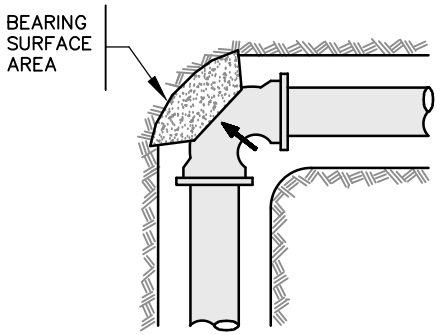
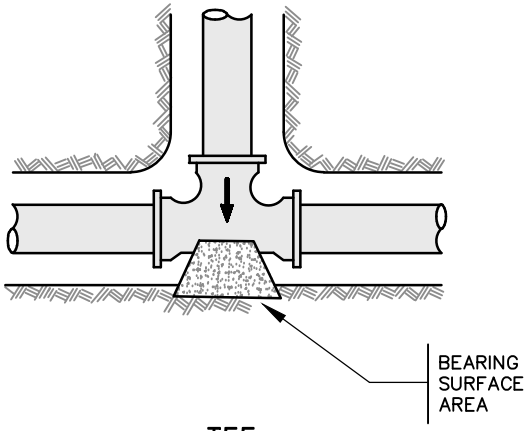
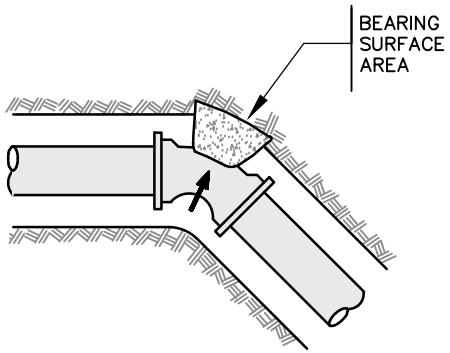


90°
ELBOW



TEE



(45° – 22 1/2° – 11 1/4°)
ELBOW

MIN. BEARING SURFACE AREA (sq. ft. of undisturbed earth) [2,3]

PIPE SIZE	TEES[1], PLUG OR DEAD END	90° ELBOW	45° ELBOW	22 1/2° ELBOW	11 1/4° ELBOW
2"	1/2	1/2	1/2	1/2	1/2
4"	1	1–1/2	1	1/2	1/2
6"	2	3	2	1	1
8"	4	5	3	1–1/2	1
10"	6	8	5	3	2
12"	8	12	6	3	3

NOTES:

1. BRANCH OUTLET SIZE.
2. AREAS BASED ON 150 PSI. WATER PRESSURE AND 2000 PSF. ALLOWABLE SOIL BEARING CAPACITY.
3. FOR SOFT OR DAMP CLAY, DOUBLE THE MIN. BEARING SURFACE AREA.
4. PORTLAND CEMENT SHALL BE – 6 SACK – 2" SLUMP – 3/4" ROCK.

Drawn By:	DUC L.
Checked By:	AHMED A. / JAMES M.
Approved By:	SHILPA M.
Revised Date:	2/1/2023

Signature:

Director of
Water and Sewer Utilities

CITY OF SANTA CLARA
WATER AND SEWER UTILITIES - STANDARD NO. **21**

THRUST BLOCK