-2.086	
A44	-33.254	-2.281	
A45	-34.971	-2.416	
A46	-36.682	-2.491	
A47	-38.387	-2.506	
A48	-40.086	-2.461	
A49	-41.779	-2.366	
A50	-43.466	-2.211	
A51	-45.147	-2.006	
A52	-46.822	-1.751	
A53	-48.491	-1.446	
A54	-50.154	-1.091	
A55	-51.811	-0.736	
A56	-53.462	-0.381	
A57	-55.107	0.074	
A58	-56.746	0.429	
A59	-58.379	0.784	
A60	-60.006	1.139	
A61	-61.627	1.494	
A62	-63.242	1.849	
A63	-64.851	2.204	
A64	-66.454	2.559	
A65	-68.051	2.914	
A66	-69.642	3.269	
A67	-71.227	3.624	
A68	-72.806	3.979	
A69	-74.379	4.334	
A70	-75.946	4.689	
A71	-77.507	5.044	
A72	-79.062	5.399	
A73	-80.611	5.754	
A74	-82.154	6.109	
A75	-83.691	6.464	
A76	-85.222	6.819	
A77	-86.747	7.174	
A78	-88.266	7.529	
A79	-89.779	7.884	
A80	-91.286	8.239	
A81	-92.787	8.594	
A82	-94.282	8.949	
A83	-95.771	9.304	
A84	-97.254	9.659	
B1	13.914	1.579	
B2	15.696	1.285	
B3	17.472	0.957	
B4	-2.104	-12.981	
B5	-0.604	-12.957	
B6	0.895	-12.963	
B7	2.394	-12.998	
B8	3.893	-13.063	
B9	5.389	-13.157	
B10	6.884	-13.280	
B11	8.376	-13.433	
B12	9.864	-13.615	
B13	11.349	-13.826	
B14	10.880	10.505	
B15	-0.881	10.510	
B16	-2.841	10.476	
B17	-4.800	10.404	
B18	-6.757	10.293	
B19	-8.712	10.144	
B20	-10.661	9.973	
B21	-12.603	9.780	
B22	-14.538	9.564	
B23	-16.466	9.327	
B24	-18.387	9.070	
B25	-20.300	8.793	
B26	-22.205	8.496	
B27	-24.102	8.179	
B28	-26.000	7.842	
B29	-27.899	7.485	
B30	-29.799	7.108	
B31	-31.699	6.711	
B32	-33.599	6.294	
B33	-35.499	5.857	
B34	-37.399	5.400	
B35	-39.299	4.923	
B36	-41.199	4.426	
B37	-43.099	3.909	
B38	-44.999	3.372	
B39	-46.899	2.815	
B40	-48.799	2.238	
B41	-50.699	1.641	
B42	-52.599	1.024	
B43	-54.499	0.387	
B44	-56.399	-0.260	
B45	-58.299	-0.893	
B46	-60.199	-1.516	
B47	-62.099	-2.139	
B48	-63.999	-2.762	
B49	-65.899	-3.385	
B50	-67.799	-4.008	
B51	-69.699	-4.631	
B52	-71.599	-5.254	
B53	-73.499	-5.877	
B54	-75.399	-6.500	
B55	-77.299	-7.123	
B56	-79.199	-7.746	
B57	-81.099	-8.369	
B58	-82.999	-8.992	
B59	-84.899	-9.615	
B60	-86.799	-10.238	
B61	-88.699	-10.861	
B62	-90.599	-11.484	
B63	-92.499	-12.107	
B64	-94.399	-12.730	
B65	-96.299	-13.353	
B66	-98.199	-13.976	
B67	-100.099	-14.599	
B68	-101.999	-15.222	
B69	-103.899	-15.845	
B70	-105.799	-16.468	
B71	-107.699	-17.091	
B72	-109.599	-17.714	
B73	-111.499	-18.337	
B74	-113.399	-18.960	
B75	-115.299	-19.583	
B76	-117.199	-20.206	
B77	-119.099	-20.829	
B78	-120.999	-21.452	
B79	-122.899	-22.075	
B80	-124.799	-22.698	
B81	-126.699	-23.321	
B82	-128.599	-23.944	
B83	-130.499	-24.567	
B84	-132.399	-25.190	

Hole Table			
HOLE	XDIM	YDIM	DESCRIPTION
B1	13.914	1.579	
B2	15.696	1.285	
B3	17.472	0.957	
B4	-2.104	-12.981	
B5	-0.604	-12.957	
B6	0.895	-12.963	
B7	2.394	-12.998	
B8	3.893	-13.063	
B9	5.389	-13.157	
B10	6.884	-13.280	
B11	8.376	-13.433	
B12	9.864	-13.615	
B13	11.349	-13.826	
B14	10.880	10.505	
B15	-0.881	10.510	
B16	-2.841	10.476	
B17	-4.800	10.404	
B18	-6.757	10.293	
B19	-8.712	10.144	
B20	-10.661	9.973	
B21	-12.603	9.780	
B22	-14.538	9.564	
B23	-16.466	9.327	
B24	-18.387	9.070	
B25	-20.300	8.793	
B26	-22.205	8.496	
B27	-24.102	8.179	
B28	-26.000	7.842	
B29	-27.899	7.485	
B30	-29.799	7.108	
B31	-31.699	6.711	
B32	-33.599	6.294	
B33	-35.499	5.857	
B34	-37.399	5.400	
B35	-39.299	4.923	
B36	-41.199	4.426	
B37	-43.099	3.909	
B38	-44.999	3.372	
B39	-46.899	2.815	
B40	-48.799	2.238	
B41	-50.699	1.641	
B42	-52.599	1.024	
B43	-54.499	0.387	
B44	-56.399	-0.260	
B45	-58.299	-0.893	
B46	-60.199	-1.516	
B47	-62.099	-2.139	
B48	-63.999	-2.762	
B49	-65.899	-3.385	
B50	-67.799	-4.008	
B51	-69.699	-4.631	
B52	-71.599	-5.254	
B53	-73.499	-5.877	
B54	-75.399	-6.500	
B55	-77.299	-7.123	
B56	-79.199	-7.746	
B57	-81.099	-8.369	
B58	-82.999	-8.992	
B59	-84.899	-9.615	
B60	-86.799	-10.238	
B61	-88.699	-10.861	
B62	-90.599	-11.484	
B63	-92.499	-12.107	
B64	-94.399	-12.730	
B65	-96.299	-13.353	
B66	-98.199	-13.976	
B67	-100.099	-14.599	
B68	-101.999	-15.222	
B69	-103.899	-15.845	
B70	-105.799	-16.468	
B71	-107.699	-17.091	
B72	-109.599	-17.714	
B73	-111.499	-18.337	
B74	-113.399	-18.960	
B75	-115.299	-19.583	
B76	-117.199	-20.206	
B77	-119.099	-20.829	
B78	-120.999	-21.452	
B79	-122.899	-22.075	
B80	-124.799	-22.698	
B81	-126.699	-23.321	
B82	-128.599	-23.944	
B83	-130.499	-24.567	
B84	-132.399	-25.190	



SECTION B-B
SCALE 1 : 1
TYPICAL M5 THREAD DETAIL

DETAIL A
SCALE 1 / 2

THIRD ANGLE PROJECTION		NEXT ASSEMBLY		PROJECT	
REV	SHEET	DATE	BY	DATE	BY
REVISION STATUS OF SHEETS		DATE		BY	

BROOKHAVEN NATIONAL LABORATORY
Upton, NY 11973

PHENIX
sPhenix
Outer Hcal End Endplate

SP02-200-063 B

SCALE: A3