



ITEM	ITEM DESCRIPTION
1	C.P.P. FEEDERMAIN AWWA C-301 AS PER DESIGN
2	≤ 1800Ø - 750Ø OPENING, ≥ 2100Ø - 900Ø OPENING, I.D. FLANGED BRANCH (PIPE ACCESS)
3	750Ø OR 900Ø REDUCING FLANGE TAP TO 75 IPT (FBE)
4	13Ø STEEL ROD LIFTING HANDLES (2-REQUIRED ON EACH FLANGE INDICATED)
5	AIR RELEASE - VACUUM AND/OR COMBINATION VALVE AS PER DESIGN, INTERIOR AND EXTERIOR OF VALVE SHALL BE FUSION BONDED EPOXY COATED ANSI/NSF 61 APPROVED. (STD. DWG. 1-3-14)
6	2400Ø CIRCULAR PRECAST MONOLITHIC TOP SECTION (STD. DWG. 1-1-5)
7	CHAMBER TO BE GROUTED INTO GROOVE FORMED IN CAST IN PLACE CONCRETE (NON-SHRINK GROUT)
8	CHAMBER STEPS
9	APPROVED ADJUSTMENT UNITS (STD. DWG. 1-1-5)
10	FRAME AND COVER
11	25MPa CONCRETE ENCASEMENT
12	UNDISTURBED GROUND
13	150Ø 304 SS VENTILATION HOOK-UP WITH WELDED JOINTS AND FLANGE AND 304 SS INSECT SCREEN
14	SUMP c/w FRAME AND GRATE (STD. DWG 1-1-8)
15	UNSHRINKABLE FILL
16	CONCRETE SUPPORT PIER 25MPa CONCRETE
17	EQUIPMENT LIFTING SYSTEM CENTRED OVER ALL VALVES AND OTHER APPURTENANCES (SEE NOTE 4)
18	15MPa CONCRETE MUD SLAB 100mm THK. MIN. AS DIRECTED
19	BREAK AWAY CONNECTION WITH WELDED FLANGE OR PLATE WITH 4-LIGHT DUTY CONC. ANCHORS WHICH WILL ENSURE THAT THE PIPE WILL SHEAR AT THE CONC. INTERFACE
20	INTERIOR CHAMBER INSULATION (STD. DWG. 1-1-5)
21	ACCESS RISER RIGID INSULATION (STD. DWG. 1-1-5)
22	100mm THICK RIGID POLYETHYLENE FOAM IF WATERMAIN IS IN ROCK OR SHALE TRENCH

WM. SIZE	BALL VALVE	AIR VALVE	CHAMBER SIZE
750 OR GREATER	75 FL.	75 FLANGED	2400Ø

NOTE: SEE TYPICAL AIR RELEASE VALVE STANDARD DRAWING FOR DETAIL OF AIR RELEASE VALVE, FITTINGS AND SUPPORT BRACKET

SECTION A - A
AIR RELEASE CHAMBER

NOTE

- ALL VALVES TO BE RESILIENT SEAT TO AWWA C509, FUSION BONDED EPOXY (FBE) SHOP COAT FINISH ON INTERIOR AND EXTERIOR OF VALVE TO AWWA C550. INTERIOR COATING TO BE FBE ANSI/NSF 61 APPROVED.
- INTERIOR OF ALL STEEL (NOT STAINLESS STEEL) PIPE SHALL BE LIQUID EPOXY COATED TO AWWA C210 AND BE ANSI/NSF 61 APPROVED. ALL EXTERIOR SURFACES SHALL BE LIQUID EPOXY COATED TO AWWA C210.
- INTERIOR OF ALL DUCTILE IRON PIPE AND FITTINGS IN CONTACT WITH POTABLE WATER SHALL BE CEMENT MORTAR LINED TO AWWA C104.
- DAYTON SUPERIOR P-38 NUT TYPE SLOTTED INSERT c/w DAYTON SUPERIOR F-49-A EYE BOLT EQUIPMENT LIFTING SYSTEM TO BE FACTORY CAST IN PLACE IN UNDERSIDE OF PRECAST CONCRETE MONOLITHIC TOP SECTION IN ACCORDANCE WITH OPSD 1101.019. MINIMUM SYSTEM CAPACITY TO BE 1,500kg.
- AIR RELEASE VALVE TO AWWA C512, FUSION BONDED EPOXY (FBE) SHOP COAT FINISH ON INTERIOR AND EXTERIOR OF VALVE TO AWWA C550. INTERIOR COATING TO BE FBE ANSI/NSF 61 APPROVED.
- ALL NUTS, BOLTS AND WASHERS TO BE STAINLESS STEEL UNLESS OTHERWISE NOTED.
- ALL PIPING, FITTINGS, VALVES, APPURTENANCES AND MECHANICAL RESTRAINTS TO BE c/w DENSO PASTE, DENSO MASTIC AND DENSO TAPE OR APPROVED EQUAL, APPLIED TO MANUFACTURER'S RECOMMENDATIONS.



**PUBLIC WORKS
STANDARD DRAWING**

REV. DATE: APRIL 2014

APPROVED BY

DRAWN BY

A.P.

AINLEY GROUP

STD. DWG. NUMBER

SCALE

1-3-13

N.T.S.

**AIR RELEASE VALVE AND CHAMBER FOR
WATERMAIN SIZE 750 DIAMETER OR GREATER**