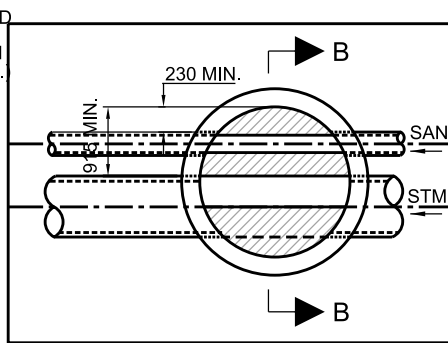
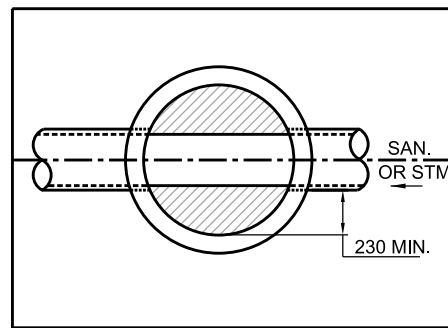


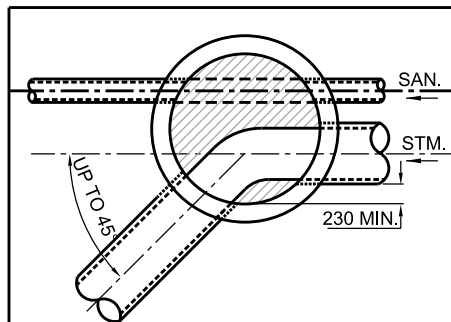
1. DUAL PIPE - STORM M.H. STRAIGHT RUNS



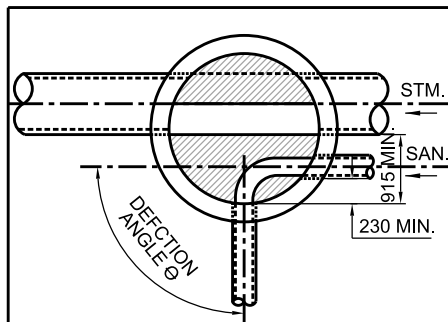
2. DUAL PIPE - SANITARY M.H. STRAIGHT RUNS



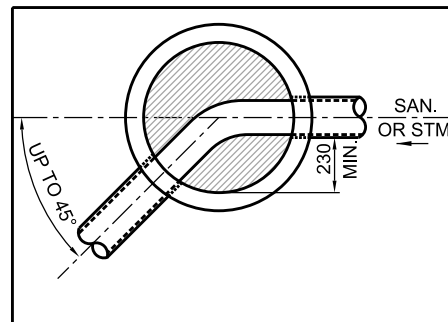
3. SINGLE PIPE STRAIGHT RUN



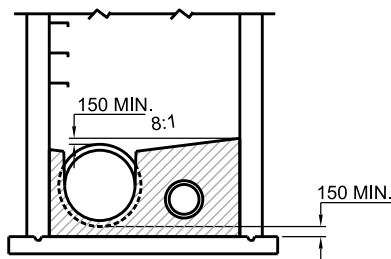
4. DUAL PIPE - STORM M.H. UP TO 45° BEND



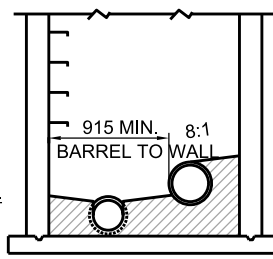
5. DUAL PIPE - SANITARY M.H. UP TO 90° BEND



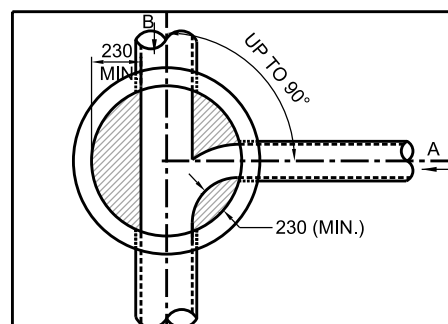
6. SINGLE PIPE UP TO 45° BEND



SECTION A



SECTION B



7. TEE / WYE INTERSECTION < 90° BEND

PRECAST M.H. SIZE	MAXIMUM PIPE SIZE					
	No. 1, 4		No. 2		No. 3	No. 6
	SAN. mm	STORM mm	SAN. mm	STORM mm	SAN./STM. mm	SAN./STM. mm
1500	250	300 TO 600	250	300 TO 525	625	750
"	300	300 TO 525	300	300 TO 450	-	-
1800	250	675 TO 750	250	600 TO 675	1050	900
"	300	600 TO 675	300	525 TO 600	-	-
2400	300	MAX. 975	200	MAX. 900	1500	1200

PRECAST M.H. SIZE	MAXIMUM PIPE SIZE					
	No. 5			No. 7		
	DEFLECTION ANGLE	SAN. mm	STORM mm	OUTLETS mm	INLETS	
				mm	mm	DEFLECTION ANGLE
1500	0<θ<45°	250	300 TO 525	525	375	FOR > 45° BEND (A)
"	"	300	300 TO 450	"	525	FOR < 45° BEND (B)
1800	0<θ<45°	250	600 TO 675	600	375	FOR > 45° BEND (A)
"	"	300	525 TO 600	"	525	FOR < 45° BEND (B)
"	45<θ<90°	250	300 TO 525	-	-	-
"	"	300	300 TO 450	-	-	-
2400	0<θ<90°	300	MAX. 675	975	375	-

NOTES:

1. CONCRETE FOR BENCHING SHALL BE 32 MPa.
2. BENCHING TO BE GIVEN WOOD FLOAT FINISH, CHANNEL TO BE GIVEN STEEL TROWEL FINISH.
3. ALL DIMENSIONS ARE NOMINAL.
4. TOP OF BENCHING SHALL BE SLOPED NO GREATER THAN 8:1 (HORIZONTAL TO VERTICAL).
5. FOR STORM AND SANITARY SEWERS, BENCHING TO CROWN.

All dimensions are in millimetres unless otherwise shown.



ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING

REV 1

APR 2013

DUAL SYSTEM BENCHING DETAILS

T-701.022

NTS

SHEET 1