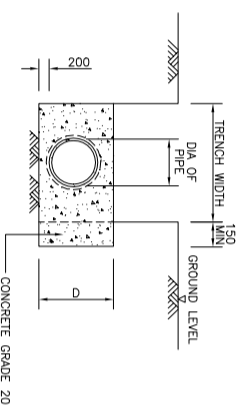


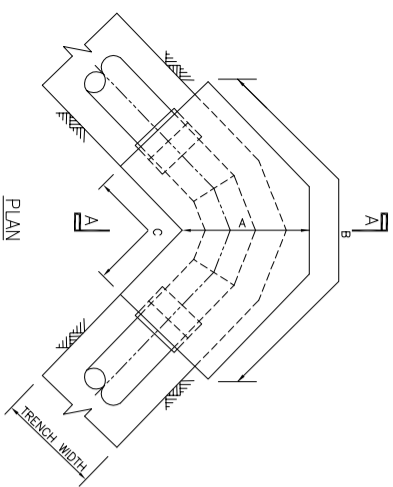
LESS THAN 30° BEND

SECTION A-A



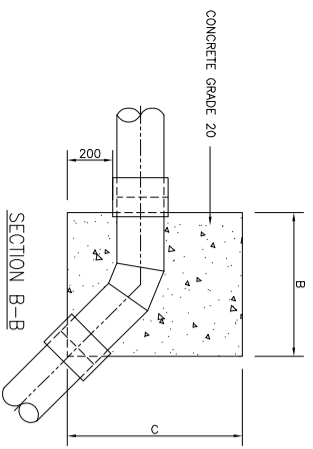
31° TO 60° BEND

SECTION A-A

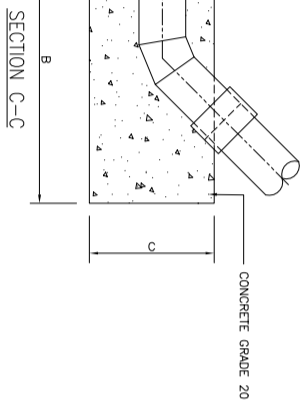


61° TO 90° BEND

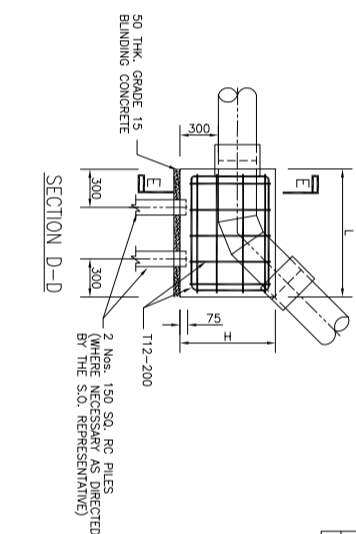
SECTION A-A



61° TO 90° BEND

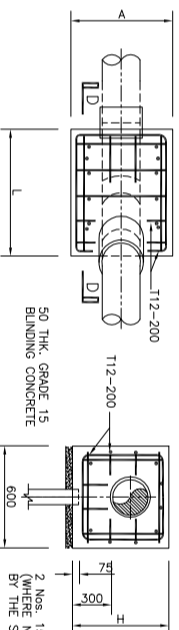


31° TO 60° BEND



THRUST BLOCK WITH RC PILE FOR OVER-CROSSING

SECTION D-D

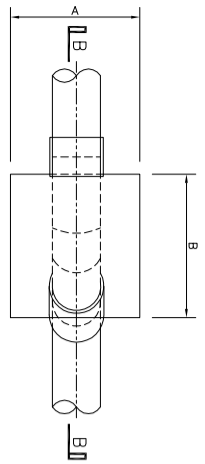


THRUST BLOCK WITH RC PILE FOR OVER-CROSSING

SECTION E-E

THRUST BLOCK FOR VERTICAL BEND (ACTING UPWARD)

PLAN



THRUST BLOCK FOR VERTICAL BEND (ACTING DOWNWARD)

PLAN

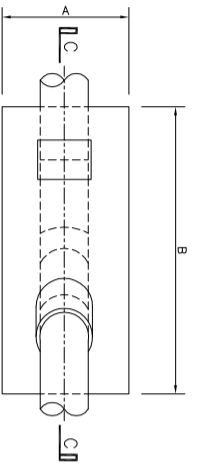


TABLE FOR CONCRETE THRUST BLOCK FOR HORIZONTAL BENDS

NOMINAL DIA. OF MS PIPE (mm)	BEND														
	UP TO 30°			OVER 30° TO 60°			OVER 60° TO 90°			OVER 90° TO 100°					
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
400	1050	1550	800	800	1050	2700	1050	1000	1050	3800	1050	1000	1000	1000	1000
350	1000	1300	600	750	1000	2350	750	850	1000	3200	800	900	950	700	700
300	950	1050	350	700	950	2050	600	700	950	2800	600	600	700	350	650
250	900	800	300	650	900	1500	350	650	900	2250	300	300	600	600	600
200	850	600	200	600	850	1150	300	600	850	1600	300	300	600	550	550
150	800	400	200	550	800	800	200	550	800	1200	200	200	500	500	500
100	750	300	200	500	750	700	200	500	750	1100	200	200	500	500	500

TABLE FOR CONCRETE THRUST BLOCK FOR VERTICAL BENDS (ACTING DOWNWARD)

NOMINAL DIA. OF MS PIPE (mm)	BEND														
	UP TO 15°			OVER 15° TO 30°			OVER 30° TO 45°			OVER 45° TO 60°					
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
400	900	950	800	1100	1500	800	1200	2000	1000	1000	1000	1000	1000	1000	1000
350	850	750	750	1000	1200	750	1100	1500	1000	1000	1000	1000	1000	1000	1000
300	800	600	700	800	1100	700	900	1400	900	900	900	900	900	900	900
250	750	400	650	750	800	650	750	1100	650	650	650	650	650	650	650
200	700	300	600	700	550	600	700	750	600	600	600	600	600	600	600
150	650	300	550	650	350	550	650	650	450	450	450	450	450	450	450
100	600	300	500	600	300	500	600	300	300	300	300	300	300	300	300

TABLE FOR CONCRETE THRUST BLOCK FOR VERTICAL BENDS (ACTING UPWARD)

NOMINAL DIA. OF MS PIPE (mm)	BEND														
	UP TO 15°			OVER 15° TO 30°			OVER 30° TO 45°			OVER 45° TO 60°					
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
400	900	950	800	1100	1500	800	1200	2000	1000	1000	1000	1000	1000	1000	1000
350	850	750	750	1000	1200	750	1100	1500	1000	1000	1000	1000	1000	1000	1000
300	800	600	700	800	1100	700	900	1400	900	900	900	900	900	900	900
250	750	400	650	750	800	650	750	1100	650	650	650	650	650	650	650
200	700	300	600	700	550	600	700	750	600	600	600	600	600	600	600
150	650	300	550	650	350	550	650	650	450	450	450	450	450	450	450
100	600	300	500	600	300	500	600	300	300	300	300	300	300	300	300

TABLE FOR CONCRETE THRUST BLOCK WITH RC PILE FOR OVER-CROSSING

No. OF PILE	MS PIPE ND (mm)		H	L	A
	400	850			
2 Nos.	350	800	1200	800	900
	300	750	1000	800	800
	250	700	1000	700	750
	200	650	1000	700	700
	150	600	1000	600	600

NOTE:

1. ALL DIMENSIONS ARE MILLIMETRE AND LEVELS ARE IN METRE UNLESS OTHERWISE STATED.
2. MASS CONCRETE GRADE 20.
3. ALLOWABLE BEARING PRESSURE = 75 kN/m².
4. TEST PRESSURE FOR THRUST BLOCKS IS BASED ON 100mm HEAD OF WATER.
5. DIMENSIONS OF THRUST BLOCKS TO BE INCREASED IF ACTUAL BEARING PRESSURE IS FOUND TO BE LESS THAN 75 kN/m².
6. DIMENSION 'A' OF THRUST BLOCK TO BE ADJUSTED BY THE S.O IF NECESSARY TO SUIT TRENCH WIDTH.
7. REINFORCED CONCRETE GRADE 25.
8. BLINDING CONCRETE GRADE 15.



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PROJECT:

DRAWING TITLE:

DETAILS OF THRUST BLOCK

DRAWN BY: MAZZ DESIGNED: W/C

CHECKED: MFB APPROVED: T/C

SCALE: NOT TO SCALE DATE: DECEMBER 2013

DRAWING NO: SAJ/STD/TB/01

REV. / REVISION BY / DESCRIPTION / DATE