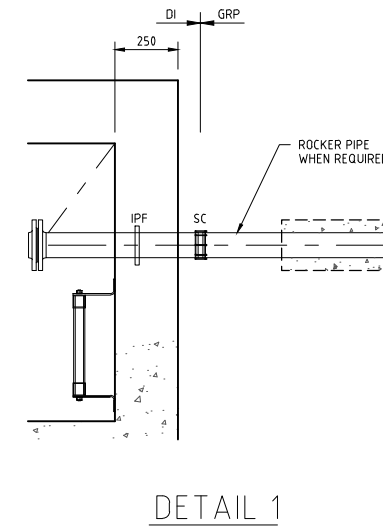
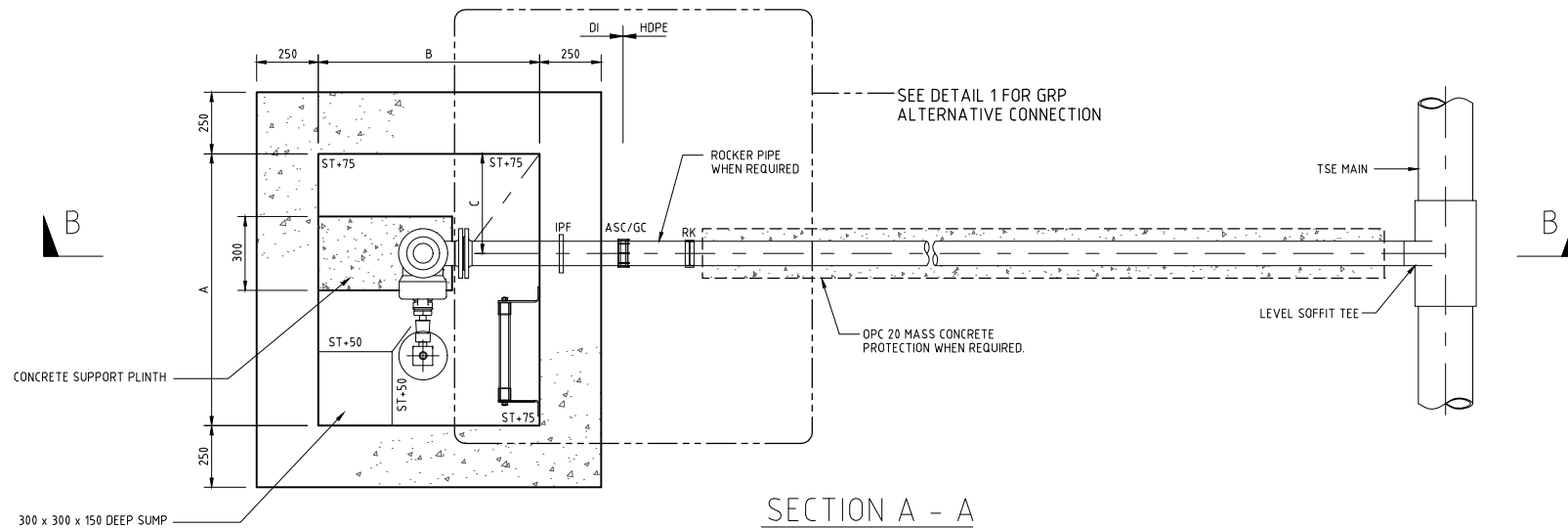
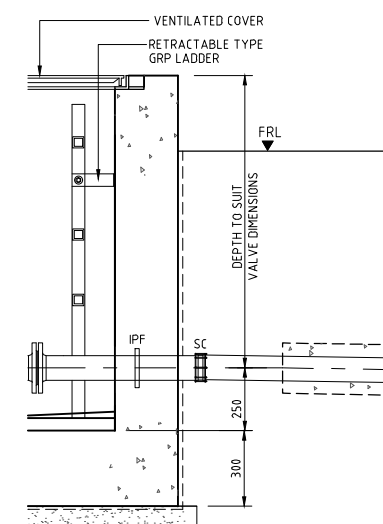
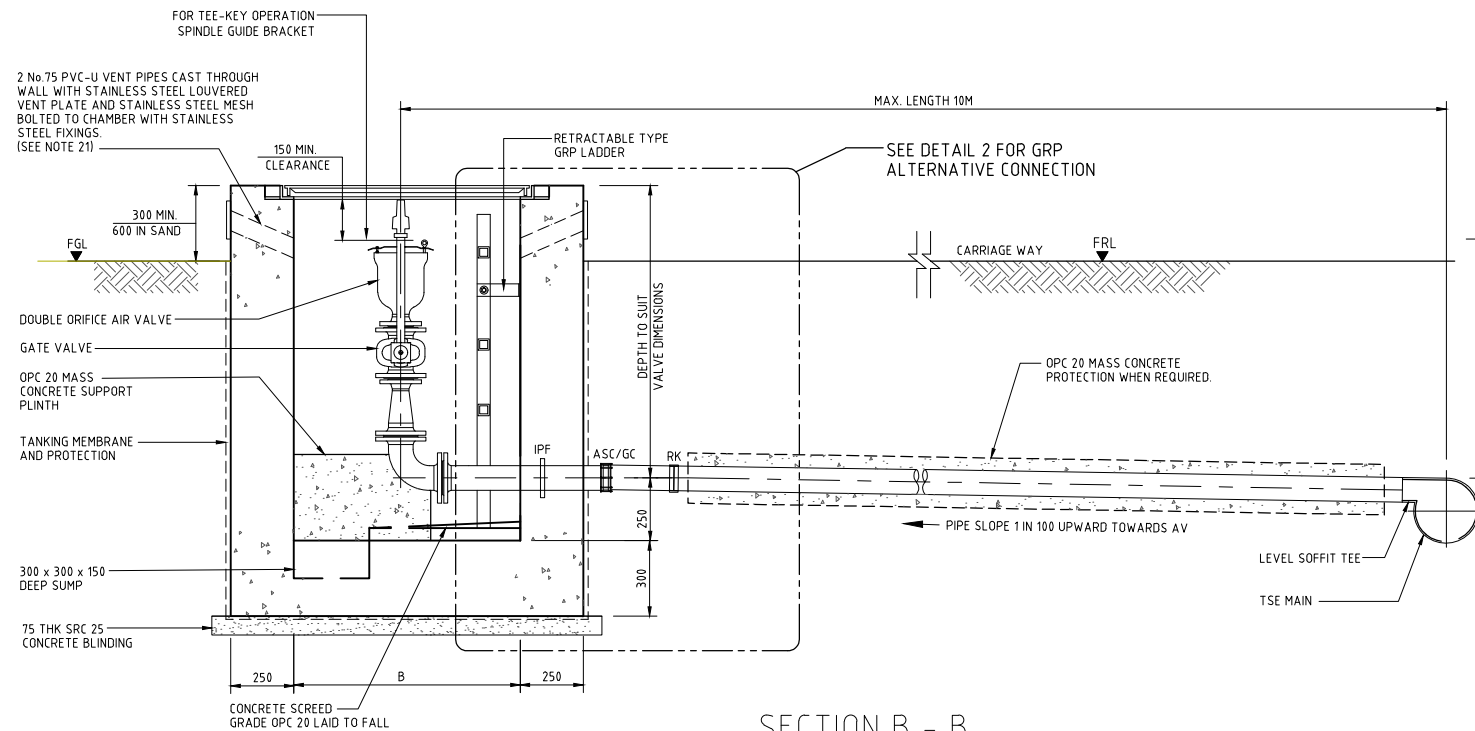




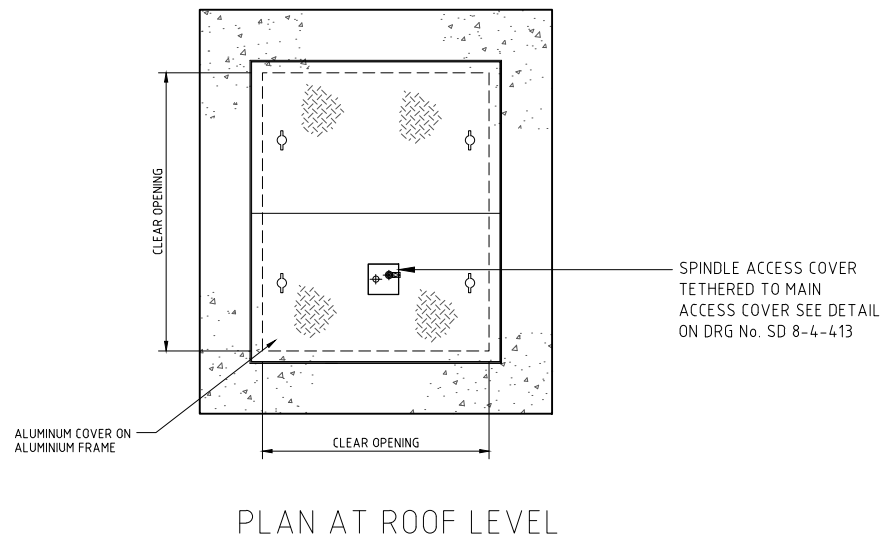
DETAIL 1

SECTION A - A



DETAIL 2

SECTION B - B



PLAN AT ROOF LEVEL

MAIN DIA	TEE DIA
100	80
150	80
200	80
250	100
300	150
400	150
500	150
600	200
700	200
800	200
900	200
1000	200
1200	200

TSE MAIN PIPE SIZE	TYPICAL AIR VALVE SIZE
≤ 250	80
>250 ≤ 600	100
>600 ≤ 900	150
>900 ≤ 1000	2 x 200

PIPE FITTINGS SCHEDULE					
ITEM NO	QUANTITY	MATERIAL	TYPE OF FITTINGS	ENDS	REMARKS
1	1	-	DOUBLE ORIFICE AIR VALVE	FL	MATERIAL AS PER QCS
2	1	-	GATE VALVE	FL - FL	MATERIAL AS PER QCS
3	1	DI	FLANGED BEND 90°	FL - FL	-
4	1	DI	DI PIPE C/W IPF	FL - SP	-
5	1	-	STEPPED COUPLING	-	TO SUIT CHANGE IN MATERIAL
6	1	GRP	ROCKER PIPE	SP - SP	ONLY WITH GRP CONNECTING PIPE
7	1	GRP	REKA COUPLING	-	ONLY WITH GRP CONNECTING PIPE
FL = FLANGE END				SP = SPIGOT END	

AIR VALVE CHAMBER SIZE			
AV SIZE	DIM 'A'	DIM 'B'	DIM 'C'
80	1200	900	450
100	1200	900	450
150	1200	1000	450
200	1350	1100	500
DIM "C" : CLEARANCE BETWEEN WALL AND AIRVALVE			

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.
- 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 VALVES AND FITTINGS WITHIN CHAMBERS SHALL BE DUCTILE IRON UNLESS OTHERWISE SPECIFIED. SUITABLE FLEXIBLE COUPLINGS SHALL BE USED TO CONNECT TSE MAINS TO THESE DUCTILE IRON PIPES.
- VALVE SPINDLES TO BE EXTENDED TO 50 BELOW COVER LEVEL FOR TEE KEY OPERATION. SUPPORT BRACKET FOR SPINDLES TO BE PROVIDED WHEN NECESSARY.
- 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 DI 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.
- RETRACTABLE TYPE GRP LADDER WITH SAFETY CAGE IF THE CHAMBER DEPTH IS MORE THAN 3.5 METERS.
- CHAMBERS WITH ALUMINUM FRAME & COVERS AND ARE LEVELLED ABOVE FINISHED GROUND LEVEL SHALL HAVE ALUMINUM FLASHING OF THE WATER PROOF MEMBRANE AND PROTECTION BOARD.

LEGEND:

AV	AIR VALVE
C/W	COMPLETE WITH
DI	DUCTILE IRON
FRL	FINISHED ROAD LEVEL
FGL	FINISHED GROUND LEVEL
GV	GATE VALVE
GRP	GLASS REINFORCED PLASTIC
IPF	INTEGRAL PUDDLE FLANGE
RK	GRP REKA COUPLING
RP	ROCKER PIPE
SC	STEPPED COUPLING
ST	SCREED THICKNESS
GC	GRIP COUPLER

2	SEP 19	ISSUED FOR USE	
1	APR 19	ISSUED FOR USE	
0	01 MAR 19	ISSUED FOR USE	
Rev.	Date	Revision Details	Appd.

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PROJECTS AFFAIRS
QCS Section:
Section 6 - Road Works
Part 10 - Vehicle Crash Barriers

Drawing Title:
**TSE
OFFLINE AIR VALVE
CHAMBER DETAILS**

Approved:	Sheet No: 1 OF 1
Date: APRIL 2019	Scale: N.T.S.
Drawing Number: SD 8-4-422	Revision: 2