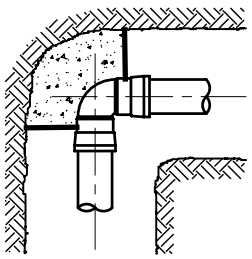
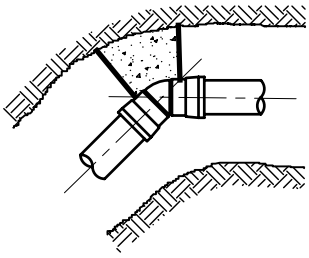
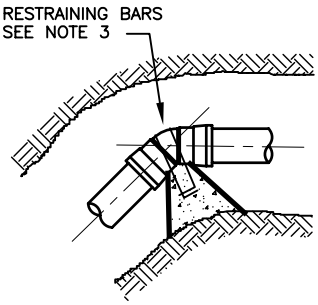


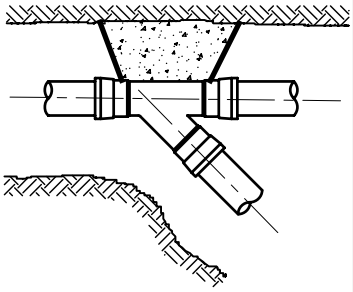
90 BEND



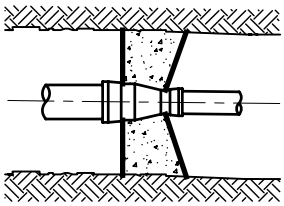
45 or 22.5
BEND



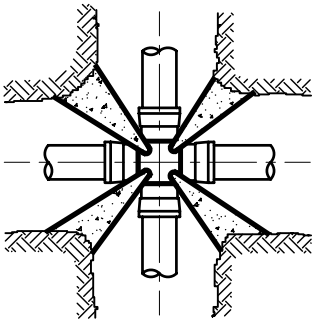
VERTICAL BEND



TEE or WYE

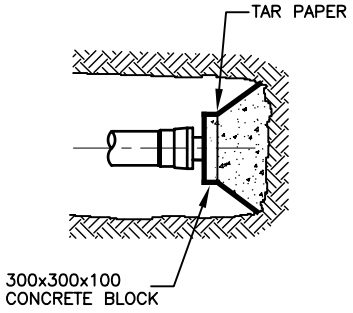


REDUCER

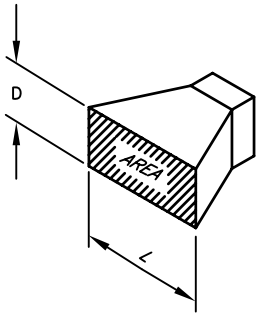


SEE NOTE 4

CROSS



PLUGGED END



MINIMUM THRUST AREA BASED ON WATER PRESSURE OF – 1000KPa (150psi)
& SOIL BEARING CAPACITY OF – 100KPa (2000psf)

FITTING	PIPE SIZE	AREA SQ. METERS	L x D AT FACE
90° BEND	100	0.2	0.7 x 0.3m
	150	0.4	1.0 x 0.4m
	200	0.7	1.2 x 0.6m
	250	1.1	2.0 x 0.6m
	300	1.6	2.0 x 0.8m
45° BEND or WYE	100	0.2	0.7 x 0.3m
	150	0.3	1.0 x 0.3m
	200	0.4	1.0 x 0.4m
	250	0.6	1.0 x 0.6m
	300	0.9	1.5 x 0.6m

FITTING	PIPE SIZE	AREA SQ. METERS	L x D AT FACE
22.5° BEND	100	0.1	0.5 x 0.2m
	150	0.2	0.7 x 0.3m
	200	0.2	0.7 x 0.3m
	250	0.3	0.8 x 0.4m
	300	0.5	1.0 x 0.5m
CAPPED END OR TEE	100	0.2	0.7 x 0.3m
	150	0.3	0.8 x 0.4m
	200	0.5	1.0 x 0.5m
	250	0.8	1.2 x 0.7m
	300	1.1	1.4 x 0.8m

NOTES:
1. SOIL BEARING CAPACITY USED IS THAT FOR SOFT CLAY, FOR SOFTER SOILS THRUST BLOCKS SHALL BE DESIGNED BY THE ENGINEER.
2. THRUST BLOCKING FOR FITTINGS LARGER THAN 300 ø SHALL BE DESIGNED BY THE ENGINEER.
3. VOLUME OF CONCRETE IN VERTICAL BEND ANCHORS TO BE DETERMINED BY THE ENGINEER. USE 2–20M RETAINING BARS PER CUBIC METRE.
4. FOR CROSSES USE VALUE FOR 45° BEND IN EACH QUADRANT.
5. WHERE PIPE SIZE DIFFERS IN ANY ONE FITTING USE VALUE FOR LARGEST SIZE.
6. CONCRETE NOT TO ENCROACH ON PIPE BARREL, BUT TO BEAR ON FITTING ONLY.
7. CONCRETE TO BE 20MPa (3000psi) COMPRESSIVE STRENGTH.

Making a difference...together

CONCRETE THRUST BLOCK DETAILS

revision date: APRIL 2007	scale: N.T.S.
drawn: P.J.	checked: C. GOTTFRED

standard drawing no.:
1.8