



**VAULT SIZING:**  
 MINIMUM DIMENSIONS:  
 4" VALVE - 48"W x 72"LONG  
 6" VALVE - 60"W x 72"LONG  
 8" VALVE - 72"W x 84"LONG  
 10" VALVE - 72"W x 96"LONG  
 12" VALVE - 72"W x 108"LONG

**CONSTRUCTION NOTES**

- ① CLA-VAL MODEL 100-01 HYTROL PRESSURE REDUCING VALVE (GLOBE PATTERN VALVE). DUCTILE IRON BODY WITH 316SS STAINLESS STEEL INTERNAL AND EXTERNAL TRIM AND EPOXY COATED BODY.
- ② CLASS 52, MORTAR LINED, DIP SPINDLE PIECE (FOE).
- ③ CLASS 52, MORTAR LINED, DIP SPINDLE PIECE (FOE). FABRICATE WITH HARNESS LUGS WITH DRESSER.
- ④ DUCTILE IRON FLEX COUPLING. FORD, ROMAC, DRESSER OR APPROVED EQUIVALENT. STAINLESS STEEL TIEBACKS TO THE NEAREST FLANGES.
- ⑤ 504A K-FLOW BUTTERFLY VALVE FE x FE.
- ⑥ CLASS 52, MORTAR LINED, DIP SPINDLE PIECE (FOE.) 54" LONG. FABRICATE WITH HARNESS LUGS.
- ⑦ "LINK-SEAL" MECHANICAL PIPING SEAL IN ANNULAR SPACE BETWEEN PIPE O.D. & ROUND, SLEEVE LINED, VAULT OPENING. CAST SLEEVE IN PLACE WITH VAULT.
- ⑧ 90° BEND, MORTAR LINED DIP WITH MJ x FE ENDS & CONCRETE BLOCK.
- ⑩ ROUND, RECESSED DRAIN SUMP WITH ALHAMBRA FOUNDRY PRECAST GRATING. 12" MINIMUM DEPTH & DIAMETER.
- ⑪ ADJUSTABLE PIPE SUPPORT STAINLESS STEEL PER STD 521.
- ⑫ RESILIENT WEDGE GATE VALVE WITH "BURIED SERVICE OPERATOR". MJ x FE ENDS.
- ⑬ MORTAR LINED DUCTILE IRON TEE. MJ x FE x FE WITH CONCRETE THRUST BLOCK.

- ⑭ INSTALL A LADDER BOLTED TO THE SIDE WALL OF VAULT PER STD 525-B
- ⑮ J&R PRECAST VAULT W/8" CONCRETE SLAB FLOOR. SECTIONAL VAULT MAY BE USED IN PARKWAY AREAS.
- ⑯ SDR-14 C-900 PVC PIPE.
- ⑰ J&R U.S.F. DIAMOND PLATE ALUMINUM COVER IN PARKWAYS. J&R U.S.F. DIAMOND PLATE STAINLESS STEEL FOR TRAFFIC AREAS. SPRING ASSISTED, HINGED, TWO PIECE, LOCKING, COVER.
- ⑱ CONCRETE CURB AND GUTTER SECTION, TYPICAL. VAULTS SHOULD BE PLACED IN PARKWAY, PLANTER OR MEDIAN AREAS WHERE PRACTICAL.
- ⑲ 1" TAP WITH SADDLE CAST-IRON EPOXY COATING WITH STAINLESS STEEL STRAP AND 1" TYPE 316 SS BALL VALVE.
- ⑳ THRUST BLOCKS PER STD 516-A.

**GENERAL NOTES**

1. ALL ABOVE GRADE PIPING SHALL BE PAINTED WITH AN ALKYD ENAMEL PAINT SYSTEM CONSISTING OF A 2 MIL PRIMER COAT AND TWO (2) COATS OF 2 MILS (EACH) HIGH GLOSS ENAMEL. COLOR SHALL BE BLUE.
2. ALL BELOW GRADE DUCTILE IRON FITTINGS SHALL BE C-110. ALL BELOW GRADE DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED IN ACCORDANCE WITH AWWA STANDARDS IN AN 8 MIL POLYETHYLENE WRAP.
3. ALL FLANGE JOINTS SHALL BE CONNECTED WITH TYPE 316 STAINLESS STEEL FASTENERS. MECHANICAL JOINT SHALL BE JOINED WITH EITHER MALLEABLE IRON OR SELF-WEATHERING CORTEN STEEL.
4. ALL VAULTS REQUIRE THE INSTALLATION OF ONE VENT AT THE LOW POINT AND ONE AT THE HIGH POINT. VAULT VENTS SHALL BE INSTALLED PER STD 528-A OR STD 528-B. SIZING OF VENTS SHALL BE DETERMINED BY THE PROJECT'S ENGINEER.

FORMER CITY STANDARD PLAN NUMBER (2004 EDITION): STD 521-L

APP. <i>James M. Hinkle</i>	51568	11/24/2020		
CITY ENGINEER	RCE	DATE	NO.	DATE
				DESCRIPTION OF REVISIONS

**CITY OF NEWPORT BEACH DEPARTMENT OF PUBLIC WORKS**

DRAWN: M. ELIAS	<b>PRESSURE REDUCING STATION</b>	STANDARD DRAWING NO.
DATE: 11/3/2020		<b>520</b>
		SHEET 1 OF 1