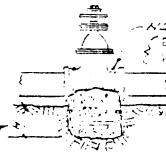
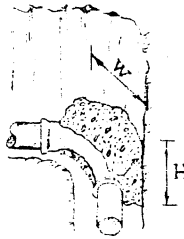
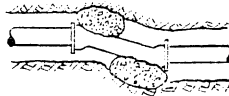
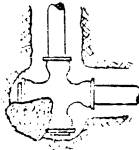
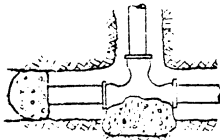
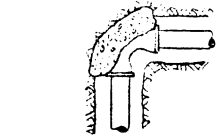


### THRUST BLOCK TABLES

PIPE SIZE "	TYPE OF FITTING	SAFE SOIL BEARING #/SQ. FT.	THRUST BLOCK DIMENSIONS		SAFE SOIL BEARING #/SQ. FT.	THRUST BLOCK DIMENSIONS		SAFE SOIL BEARING #/SQ. FT.	THRUST BLOCK DIMENSIONS		SAFE SOIL BEARING #/SQ. FT.	THRUST BLOCK DIMENSIONS	
			CLASS 150 HGT. - WIDTH	CLASS 200 HGT. - WIDTH		CLASS 150 HGT. - WIDTH	CLASS 200 HGT. - WIDTH		CLASS 150 HGT. - WIDTH	CLASS 200 HGT. - WIDTH			
16	TEE	1500	5' x 7'	6' x 7'	2000	4' x 7'	5' x 6'	3000	4' x 5'	4' x 5'	5000	3' x 3'	3' x 4'
16	90° BEND	1500	5' x 10	6' x 10	2000	5' x 8	5' x 9	3000	4' x 6	5' x 6	5000	3' x 5	3' x 6
16	45° BEND	1500	4' x 7	4' x 8	2000	4' x 5	4' x 6	3000	3' x 5	4' x 4	5000	2' x 4	2' x 5
16	22½° BEND	1500	3' x 5	4' x 4	2000	3' x 4	3' x 4	3000	2' x 4	3' x 3	5000	2' x 2	2' x 3
14	TEE	1500	4' x 7	4' x 8	2000	4' x 5	4' x 6	3000	3' x 5	4' x 4	5000	3' x 3	2' x 5
14	90° BEND	1500	5' x 10	5' x 9	2000	5' x 8	5' x 7	3000	5' x 5	4' x 6	5000	3' x 5	3' x 6
14	45° BEND	1500	4' x 5	4' x 6	2000	4' x 4	3' x 6	3000	3' x 4	3' x 4	5000	2' x 3	2' x 5
14	22½° BEND	1500	3' x 4	3' x 4	2000	2' x 4	3' x 3	3000	2' x 3	2' x 6	5000	1' x 3	2' x 2
12	TEE	1500	4' x 5	4' x 6	2000	3' x 5	3' x 6	3000	3' x 4	3' x 4	5000	2' x 3	2' x 4
12	90° BEND	1500	4' x 7	4' x 8	2000	4' x 6	4' x 6	3000	3' x 5	4' x 4	5000	3' x 3	2' x 5
12	45° BEND	1500	4' x 4	3' x 6	2000	3' x 4	3' x 5	3000	2' x 4	3' x 3	5000	2' x 3	2' x 3
12	22½° BEND	1500	2' x 4	3' x 3	2000	2' x 3	2' x 4	3000	2' x 2	2' x 3	5000	1' x 3	1' x 3
8	TEE	1500	3' x 3	2' x 5	2000	2' x 3	2' x 4	3000	2' x 3	2' x 3	5000	1' x 3	1' x 3
8	90° BEND	1500	3' x 4	3' x 5	2000	3' x 3	3' x 4	3000	2' x 3	2' x 4	5000	2' x 2	2' x 3
8	45° BEND	1500	2' x 4	2' x 4	2000	2' x 3	2' x 6	3000	2' x 2	2' x 2	5000	1' x 2	1' x 3
8	22½° BEND	1500	2' x 2	2' x 2	2000	1' x 3	1' x 3	3000	1' x 2	1' x 2	5000	1' x 1	1' x 1
6	TEE	1500	2' x 3	2' x 3	2000	2' x 2	2' x 2	3000	1' x 3	1' x 3	5000	1' x 2	1' x 2
6	90° BEND	1500	2' x 4	2' x 4	2000	2' x 3	2' x 3	3000	2' x 2	2' x 2	5000	1' x 2	1' x 3
6	45° BEND	1500	2' x 2	2' x 2	2000	1' x 3	2' x 2	3000	1' x 2	1' x 3	5000	1' x 1	1' x 2
6	22½° BEND	1500	1' x 2	1' x 2	2000	1' x 2	1' x 2	3000	1' x 1	1' x 1	5000	1' x 1	1' x 1
4	TEE	1500	1' x 3	1' x 3	2000	1' x 2	1' x 2	3000	1' x 2	1' x 2	5000	1' x 1	1' x 1
4	90° BEND	1500	2' x 2	2' x 2	2000	1' x 3	1' x 3	3000	1' x 2	1' x 2	5000	1' x 1	1' x 1
4	45° BEND	1500	1' x 3	1' x 2	2000	1' x 2	1' x 2	3000	1' x 1	1' x 1	5000	0	1' x 1
4	22½° BEND	1500	1' x 1	1' x 1	2000	1' x 1	1' x 1	2000	0	1' x 1	5000	0	0

### NOTES

1. CONCRETE THRUST BLOCKS ARE TO BE POURED AGAINST UNDISTURBED EARTH.
2. CONCRETE THRUST BLOCKS SHALL BE OF CLASS 'C' (4 1/2 SACK MIX) CONCRETE.
3. ALL GATE VALVES SHALL BE SUPPORTED PER DETAIL 'A' BELOW, & STD. DWG. B-235 & B-279.
4. PLUG ALL STUBS PER DWG. B-214.
5. ALL CONCRETE SHALL BE REQUIRED TO AVOID INTERFERENCE WITH BOLTED CONNECTIONS.
6. WHERE PIPE CONNECTS TO A FITTING IN A STEEL PIPELINE, THE STEEL PIPELINE SHALL BE BLOCKED AS SHOWN HEREON.



APPLIES TO HUB-  
END VALVES ONLY

PLAN VIEW

PERSPECTIVE VIEW

DETAIL 'A'

### TYPICAL THRUST BLOCK INSTALLATION

REVISIONS					REFERENCES			SCALE	NONE	DATE	EASTERN MUNICIPAL WATER DISTRICT RIVERSIDE COUNTY, CALIFORNIA	
NO.	DATE	INITIAL	DESCRIPTION	APP'YD	TRANSITE PIPE MANUAL			DESIGNED				
1	10-11-69	JED	ADD NOTE 6, & REVISE TABLES	[Signature]				DRAWN	JED		STANDARD DRAWING <b>THRUST BLOCK INSTALLATION</b> FOR HUB-END PIPE - CLASS 150 & 200	
2	10-21-69	MCM	REVISE TABLES	[Signature]				TRACED				
3	7-23-71	SPW	ADDED CLASS 200	[Signature]				CHECKED			APPROVED <i>[Signature]</i> GENERAL MANAGER & CHIEF ENGINEER	
4	2-16-73	MCM	REVISED TITLE TO SAY "HUB-END PIPE"	[Signature]				SUBMITTED	LAM			
					DESIGN	CONSTRUCTION	OPERATIONS	RECOMMENDED				A