

SECTION A-A

STANDARD HEAVY OR MEDIUM DUTY MANHOLE FRAME AND COVER

225mm ENGINEERING BRICKWORK RENDERED TWO COATS EXTERNALLY WITH CEMENT MORTAR

DETAILS OF MULTI-STRAND POLY-PROPYLENE NYLON ROPE NETTING REFER TO (DWG NO. PUB/WRN/STD/008)

PRECAST R.C. SLAB

MIN. 2.5mm THICK HDPE LINING WITH INTEGRAL ANCHOR STUDS ALL ROUND

JOINTS MADE AND NEATLY POINTED IN CEMENT MORTAR

CONSTRUCTION JOINT WITH WATER STOP

IN-SITU RC TO PROFESSIONAL ENGINEER'S DETAIL

STANDARD ANODISED ALUMINIUM ALLOY SAFETY CHAIN AND HANDRAIL

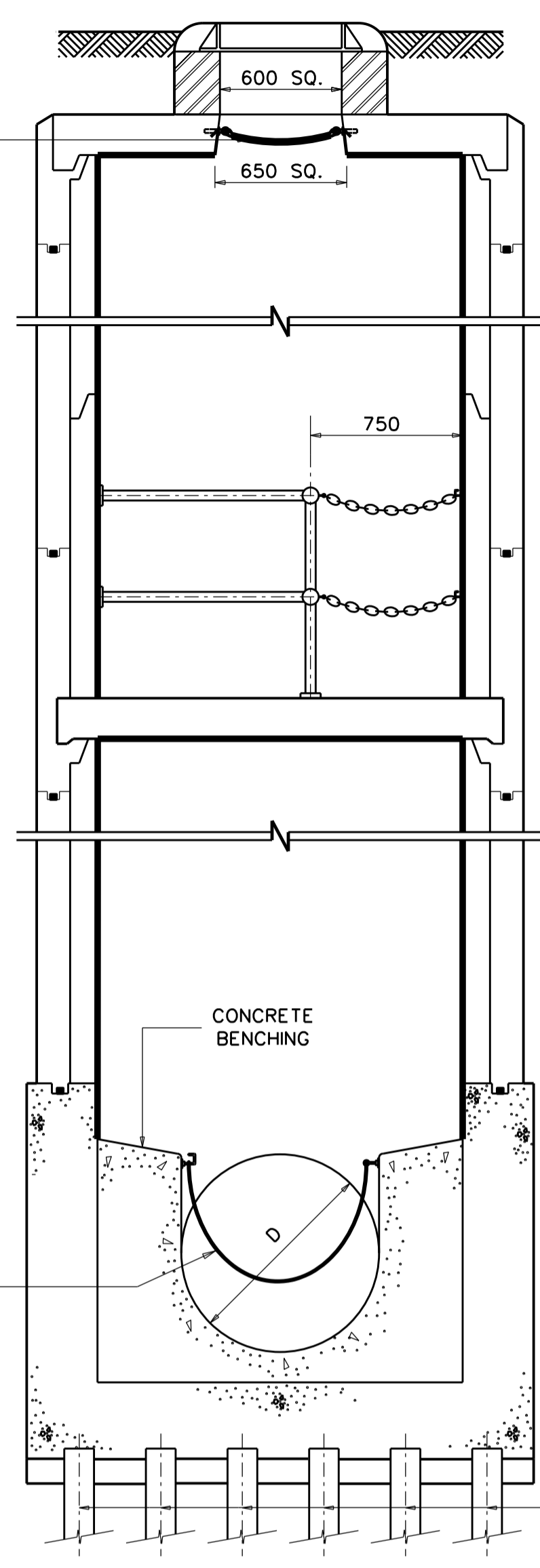
R.C. INTERMEDIATE PLATFORM WITH MIN. 2.5mm THICK HDPE LINING WITH INTEGRAL ANCHOR STUDS ALL ROUND

CAST-IN OR CHEMICALLY ANCHORED DOWEL BARS TO PROFESSIONAL ENGINEER'S DESIGN

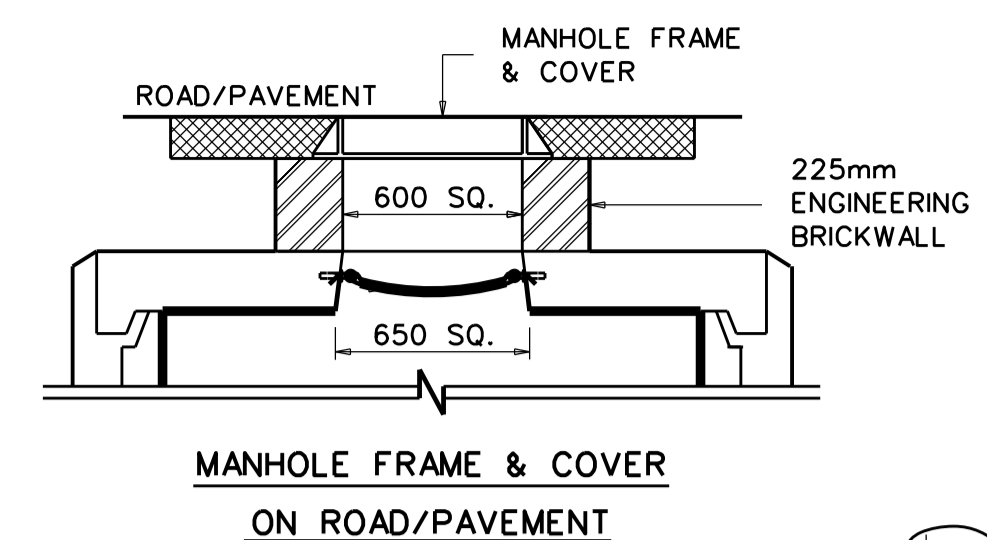
MULTI-STRAND POLY-PROPYLENE NYLON ROPE

INVERT LEVEL

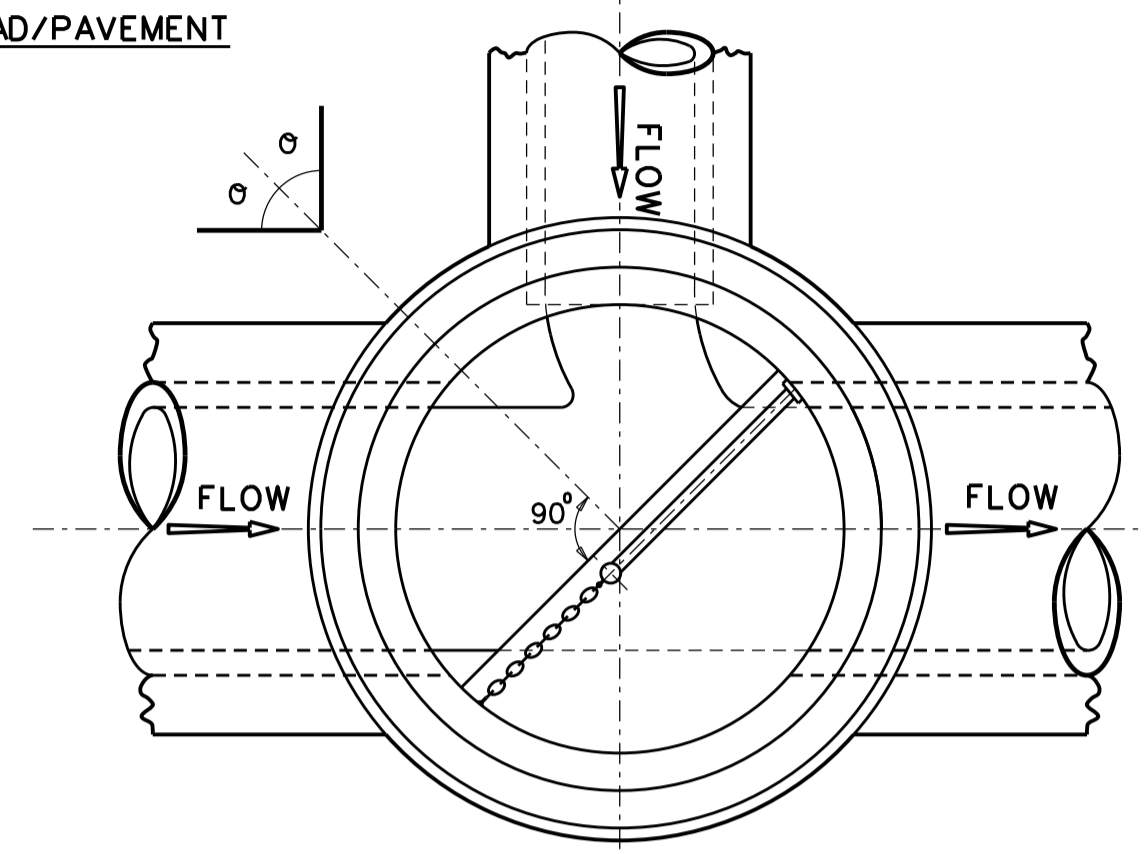
SUITABLE PILES AT CENTRES & LENGTHS TO PROFESSIONAL ENGINEER'S DESIGN



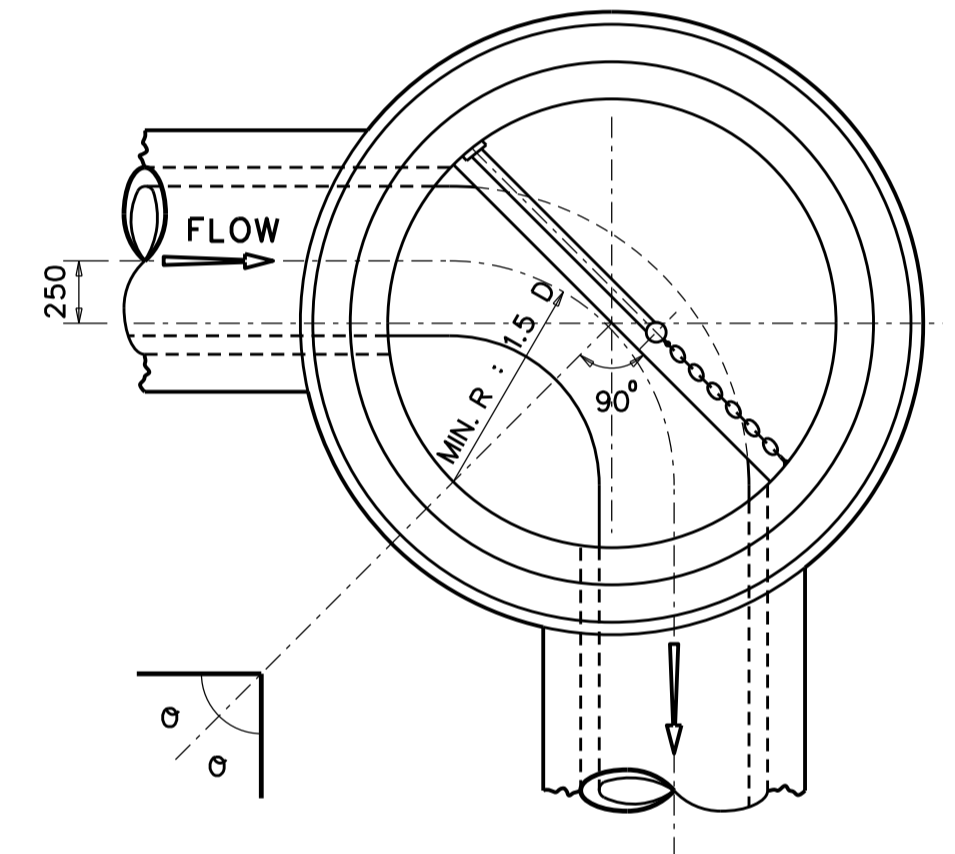
SECTION B-B



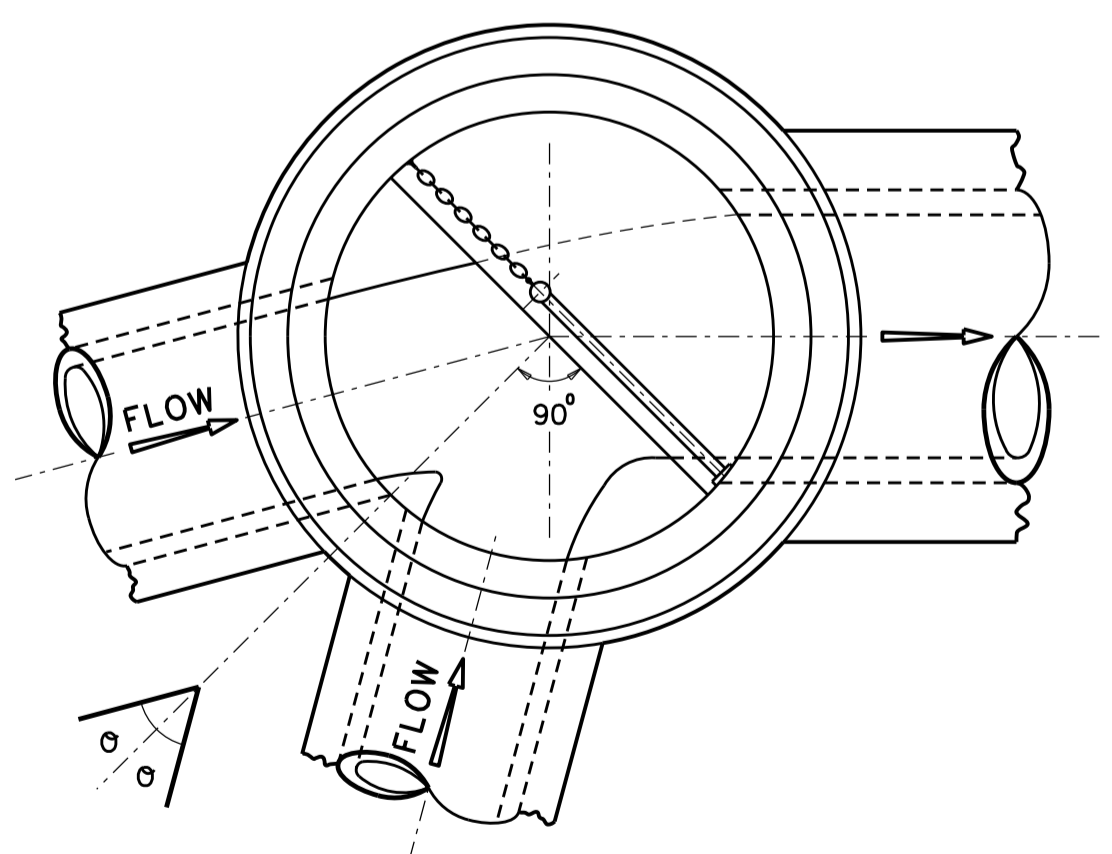
MANHOLE FRAME & COVER ON ROAD/PAVEMENT



T - JUNCTION

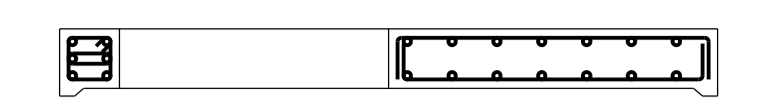


90° BEND (UP TO 600mm DIA. PIPE)

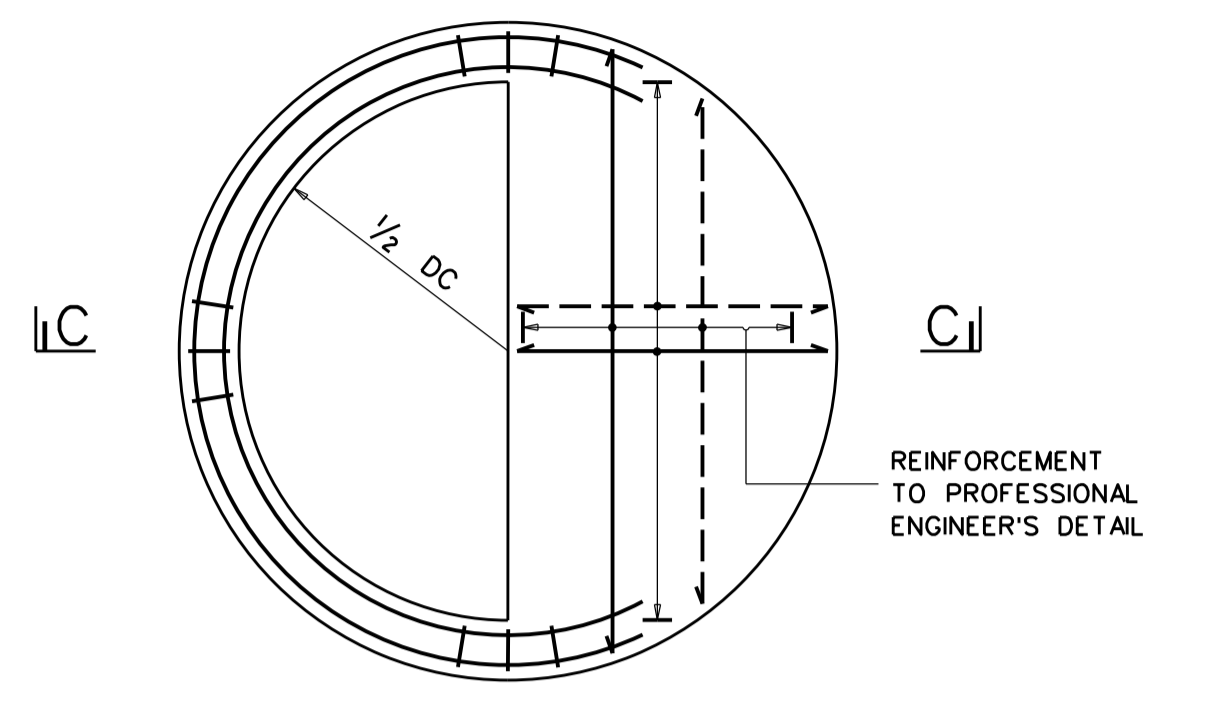


Y - JUNCTION  
PLAN VIEW-ARRANGEMENT OF INTERMEDIATE PLATFORM

SCALE 1 : 30



SECTION C-C

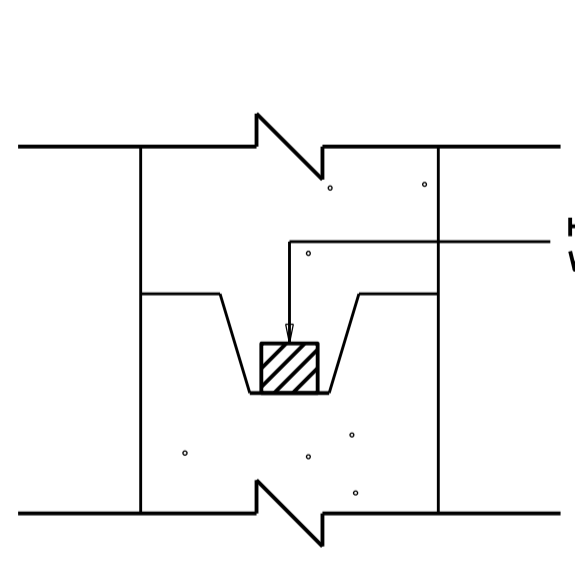


INTERMEDIATE PLATFORM

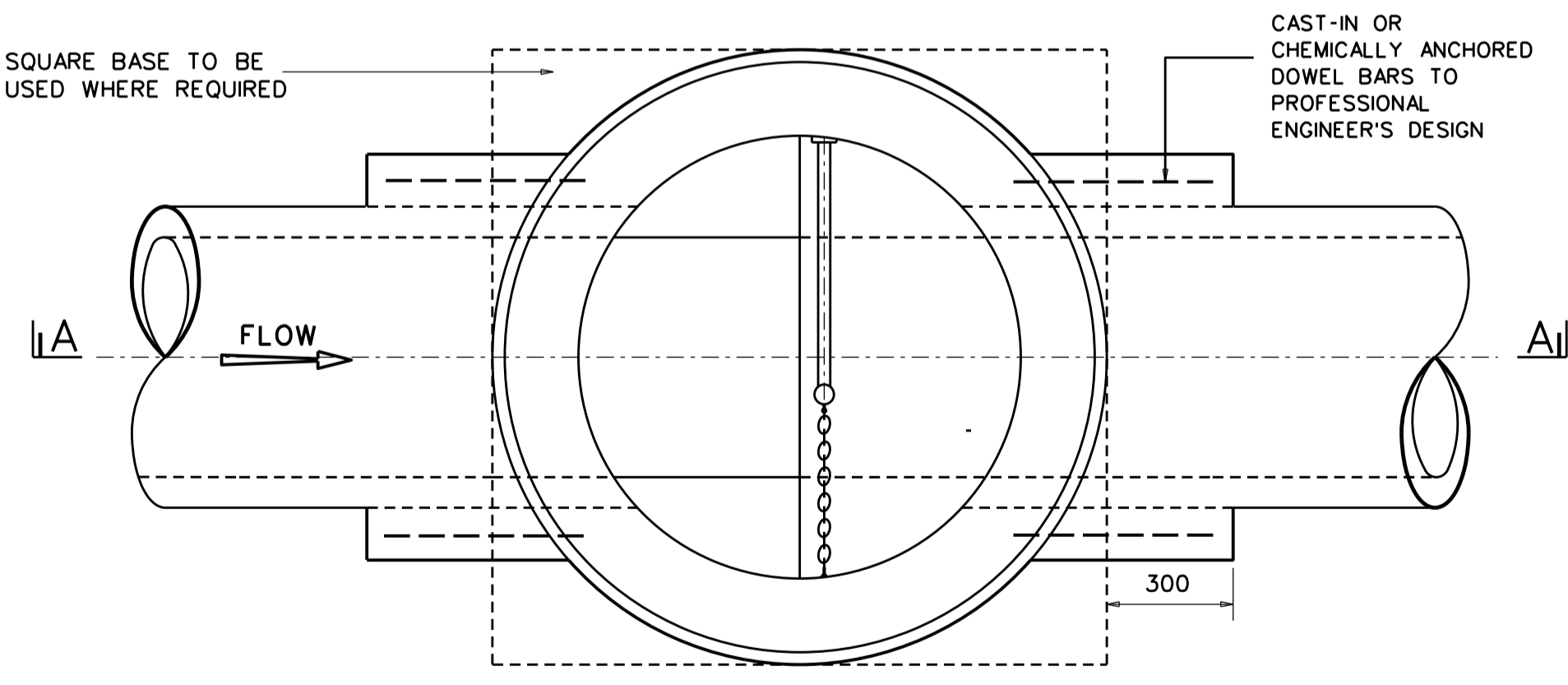
D	DC	M
200 & 250	1500	75
300 & 400	1500	130
450 to 700	1800	130
800 to 1000	1800	150

NOTES :

1. ALL CONCRETE COVER TO REINFORCEMENT SHALL BE MINIMUM 50mm DEPENDENT ON SOIL CONDITIONS.
2. FOR ALL SEWERS OVER 700mm AND ABOVE IN DIAMETER, SAFETY ROPES SHALL BE PROVIDED AT THE ENTRANCE OF THE DOWNSTREAM PIPE.
3. BENCHINGS TO MANHOLES TO BE TROWELLED TO THE SOFFIT OF THE OUTGOING SEWER RISING BY 75mm TO THE MANHOLE WALLS. CURVED AND JUNCTION BENCHINGS TO BE FORMED TO A RADIUS ON THE CENTRE LINE OF CHANNEL OF NOT LESS THAN 1.5D OR 400mm WHICHEVER IS GREATER. FOR LARGE DEGREE BENDS AND MULTIPLE JUNCTIONS MANHOLE, SPECIAL MANHOLES ARE REQUIRED.
4. MANHOLE COVER SHALL BE LAID FLUSH WITH PAVED, TILED AND ROAD SURFACES. ON TURFED GROUNDS, THE MANHOLE COVER SHALL BE LAID 50mm HIGHER THAN THE SOIL LEVEL.
5. ALL STRUCTURAL CONCRETE GRADE SHALL BE MINIMUM C28/35.
6. ALL CONCRETE GRADE FOR HAUNCHING AND BENCHING SHALL BE C20/25.
7. REINFORCEMENT SHALL BE DESIGNED BY THE PROFESSIONAL ENGINEER.
8. ALL HDPE LININGS SHALL INCLUDED ALL NECESSARY SEALING BY ANGLE FILLETS, WELDINGS AND TESTING.
9. THE ENDS OF ALL PIPES AT MANHOLE WALLS SHALL BE GROUND SMOOTH.
10. HEAVY DUTY MANHOLE FRAMES AND COVERS ARE TO BE USED ON ALL ROADS SERVICE VERGE, CAR PARKS AND WHERE VEHICULAR TRAFFIC IS EXPECTED.



WATERSTOP FOR INSITU CONCRETE JOINTS



PLAN

SCALES  
1 : 25  
UNLESS  
OTHERWISE  
STATED  
(A1)

STANDARD DETAILS OF DEEP PRECAST CONCRETE MANHOLE WITH ONE INTERMEDIATE PLATFORM

AMENDMENTS	
1.	DETAILS OF MANHOLE FRAME AND COVER ON ROAD/PAVEMENT AND ON TURF UPDATED.
2.	HEIGHT OF BRICKWALL TO EXCLUDE MANHOLE FRAME THICKNESS.
3.	MINIMUM 300mm CONCRETE HAUNCHING WITH CAST IN OR CHEMICALLY ANCHORED DOWEL BARS WRAP ROUND THE HAUNCHING ADDED.
4.	MIN 2.5mm THICK HDPE LINING ADDED TO MANHOLE WALLS WITH INTEGRAL ANCHOR STUDS ALL ROUND. 1.5mm THICK PVC REMOVED.
5.	INTERMEDIATE PLATFORM REINFORCEMENT TO PROFESSIONAL ENGINEER'S DESIGN.
6.	SUITABLE PILES AT CENTRES AND LENGTHS AT ALL MANHOLE SECTIONS ADDED.
7.	WATERSTOP DETAIL ADDED.
8.	NOTES REVISED.
9.	MIN 2000mm FROM PIPE CROWN TO UNDERSIDE OF INTERMEDIATE PLATFORM.