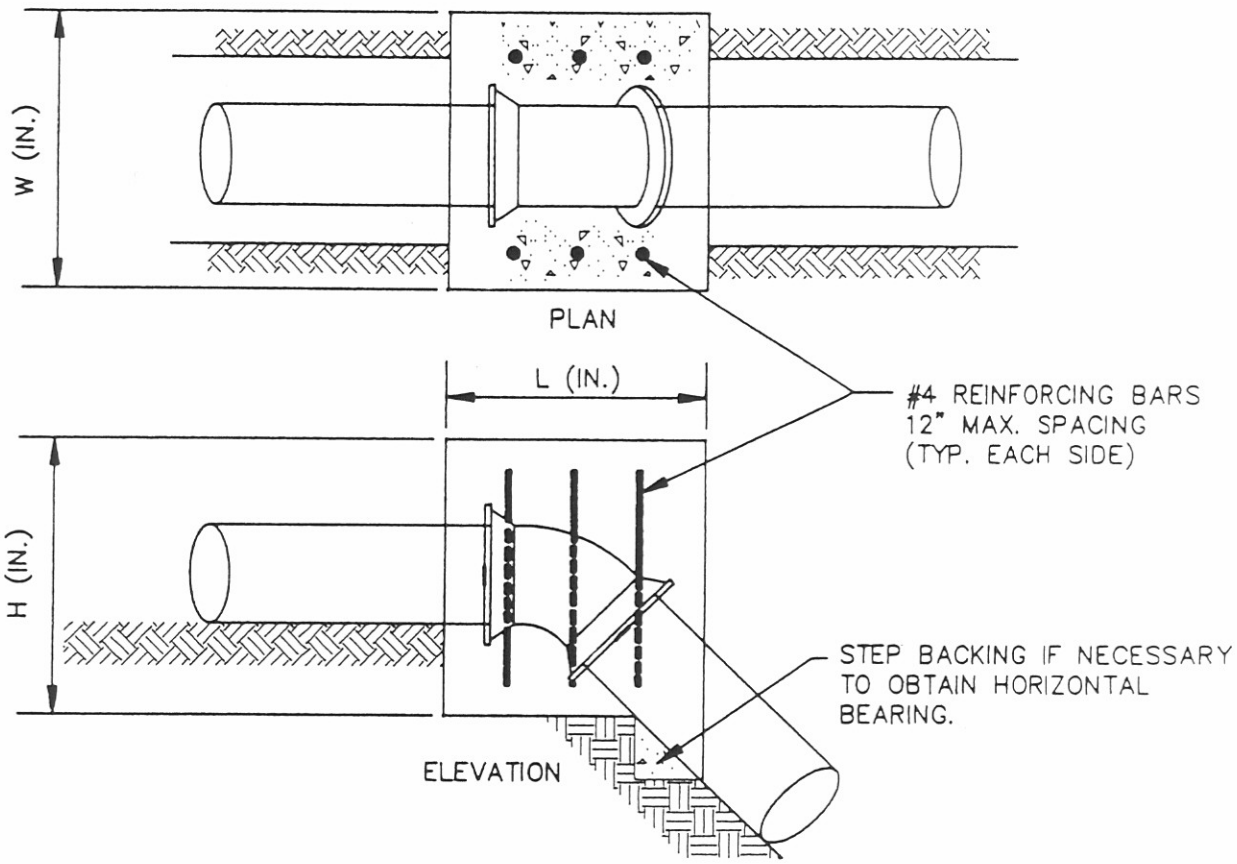

VERTICAL BENDS

SIZE OF PIPE (D)	DEGREE OF BEND											
	11 1/4°			22 1/2°			45°			90°		
	L	W	H	L	W	H	L	W	H	L	W	H
3"	12	18	15	13	24	15	18	30	16	25	30	20
4"	13	24	16	16	30	16	25	30	20	27	40	24
6"	15	36	18	27	36	18	30	44	24	36	45	36
8"	20	40	20	28	48	22	34	50	34	43	58	42
10"	24	44	22	32	54	27	40	55	40	51	64	50
12"	32	48	24	36	60	30	46	60	46	60	66	59
14"	34	54	26	40	60	38	54	60	53	66	73	66
16"	35	60	30	42	66	42	59	66	58	72	80	72
18"	36	66	32	48	66	46	66	66	65	75	94	74
20"	38	70	36	54	66	50	68	76	68	78	106	78
24"	42	72	44	60	72	60	78	84	77	90	114	90

NOTES:
1. BLOCKING TO BE CENTERED ON BEND HORIZONTALLY.
2. ALL CONCRETE TO BE FILL CONCRETE.
3. L & W & H DIMENSIONS ARE IN INCHES.
4. BLOCKING DESIGN BASED ON A WORKING PRESSURE OF 125 P.S.I. AND A SOIL BEARING OF 3000 LB./SQ.FT.

CITY OF NEW PHILADELPHIA	STANDARD CONSTRUCTION DRAWING NO.
THRUST BLOCKING DETAILS VERTICAL BENDS	SD-101 REV. 6-92