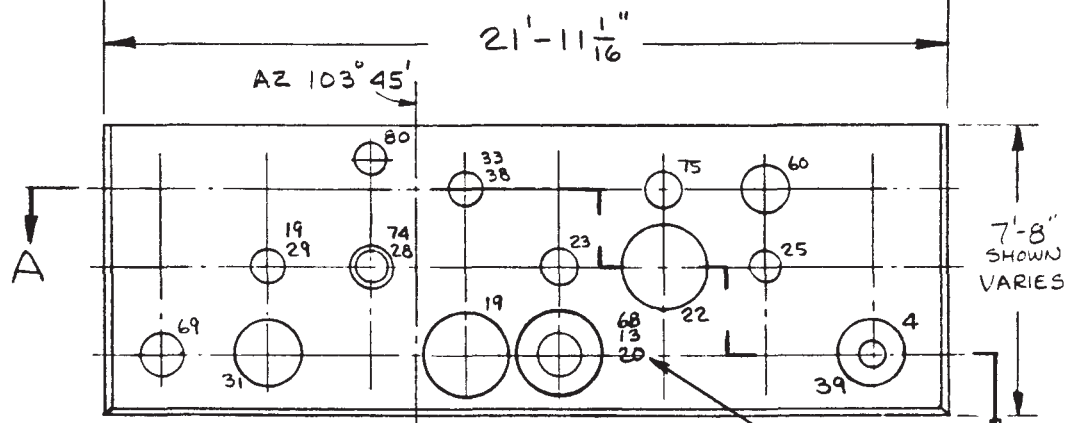
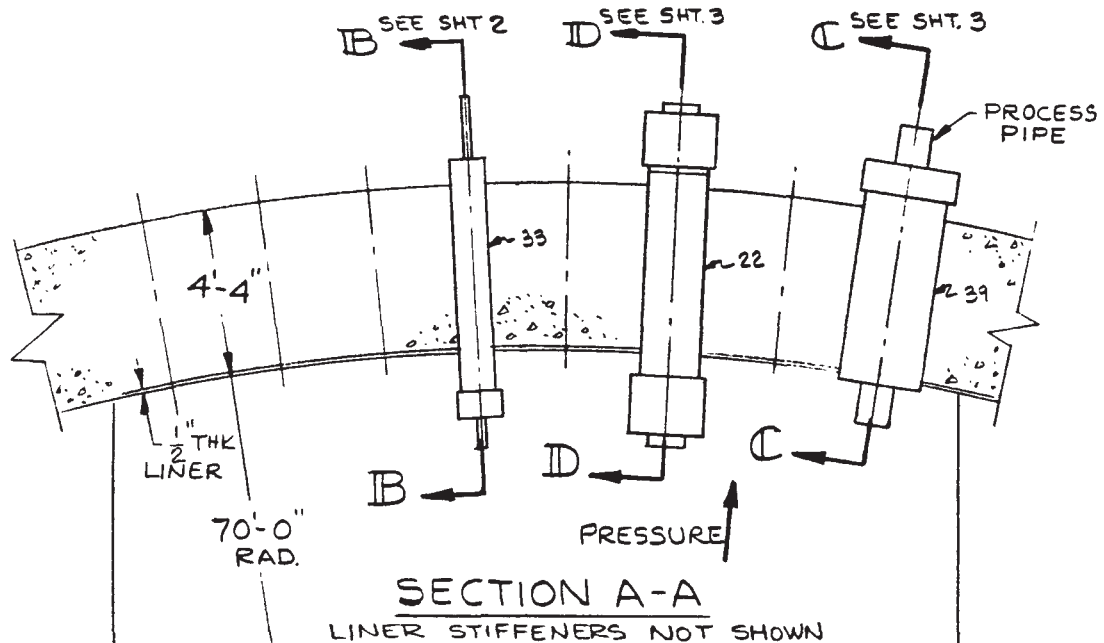


UNITS 1 & 2 FIG. 7 SHT. 1 of 3 PIPE PENETRATIONS (TYPE 4)  
 CONCRETE CONTAINMENT (STEEL LINER)

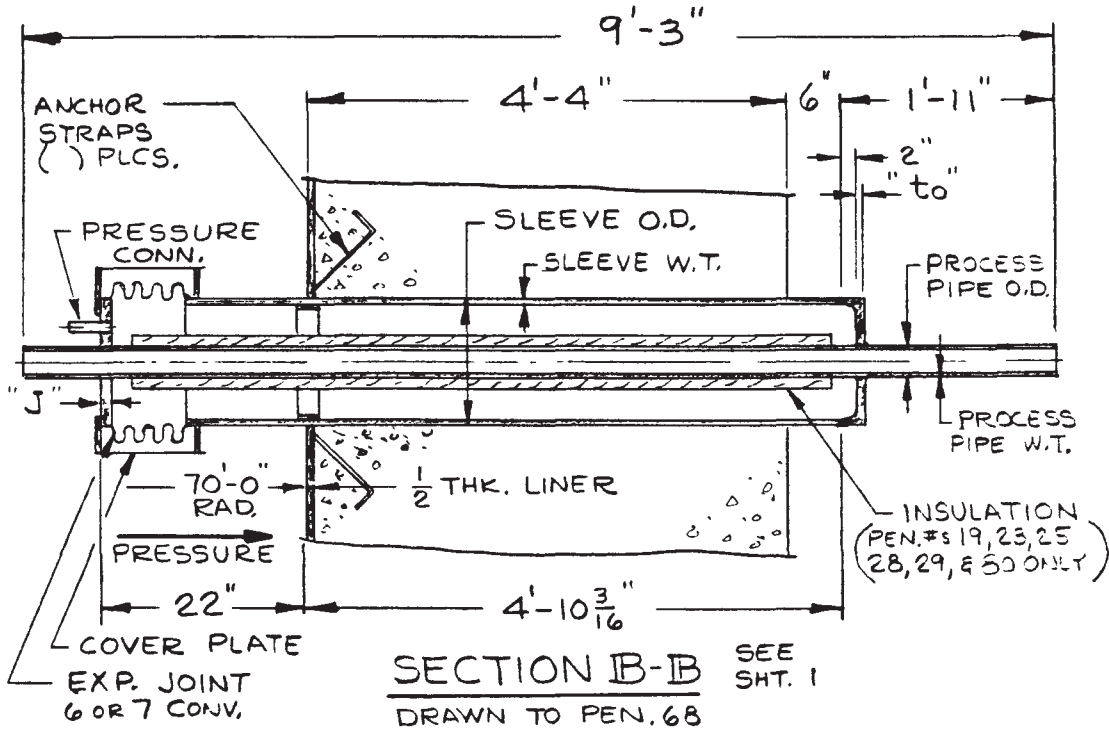


ELEVATION VIEW

4 LINER COURSES SHOWN CONCURRENTLY  
 SEE TYPED CHART FOR ELEV.

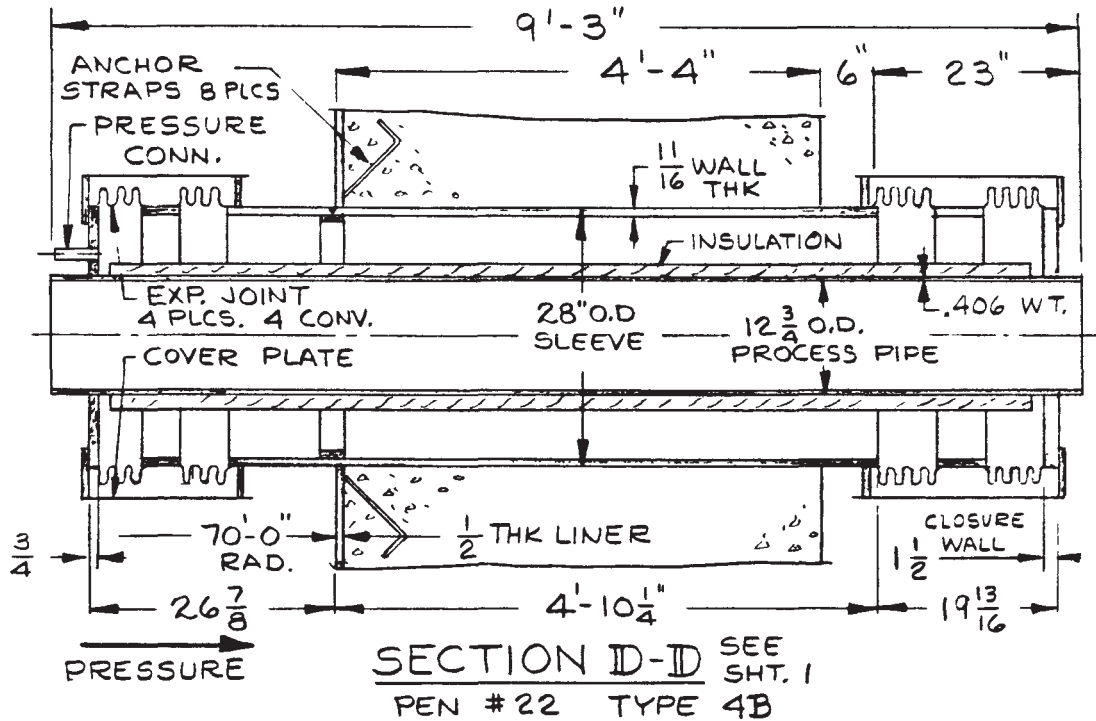
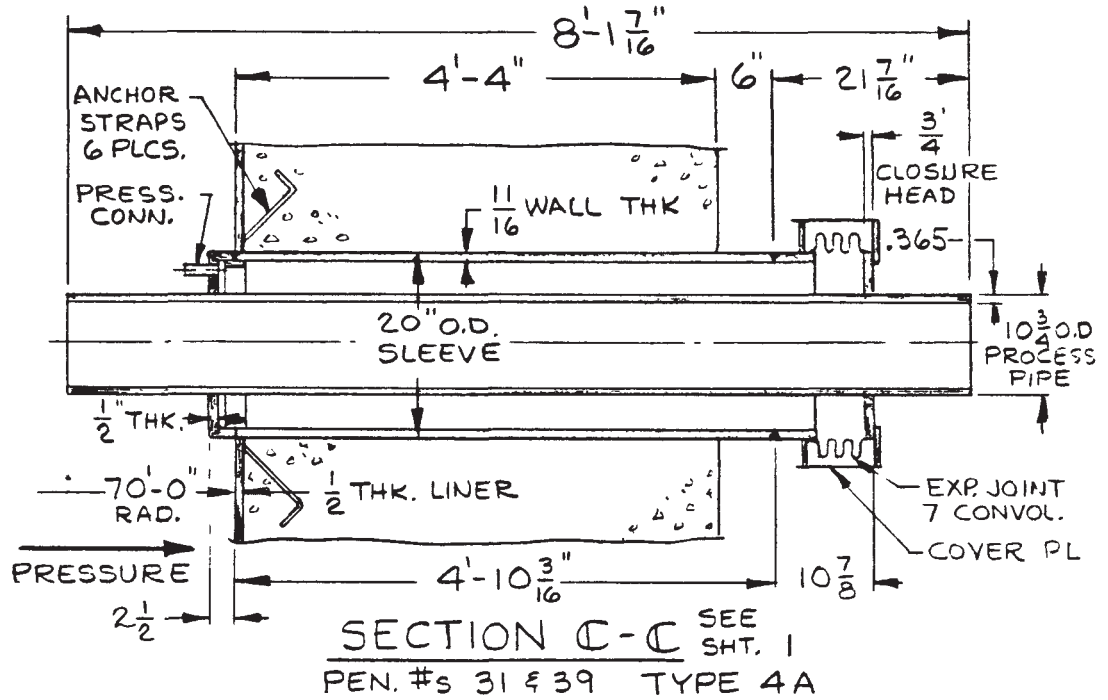
PENETRATION NUMBER		
TYPE 4 ON SHT. 2	TYPE 4A ON SHT. 3	TYPE 4B ON SHT. 3
4, 13, 19, 23, 25 28, 29, 33, 38, 60 68, 69, 74, 75, 80	18, 20 31, 39	22

UNITS 1 & 2 FIG. 7 SHT. 2 OF 3 PIPE PENETRATIONS (TYPES 4)  
 CONCRETE CONTAINMENT (STEEL LINER)



PENETRATION NUMBER	SLEEVE		PROCESS PIPE		CAP THK		ANCHOR STRAPS No	EXP. JOINT No CONV.
	O.D.	W.T.	O.D.	W.T.	"t <sub>o</sub> "	"J"		
4	8.625	.322	3.50	.438	.750	.5	4	7
25	10.750	.365	4.50	.237	.375	.5	4	7
80	10.750	.365	4.50	.237	.625	.5	4	7
28,29	12.750	.406	3.50	.216	.375	.5	4	6
33	12.750	.406	3.50	.438	.375	.5	4	6
75	12.750	.406	3.50	.438	.750	.5	4	6
13,68,69,74	14.000	.438	3.50	.438	.875	.75	4	7
60	16.000	.500	10.750	.365	.500	.5	5	7
38	20.000	.593	10.750	.365	.625	.5	6	6
19,23	12.750	.406	6.625	.280	.375	.5	4	6

UNITS 1 & 2 FIG. 7 SHT 3 OF 3 PIPE PENETRATIONS (TYPES 4)  
 CONCRETE CONTAINMENT (STEEL LINER)



SURVEY DATA - CONCRETE CONTAINMENT (STEEL LINER)

UNITS 1 AND 2 PIPE PENETRATIONS (TYPE 5)

Figure 8, Sheet 1 presents the typical design configuration of Type 5 and 5A pipe penetrations. There are 20 Type 5 and 2 Type 5A pipe penetrations mounted in the concrete containment wall. Figure 8, Sheet 2 presents the design dimensions for the 20 Type 5 and Figure 8, Sheet 3 for the 2 Type 5A pipe penetrations. These pipe penetrations designated Types 5 and 5A per the plant A/E for these plants. All type 5 and 5A penetrations are radially mounted in the concrete containment wall.

TYPE 5 RADIAL PIPE PENETRATIONS (Total 20)

Type 5 Penet. No.	Name	Process Pipe OD, in*	Sleeve in Wall OD, in.*	Location in Wall	
				Elevation (ft.in.)	Azimuth (Deg.Min)
1	Fire Protection	4	10	577-6	107-0
32	Serv. Water Pump	14	20	599-9	104-45
34	Demin. Water	12	2	588-10	96-15
40	Vent. Cooler	10	20	599-9	98-30
41	Cont. Press.	2	8	605-4	107-0
42	Sump Discharge	1-1/2	6	577-6	104-45
48	Serv. Water Pump	14	28	604-6	98-30
54	Cont. Press.	2	6	586-10	109-15
56	Filter Vent	2	8	580-1	100-45
70	Cavity Drain	3	14	577-6	102-45
78	Cont. Press.	2	8	603-8	107-0
79	Water Discharge	10	14	594-4	109-15
81	Filter Vent	2	8	580-1	109-15
82	Cont. Press.	2	8	601-11	102-45
99	Pump Discharge	2	14	594-4	102-45
102	Primary Water	3	10	592-0	109-15
119	Water Discharge	10	12	601-11	100-45
120	Water Discharge	10	12	601-11	98-30
121	Serv. Water Pump	10	12	601-11	96-15
122	Cooler Discharge	10	14	594-4	107-0

TYPE 5A RADIAL PIPE PENETRATIONS (Total 2)

51	Purge Air In	42	48	626-0	146-0
52	Purge Air Out	42	48	634-0	146-0

\*Pipe Size, attached figures present actual pipe dimensions.