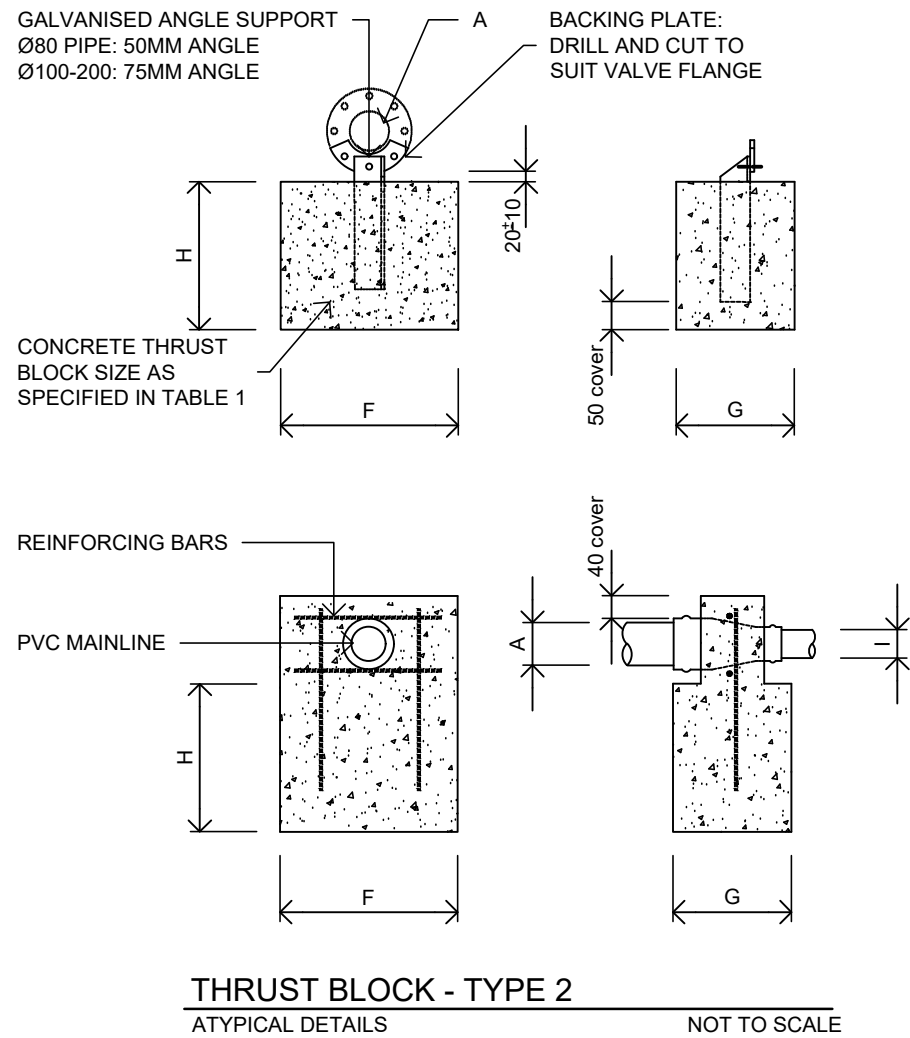
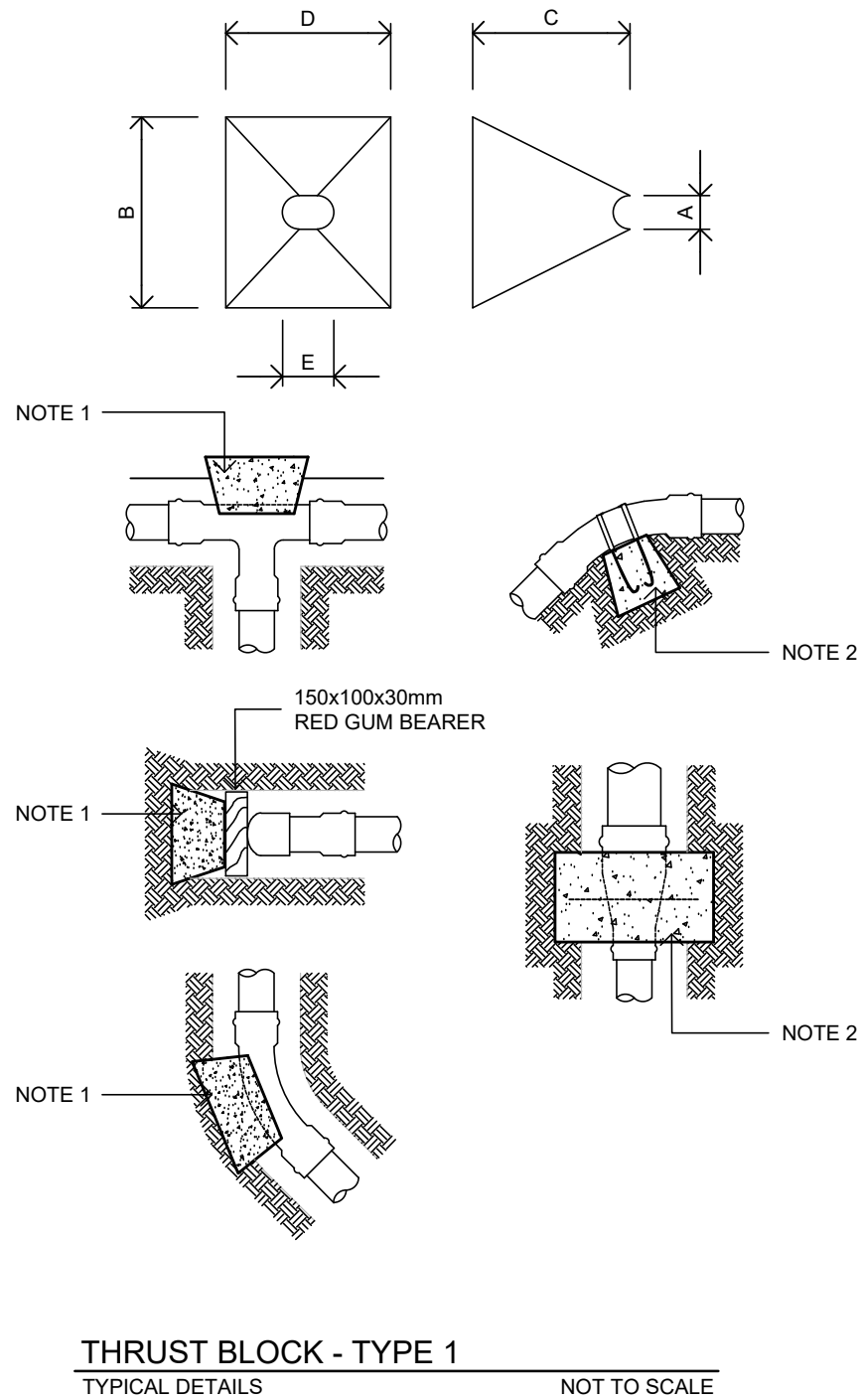


APPLICATION:

- TO ALL PRESSURISED MAINLINE AND SUB MAIN PIPE WORK



THRUST BLOCK NOTES:

- DIMENSIONS BASED ON CLASS 12 PIPE & 75kPa SOIL BEARING CAPACITY
- THRUST BLOCKS SHALL BE OF AT LEAST 20 MPa CONCRETE AT 28 DAY STRENGTH AND HAVE A BEARING SURFACE NOT LESS THAN THAT LISTED IN TABLE 1.
- THRUST BLOCKS SHALL BE INSTALLED ON ALL RRJ MAINLINE FITTINGS WHEN PRESENT ON THE PROJECT DRAWINGS INCLUDING ELBOWS, BENDS, TEES, REDUCERS, STOP ENDS AND ISOLATION VALVES BUT EXCLUDING 'SELF STRAINING' TAKE-OFFS SUCH AS TAPPING BANDS FOR AIR VALVES AND TEES TO SOLVENT WELD BRANCHES FOR SUBMAINS. ISOLATION VALVES SHALL HAVE A STEEL BRACKET RESTRAINT (SEE DRAWING).
- THRUST BLOCKS SHALL BE SO PLACED THAT THE PIPE JOINTS AND ANY BOLT-UP JOINTS WILL BE ACCESSIBLE FOR INSPECTION AND REPAIR.
- CONCRETE FOR THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED SOIL FACE. ALL SIDES OF THE BLOCK NOT IN CONTACT WITH UNDISTURBED SOIL SHALL BE FORMED.
- INSPECTION OF EXCAVATIONS SHALL BE REQUIRED FOR ALL THRUST BLOCKS PRIOR TO PLACEMENT OF CEMENT AND BACKFILLING.
- ALL CABLES LAID NEAR THRUST BLOCKS SHALL BE CLEAR OF THE FITTING AND BLOCK, AND SHALL BE WRAPPED IN 10mm THERMAL INSULATOR.
- TYPE 1 THRUST BLOCK DETAILS APPLIED IN THE FIELD TO ALL PRESSURIZED MAINLINE AND SUB MAIN PIPE WORK BELOW 63mm IN DIAMETER.
- TYPE 2 THRUST BLOCK DETAILS APPLIED IN THE FIELD WHEN PRESSURIZED PIPE DIAMETERS OF 80mm OR GREATER ARE APPLIED.

TABLE 1: THRUST BLOCK DIMENSIONS (mm)									
	A	B	C	D	E	F	G	H	I
90° BEND	200 150 100 80 50	750 450 300 300 250	TO UNDISTURBED SOIL FACE - MINIMUM 500mm	1000 700 500 400 300	LEAVE ACCESS TO PIPE JOINT AND FLANGE BOLTS				IF 'I' IS LESS THAN THIS, USE STOP END DIMENSIONS
STOP END	200 150 100 80 50	750 450 300 300 250		750 600 400 300 300					
TEE	200 150 100 80	750 450 300 300		1000 700 500 400					
CROSS	200 150 100 80								
BEND	200 150 100 80	750 450 300 300		750 450 400 300					
MAINLINE ISOLATION VALVE	200 150 100 80					800 700 550 550	400 400 300 300	600 500 450 300	
REDUCERS	200 150 100 80					350 300 200 200	400 400 300 300	450 150 150 150	100 80 50 40

CoA 632 THRUST BLOCK INSTALLTION DETAILS