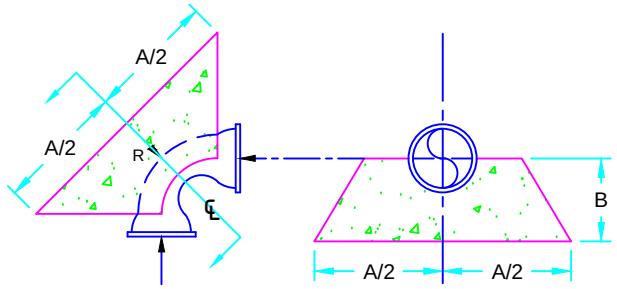
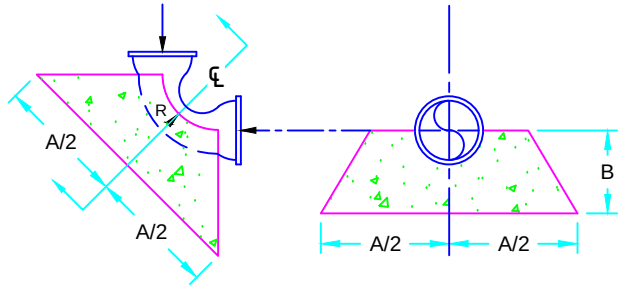
NOMINAL DIAMETER (mm)	EFFECTIVE AREA (m²)	BENDS --- HORIZONTAL & VERTICAL --- UP																				TEE & DEAD END				
		90°					45°					22 1/2°					11 1/4°									
		R	b AREA	A	B	CONC	R	b AREA	A	B	CONC	R	b AREA	A	B	CONC	R	b AREA	A	B	CONC	R	b AREA	A	B	CONC
100	0.012	1.74	0.14	375	300	0.04	0.94	0.08	300	300	0.04	0.37	0.03	300	300	0.04	0.24	0.02	300	300	0.04	1.23	0.10	375	450	0.04
150	0.024	3.61	0.30	525	300	0.04	1.95	0.16	450	300	0.04	1.00	0.08	300	300	0.04	0.50	0.04	300	300	0.04	2.55	0.21	450	450	0.04
200	0.042	6.21	0.51	750	450	0.19	3.36	0.27	525	450	0.04	1.71	0.14	375	450	0.04	0.86	0.07	300	450	0.04	4.39	0.36	600	450	0.08
250	0.063	9.21	0.75	900	450	0.19	5.03	0.41	675	450	0.08	2.61	0.21	450	450	0.04	1.29	0.11	375	450	0.04	6.58	0.54	750	450	0.19
300	0.088	13.24	1.09	1100	450	0.38	7.12	0.58	750	450	0.19	3.65	0.30	525	450	0.04	1.84	0.15	375	450	0.04	9.34	0.76	900	525	0.19



PLAN SECTION

HORIZONTAL BEND



PLAN SECTION

VERTICAL BEND UPWARD

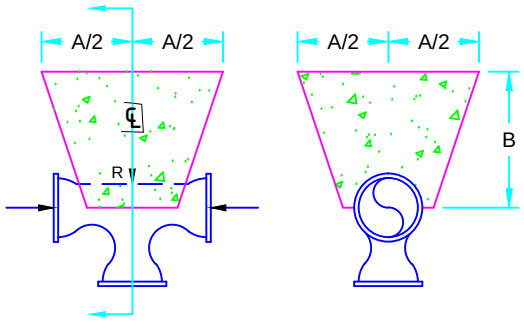
ABBREVIATIONS:

R - REACTION IN 1000kg

b AREA - MINIMUM BEARING AREA AT SOIL TO CONCRETE FACE IN m^3

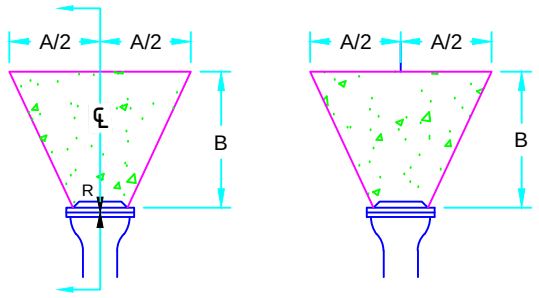
CONC - VOLUME OF CONCRETE IN m^3

A & B - DIMENSION OF CONCRETE IN mm UNLESS OTHERWISE SHOWN



PLAN SECTION

TEE



PLAN SECTION

DEAD END

NOTES:

1. CONCRETE SHALL BE 25MPa 28 DAY STRENGTH.
2. BLOCKS SHALL BE POURED DIRECTLY AGAINST UNDISTURBED SOIL AS INDICATED.
3. DESIGN DATA - STATIC PRESSURE 1000KPa.
   - MINIMUM BEARING CAPACITY OF SOIL 120 KPa.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

MASTER SPECIFICATIONS	WATERMAIN THRUST BLOCKS A	DRAWING NUMBER 04590	DATE: MARCH 2016
			SCALE: N.T.S.