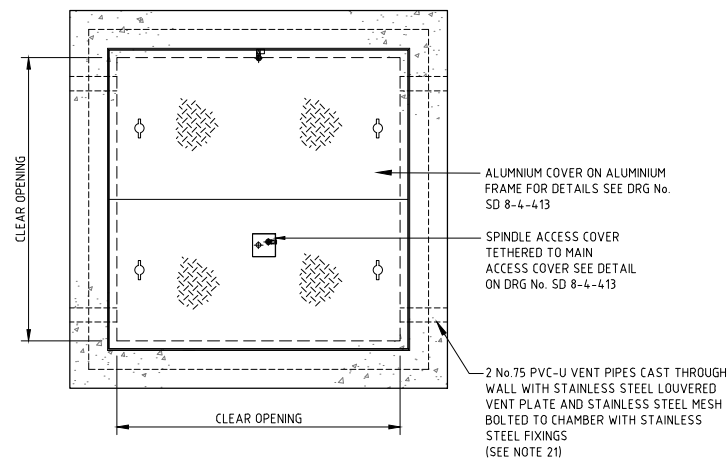


SECTION A-A



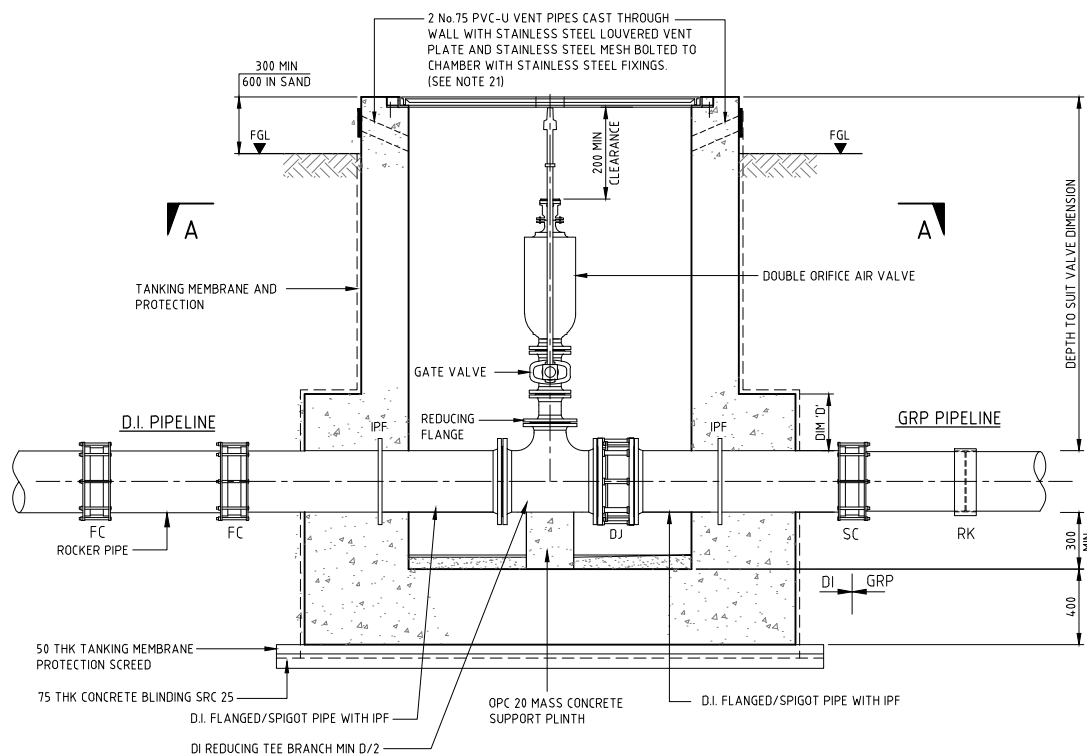
PLAN AT ROOF LEVEL

ALL CHAMBERS SHALL BE LOCATED OUT OF CARRIAGEWAY IN ACCESSIBLE AREA.

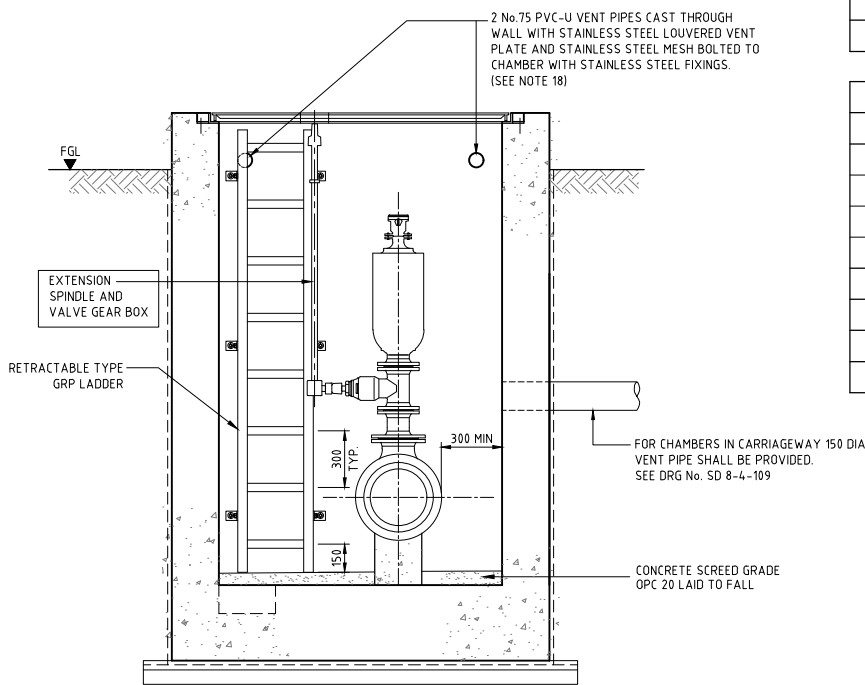
PIPE SIZE	TYPICAL AIR VALVE SIZE
UP TO 250	80
250-600	100
600-900	150
900-1000	200
> 1000	2x200

VALVE CHAMBER SCHEDULE - HDPE				
PIPE DIA O.D.	DI FITTINGS	DIM 'A'	DIM 'B'	DIM 'C'
125	100	1200	1300	450
180	150	1400	1300	450
250	200	1500	1400	500
315	250	1500	1400	500
355	300	1500	1500	500

VALVE CHAMBER SCHEDULE - D.I. / G.R.P.				
PIPE DIA I.D.	DIM 'A'	DIM 'B'	DIM 'C'	DIM 'D'
300	1500	1500	550	300
400	1600	1600	600	300
500	1800	1700	650	300
600	1900	2100	1000	500
800	1900	2300	1100	500
900	2500	2400	1150	500
1000	2700	2600	1250	500
1200	2800	2800	1350	500



SECTION B-B



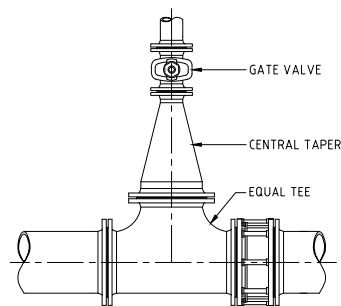
SECTION C-C

NOTES:

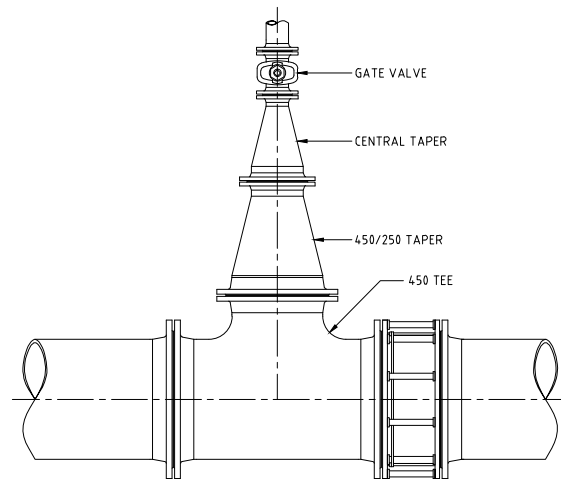
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT Q.C.S. UNLESS OTHERWISE AGREED WITH THE ENGINEER.
- ALL JOINTS BETWEEN CONCRETE AND PIPES SHALL BE WATERTIGHT.
- ALL EXTERNAL FACES TO BE TANKED IN ACCORDANCE WITH SPECIFICATION FOR TANKING DETAILS SEE DRG No. SD 8-4-103.
- ALL INTERNAL SURFACES ARE TO BE COATED AS SPECIFIED IN QCS, USING PAINT COLOUR 00A05 TO BS 4800.
- ALL DUCTILE IRON PIPEWORK TO BE WRAPPED IN ACCORDANCE WITH THE SPECIFICATION.
- ALL STRUCTURAL CONCRETE SHALL BE MINIMUM GRADE SRC 40 UNLESS OTHERWISE NOTED.
- SEE DRG No SD 8-4-106 FOR STRUCTURAL NOTES.
- 7mm NEOPRENE PAD SHALL BE PLACED BETWEEN ALL VALVES AND CONCRETE SUPPORT PLINTHS.
- ALL PIPES, VALVES AND FITTINGS WITHIN CHAMBERS SHALL BE DUCTILE IRON. SUITABLE FLEXIBLE COUPLINGS SHALL BE USED TO CONNECT TSE MAINS TO THESE DUCTILE IRON PIPES.
- VALVE SPINDLES TO BE EXTENDED TO 100 BELOW COVER LEVEL FOR TEE KEY OPERATION. SUPPORT BRACKET FOR SPINDLES TO BE PROVIDED WHEN NECESSARY. VALVE SPINDLE EXTENSIONS ARE NOT REQUIRED WHEN DEPTH TO TOP OF VALVE FROM COVER IS LESS THAN 500.
- THE CONTRACTOR SHALL PROVIDE THE PIPE SCHEDULE OF FITTINGS FOR THE STRUCTURE PRIOR TO PLACEMENT OF THE ORDER.
- GATE OR BUTTERFLY VALVES SHALL BE RATED FOR 16 BARS. BUTTERFLY VALVES TO BE USED ON PIPE ABOVE 300.
- CONCRETE COVER SLAB WITH HEAVY DUTY D.I. COVER TO BE USED WHEN CHAMBER IS SUBJECT TO VEHICLE TRAFFIC. SEE DRG NO. SD 8-4-414.
- CHAMBER SCHEDULE BASED ON EQUAL MAIN DIAMETERS IN CHAMBER. ALL OTHER CHAMBER COMBINATIONS TO BE DESIGNED BASED ON INDIVIDUAL CASES.
- PROVIDE A MINIMUM CLEARANCE OF 300 BETWEEN CHAMBER WALLS AND OUTER FACE OF FLANGE, OR VALVES FOR PIPES LESS THAN 600 DIA. AND 600 CLEARANCE FOR PIPE SIZES 600 DIA AND GREATER.
- ALL BURIED FLEXIBLE COUPLINGS, FLANGED ADAPTORS AND OTHER FERROUS FITTINGS TO BE PROTECTED WITH MASTIC FILLER, MASTIC TAPE AND LAMINATED TAPE AS PER QCS.
- ROCKER PIPE LENGTHS TO BE 600 OR 1.5 x DIAMETER WHICHEVER IS THE GREATER.
- CHAMBER SCHEDULES ARE BASED ON DI FITTINGS FROM BS EN 545:2010.
- DISTRIBUTION CHAMBERS LOCATED AT HIGHPOINTS IN PIPELINE PROFILE MAY ACT AS AIR RELEASE.
- VENT PIPE SHALL BE MADE IN CHAMBER COVERS IN ACCORDANCE TO THE AIR VALVE MANUFACTURE'S RECOMMENDATION. SEE DRG No. SD 8-4-109.
- RETRACTABLE TYPE GRP LADDER WITH SAFETY CAGE IF THE CHAMBER DEPTH IS MORE THAN 3.5 METERS.
- CHAMBERS WITH ALUMINIUM FRAME & COVERS AND ARE LEVELED ABOVE FINISHED GROUND LEVEL SHALL HAVE ALUMINIUM FLASHING OF THE WATER PROOF MEMBRANE AND PROTECTION BOARD.

LEGEND:

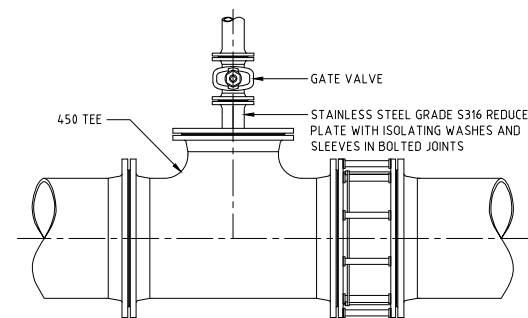
IPF	INTEGRAL PUDDLE FLANGE
GV	GATE VALVE
DI	DUCTILE IRON
ST	SCREED THICKNESS
FGL	FINISHED GROUND LEVEL
DJ	DISMANTLING JOINT
FC	D.I. FLEXIBLE COUPLERS
RK	GRP REKA COUPLING
SC	STEPPED COUPLING



PIPES 450 DIA AND BELOW



PIPES 500 DIA AND GREATER



PIPES 500 DIA AND GREATER

ALTERNATIVE DETAILS FOR JUNCTION

5	SEP 19	ISSUED FOR USE	
4	APR 19	ISSUED FOR USE	
3	01 MAR 19	UPDATED ISSUE	
2	31 MAR 16	ISSUED FOR USE	
1	30 JUN 15	ISSUED FOR USE	
0	15 SEP 13	ISSUED FOR USE	

Rev.	Date	Revision Details	Appd.
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Public Works Authority

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PROJECTS AFFAIRS
QCS Section:
Section 8 - Drainage Works
Part 4 - Pipeline Installation

Drawing Title: TSE AIR VALVE CHAMBER	
Approved:	Sheet No: 1 OF 1
Date: APRIL 2019	Scale: 1:20 ON A1
Drawing Number: SD 8-4-412	Revision: 5