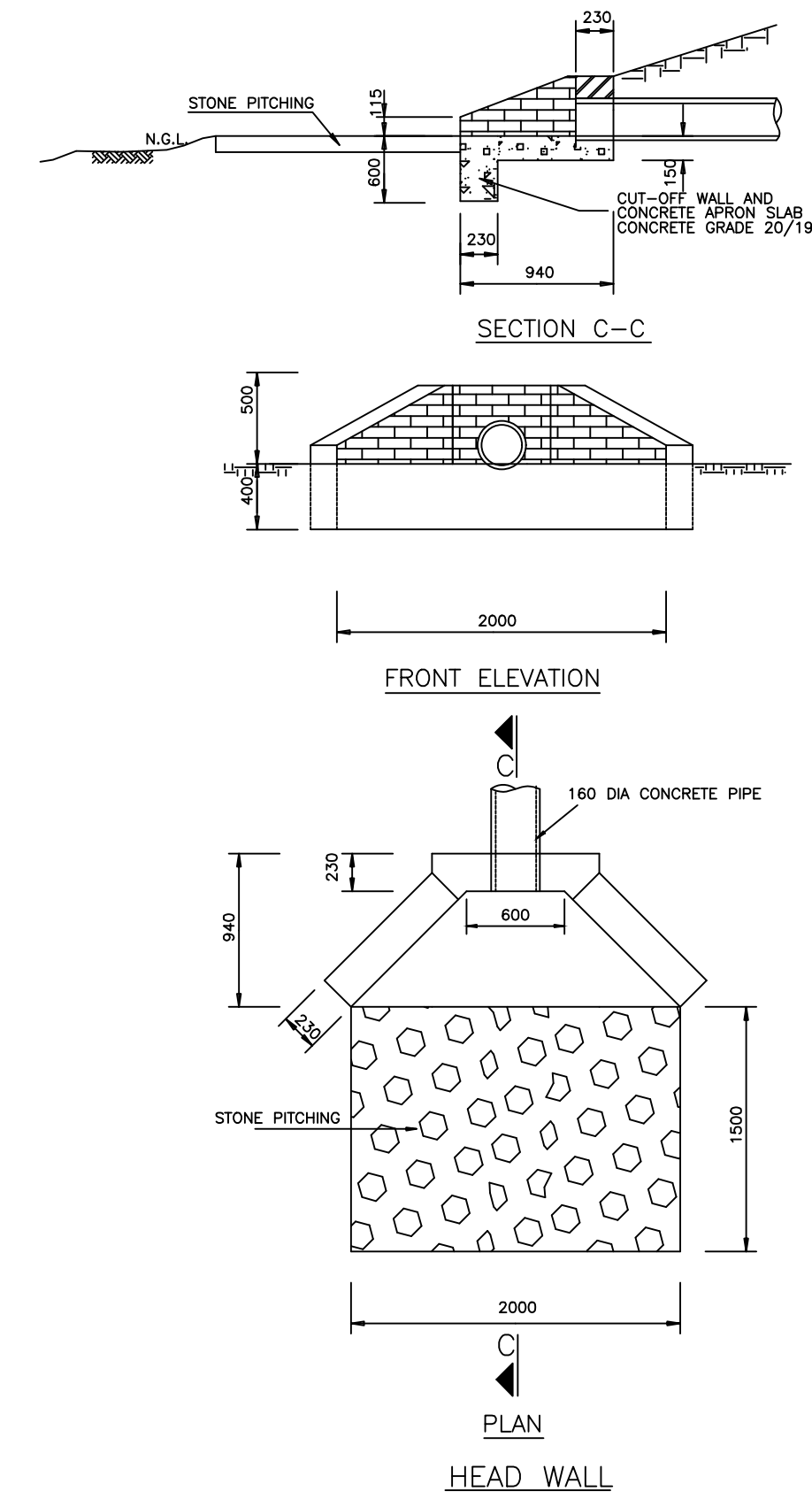
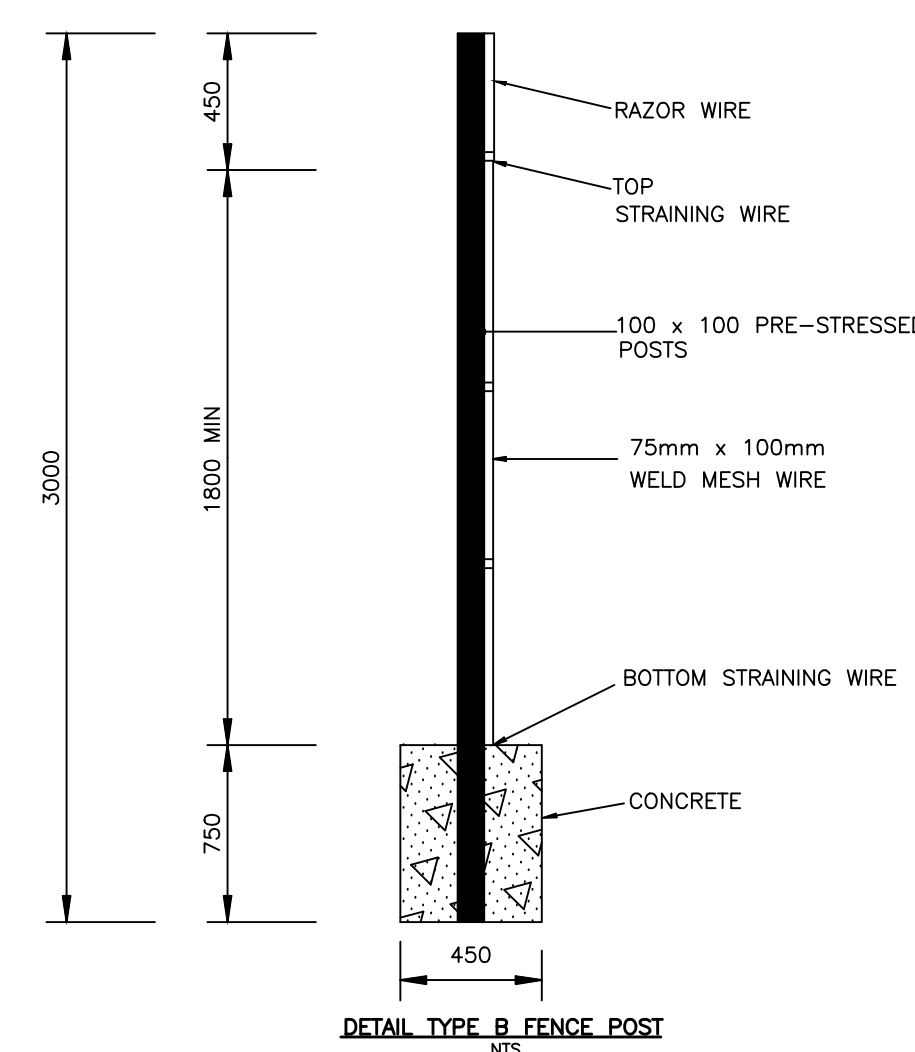


**FOR SECURITY FENCING**  
NOTE:  
1) No STRAINING WIRES.  
2) BBT-COILS TO BE EXTENDED NOT MORE THAN 10 000.



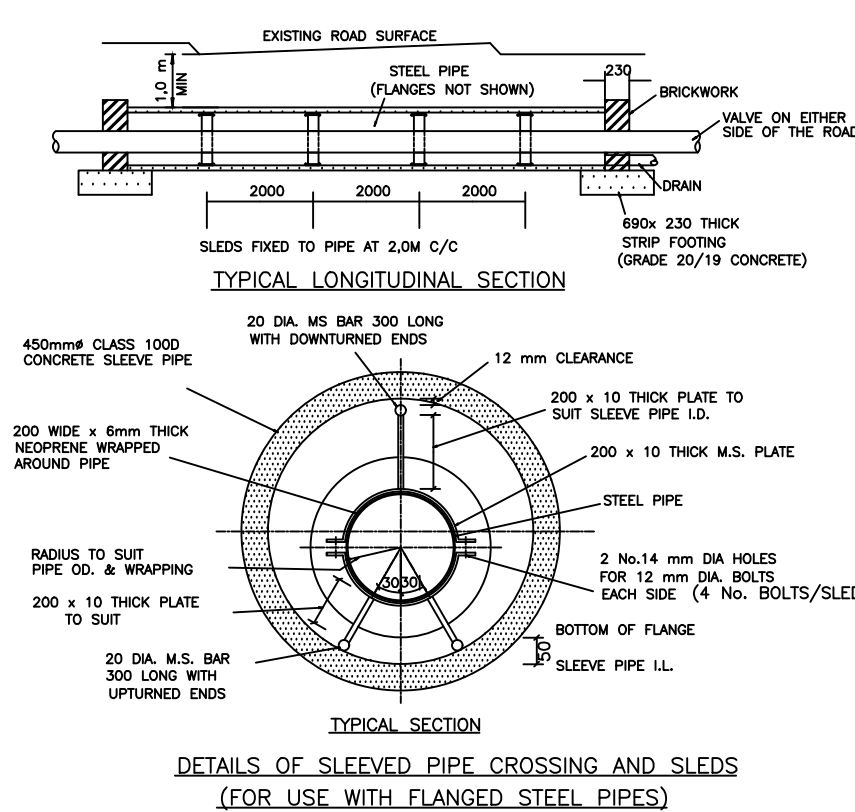
**THRUST BLOCKS : BENDS AND T-JUNCTIONS**  
MAX. TEST PRESSURE 900kPa : PIPE CLASS 12

PIPE D. (mm)	ANGLE OF BEND								T-JUNCTION OR END CAP	
	11,25°	22,5°	45°	90°	11,25°	22,5°	45°	90°	11,25°	22,5°
50	75	75	75	100	100	100	100	100	100	100
63	75	75	100	100	150	125	275	125	150	150
75	75	75	100	125	175	150	325	150	175	175
90	100	100	125	125	200	175	400	175	200	200
110	100	100	125	175	150	250	475	200	250	250
125	125	125	175	175	225	225	525	225	275	275
140	150	125	200	200	300	250	600	250	325	300
160	175	150	225	225	350	275	675	275	350	350
200	200	175	275	250	425	350	825	325	425	425
250	250	225	325	325	525	400	1000	375	525	500
315	300	275	400	400	650	500	1250	475	725	550

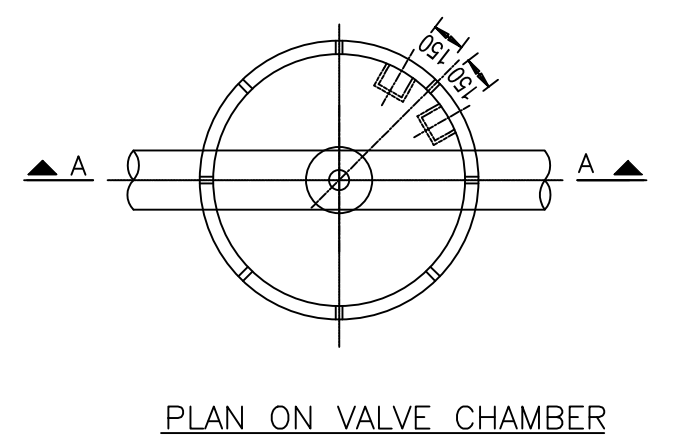
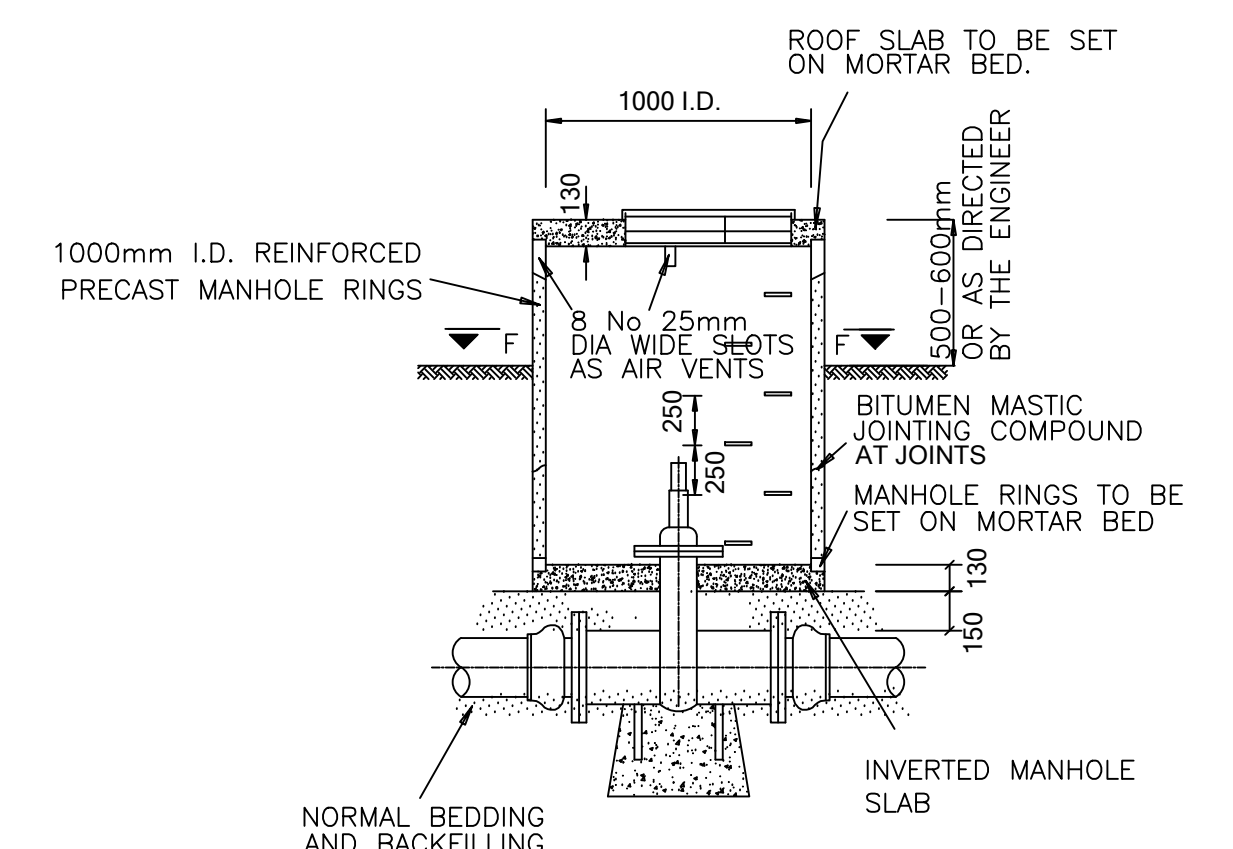
MAXIMUM DEPTH OF COVER IS 800mm.

NO THRUST BLOCKS WILL BE REQUIRED UNLESS OTHERWISE SHOWN FOR CHANGE OF DIRECTION LESSER THAN 10°

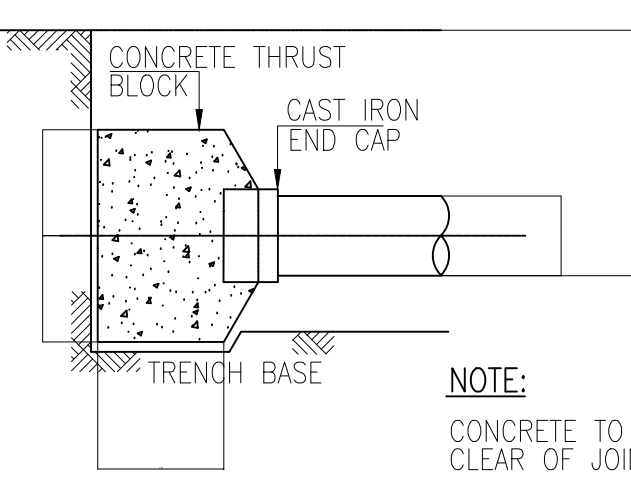
PIPE SIZE	CONCRETE SLEEVE SIZE
100mm	150mm
110mm & LOWER	200mm



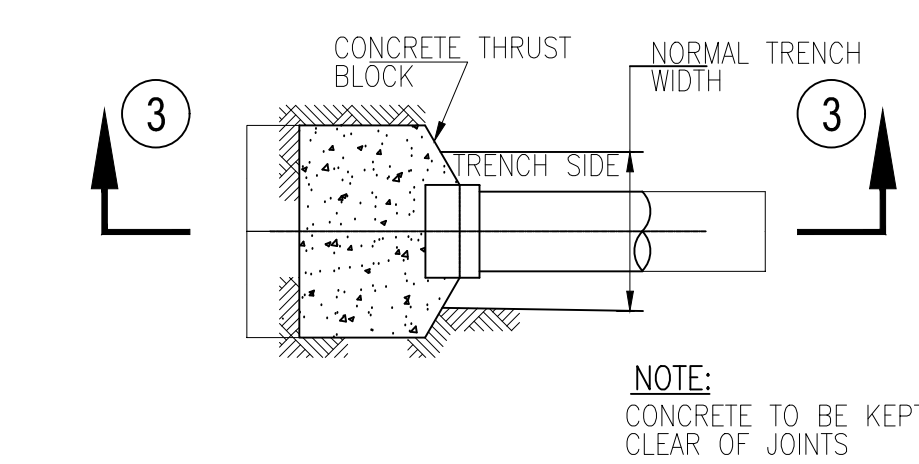
DETAILS OF SLEEVED PIPE CROSSING AND SLEDGES (FOR USE WITH FLANGED STEEL PIPES)



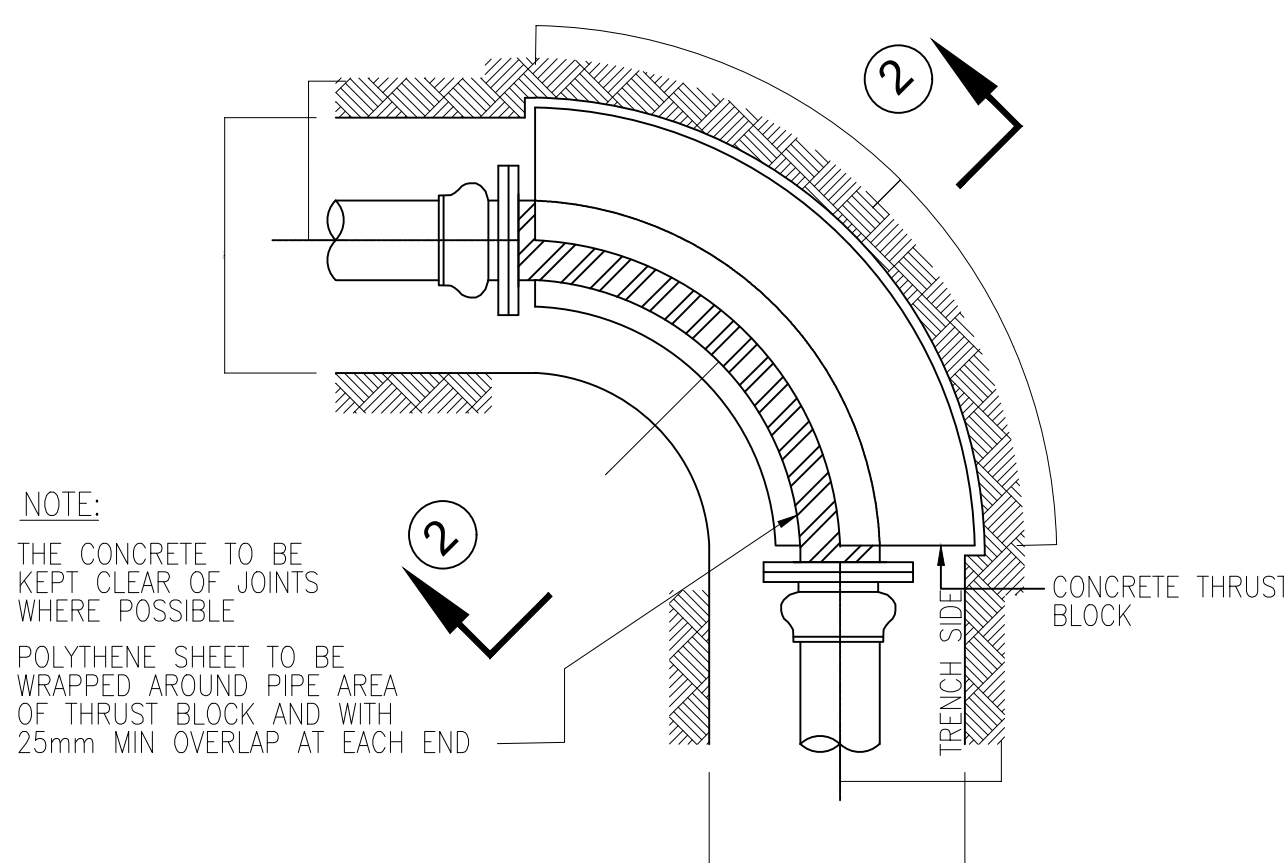
## DETAILS OF THRUST BLOCKS



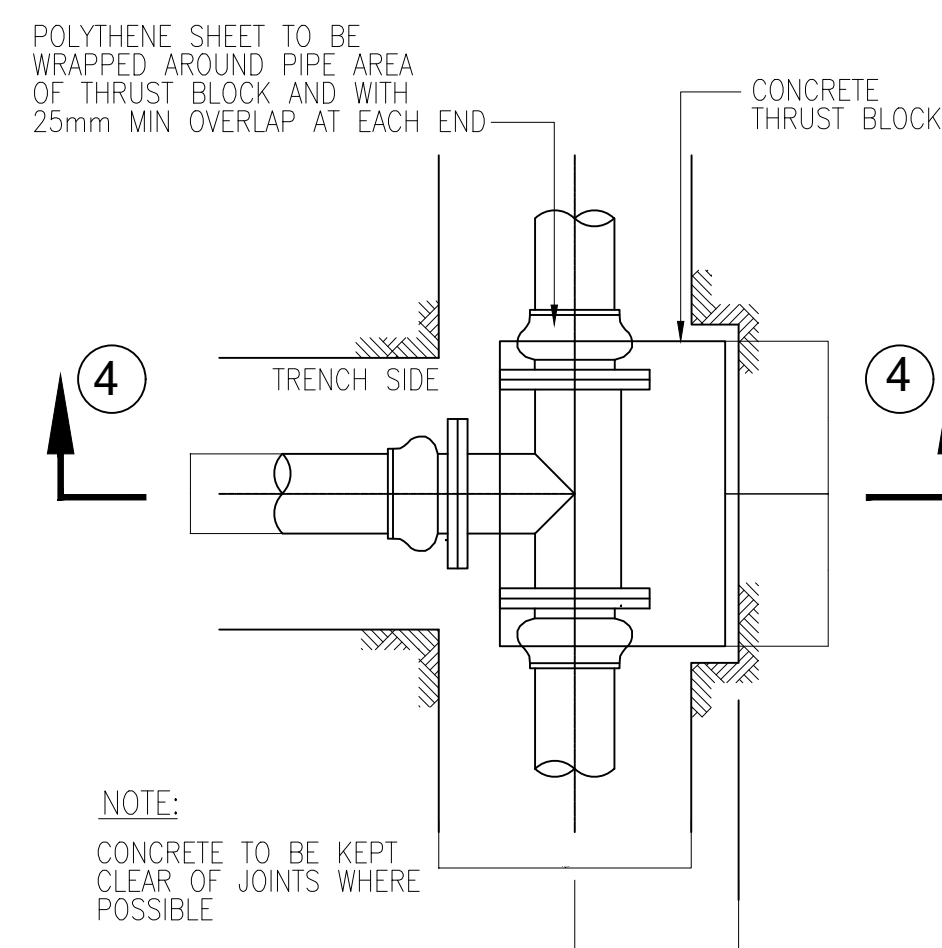
SECTION 3-3



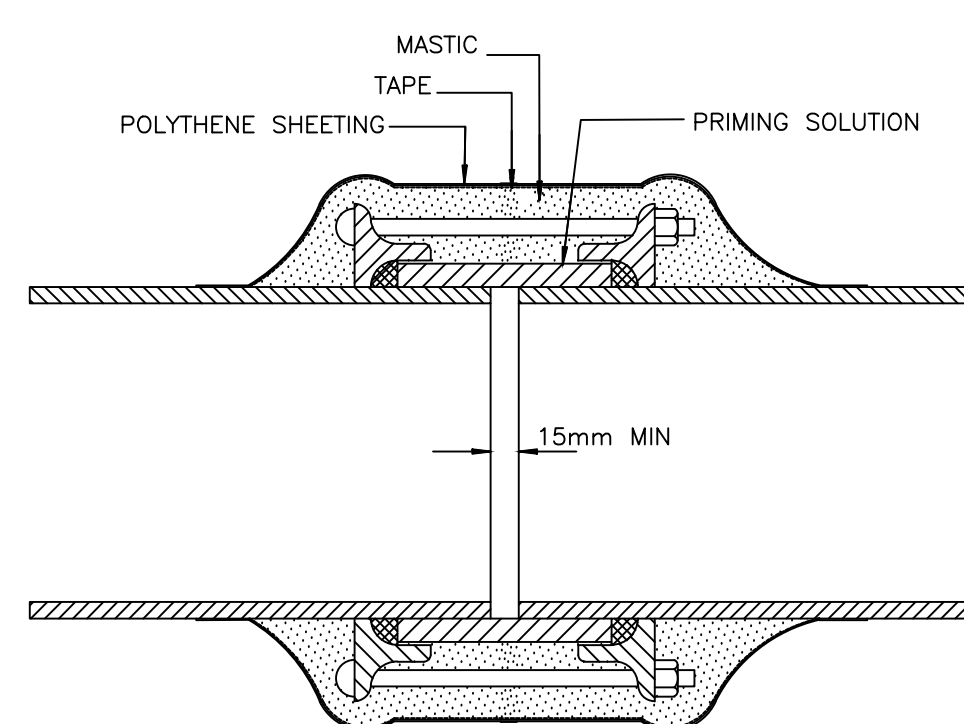
PLAN OF END CAP



PLAN OF BEND



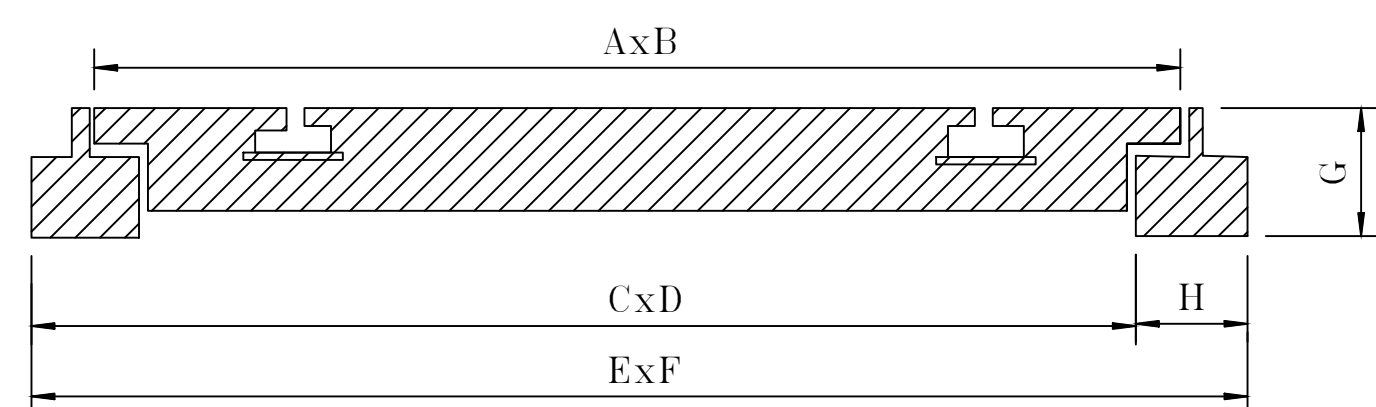
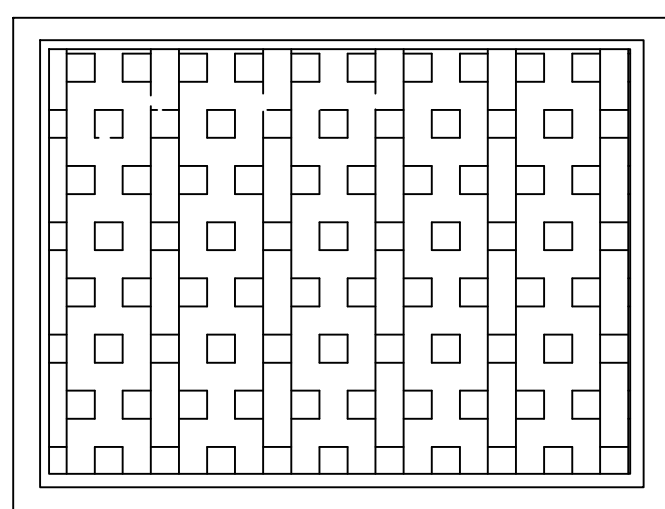
PLAN OF T-JUNCTION



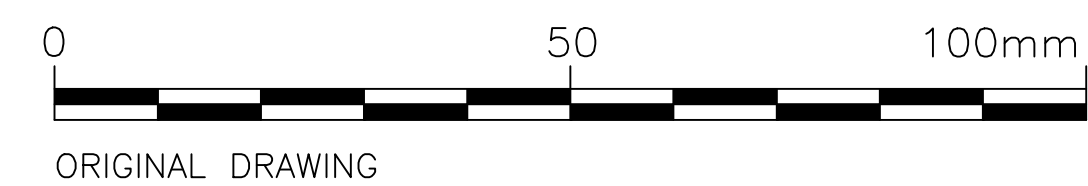
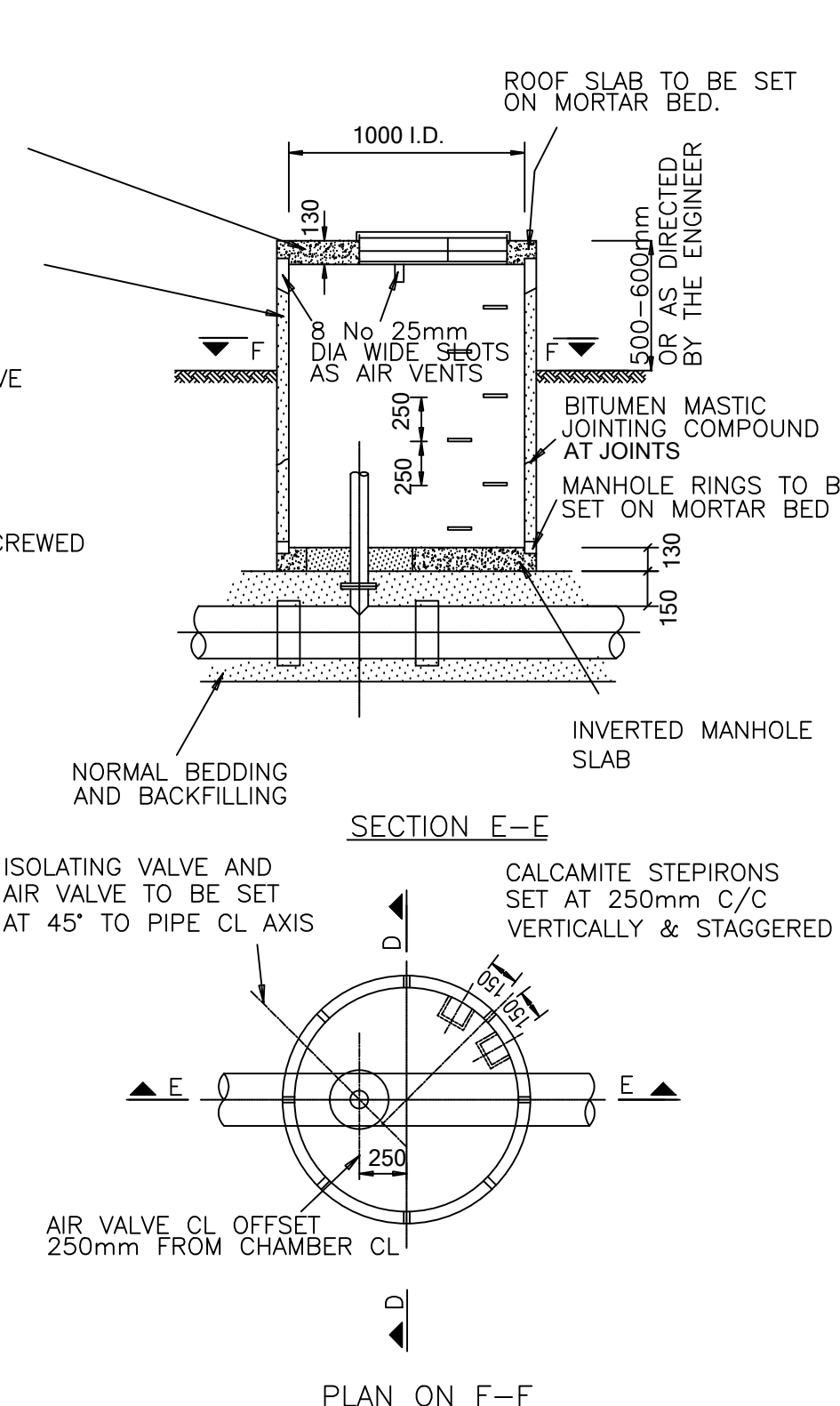
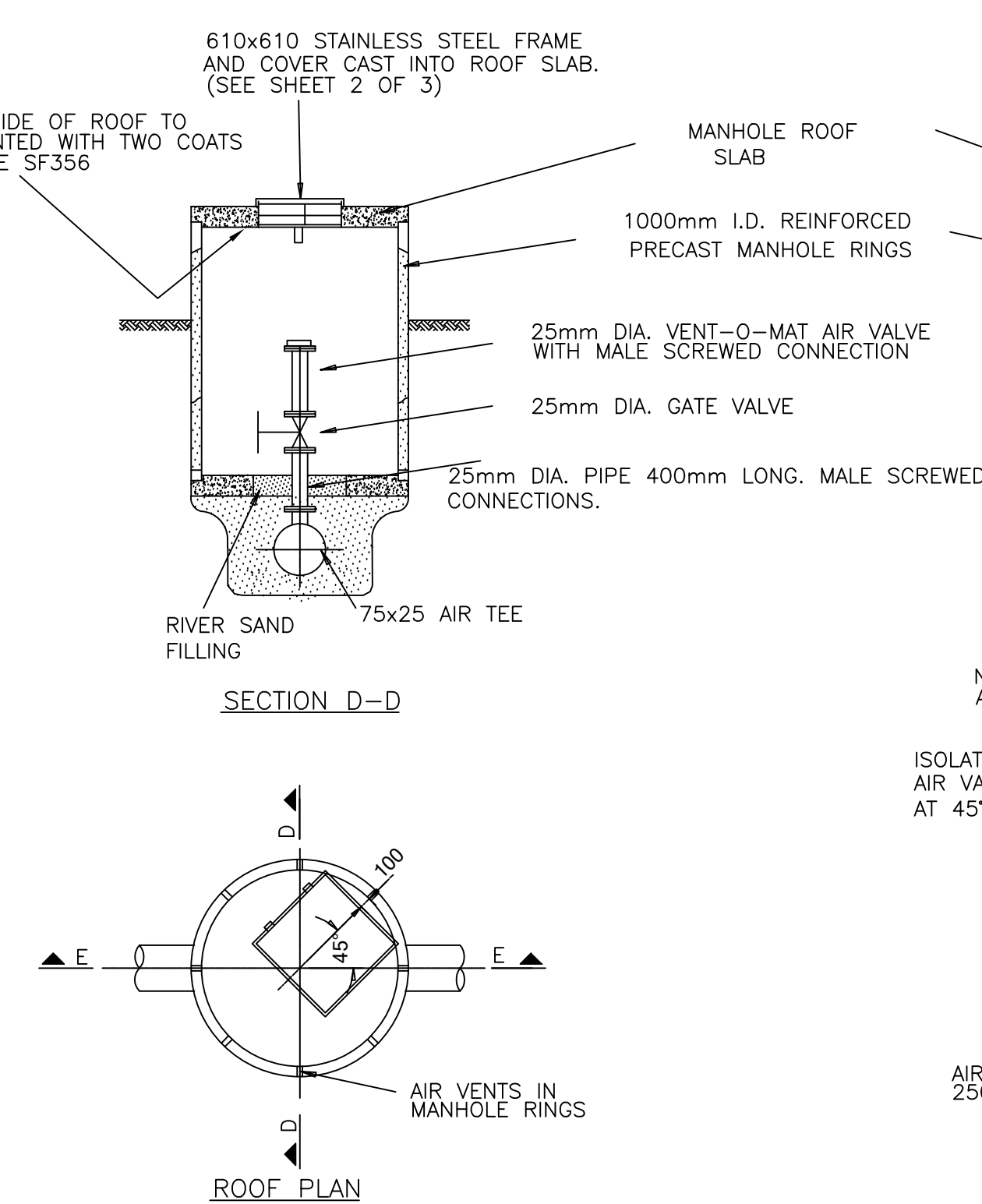
MASTIC PROTECTION TO FLANGED JOINTS, FLEXIBLE COUPLINGS AND FLANGE ADAPTORS TO BE AS SUPPLIED BY DENSOL PRODUCTS OR SIMILAR APPROVED.  
NOTE:  
1. APPLICATION TO BE IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS.  
2. MASTIC TO BE APPLIED AS SHOWN ABOVE AND MOULDED TO CONTOUR OF FLANGED JOINT/COUPLING, ENSURING ALL AIR IS EXPELLED.  
3. MASTIC TAPE TO OVERLAP 75mm CIRCUMFERENTIALLY.  
4. JOINT BY 100mm AND SECURED USING DUCT TAPE.  
(TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATION)

## ACCESS MANHOLE COVER DETAIL (SANS 1882:2003)

Code	Size	Type	Class	Force	Kg	A	B	C	D	E	F	G	H
119130	670mm	9D	M/D	40KN	39KG	670mm	530mm	595mm	450mm	760mm	620mm	80mm	75mm



SCALE: N.T.S.



								DESIGNED		G. MLAMBO		<div><div>ZIYANDA consulting</div></div> <div>TEL: (033) 346 0689 FAX: (033) 346 0692 E-mail: ziyanda@ziyandaconsulting.co.za</div> <div>PO BOX 809 HILTON PIETERMARITZBURG 3245</div> <div>APPROVED : _____ S. MGUTSHINI (PR ENG REG. No. 20040208)</div>		CLIENT:		<div><div>MHLATHUZE MUNICIPALITY</div></div>		IMPLEMENTING AGENT:		<div>PROJECT/DRAWING TITLE</div> <div>MHLATHUZE WATER</div> <div>WATER INTERVENTIONS FOR HOT SPOT AREAS</div> <div>UMHLABUYALINGANA MUNICIPALITY</div> <div>CONSTRUCTION OF 50 KL PREFABRICATED ELEVATED STEEL RESERVOIRS, RETICULATION PIPELINES AND DRILLING, EQUIPPING AND COMMISSIONING OF BOREHOLES AT EZINGENI AND THUNGWINI SUBWARDS UNDER THE UMHLABUYALINGANA MUNICIPALITY STANDARD DETAILS</div>		ALT. DWG. No.		CONTRACT No.	
								MW/YYY																	
								PROJECT No.																	
								J154																	
		O		ISSUED FOR TENDER		02/23		G.M		S.M						DRAWING No.		REVISION							
		Δ		REVISIONS		DATE		CHKD		APPRV						J154-D03		0							
				ONLY REVISIONS MARKED THUS Δ ARE VALID																					
No.				REFERENCE DRAWINGS																					

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TEL: (033) 346 0689  
FAX: (033) 346 0692  
E-mail: ziyanda@ziyandaconsulting.co.za  
APPROVED : S. MGUTSHINI (PR ENG REG. No. 20040208)

**CLIENT:** MLATHUZE WATER  
**IMPLEMENTING AGENT:** MLATHUZE WATER

**PROJECT/DRAWING TITLE:** MLATHUZE WATER  
WATER INTERVENTIONS FOR HOT SPOT AREAS  
UMHLABUYALINGANA MUNICIPALITY  
CONSTRUCTION OF 50 KL PREFABRICATED ELEVATED STEEL RESERVOIRS, RETICULATION PIPELINES AND DRILLING, EQUIPPING AND COMMISSIONING OF BOREHOLES AT EZINGENI AND THUNGWINI SUBWARDS UNDER THE UMHLABUYALINGANA MUNICIPALITY STANDARD DETAILS

**DRAWING STATUS:** ISSUED FOR TENDER  
**ORIGINAL SCALE:** AS SHOWN ON A0  
**ALT. DWG. No.:** CONTRACT No. MW/YYY  
**SHT. No. OF:** PROJECT No. J154  
**DRAWING No.:** J154-D03  
**REVISION:** 0