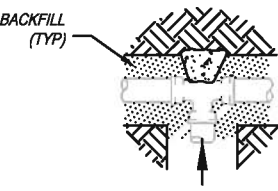
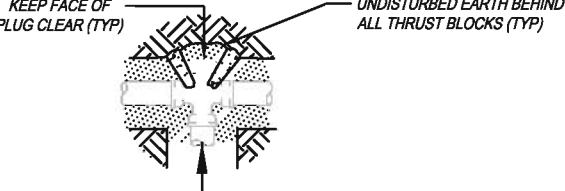
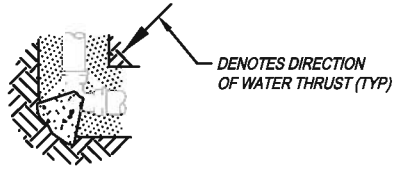





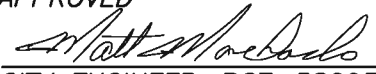


	TYPE OF FITTING	REQUIRED TOTAL BEARING AREAS, SQUARE FEET					
		PIPE SIZES					
		6"	8"	10"	12"	14"	16"
	TEE OR DEAD END	2	3	4.5	6	8	10
	CROSS AND PLUG	3	4.5	6.5	9	12	15
	90° ELBOW	2.5	4	6	9	11	14
	45° ELBOW	1.5	2.5	3.5	5	6	8
	22-1/2° ELBOW	1	1	2	2.5	3	4
	CROSS AND PLUGS	2.5	4	6	9	11	14
	TEE AND PLUGS	2.5	4	6	9	11	14

**NOTES:**

1. THE ABOVE MENTIONED BEARING AREAS ARE BASED ON 100 psi SERVICE PRESSURE, AND 2,000 psi SOIL BEARING CAPACITY. WHERE SOIL CONDITIONS REQUIRE ADJUSTMENT OF ALLOWABLE BEARING PRESSURE, IN THE OPINION OF THE ENGINEER, REQUIRED BLOCKING AREAS WILL BE ADJUSTED.
2. FOR PIPE SIZES LARGER THAN THAT SHOWN, THE DESIGN ENGINEER SHALL SUBMIT DESIGN CALCULATIONS FOR THRUST BLOCKS.
3. WHEN USING THRUST BLOCKS, RESTRAINT JOINTS ARE NOT REQUIRED.
4. VISQUEEN SHALL BE PLACED BETWEEN ALL THRUST BLOCKS AND PIPE FITTINGS.

NO.	REVISED	BY	<b>Thrust Block Details</b>	APPROVED
	3/2002	M		
DRAWN BY: MCP			<b>CITY OF RIPON</b>	CITY ENGINEER RCE-58093
CHECKED BY: DJR				DATE:
V: 1.25 City of Ripon Standards   Standard Specifications   Drawings   Water   w-12.dwg			STANDARD NO.	<b>W-12</b>