

CHAPTER 3.14 VALVES, HYDRANTS AND MISCELLANEOUS ITEMS

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3.14.005 GENERAL. This Chapter covers Valves, Hydrants, and Meter Boxes, together with other miscellaneous items to be installed.

3.14.010 GATE VALVES. Gate valves shall conform to AWWA Specification C-509. Valves shall be of cast iron body, Resilient Wedge Valve, non-rising stem design with O-ring seals. Unless otherwise shown or specified, valves shall be of mechanical joint connection design for buried service and flanged connection design for installation in structures. Buried valves shall have two (2) inch operating nuts, and valves in structures shall have handwheels unless otherwise specified.

3.14.015 VALVE BOXES. All buried valves shall be installed complete with two (2) piece, cast iron, screw type, five and one-fourth (5¼) inch shaft valve box with locking lid. Valve boxes installed between the curb and gutter and sidewalk shall be placed in a concrete pad as indicated on the standard Drawings and valve boxes placed in the street shall be surrounded by a concrete ring.

3.14.020 FIRE HYDRANTS. Fire hydrants shall be "traffic model" type designed to conform to AWWA Specification C-502 of the proper bury depth and shall be Mueller Centurion or Clow Medallion.

A. Hydrant valves shall be a minimum of six (6) inch size. Hydrants shall be supplied complete with two (2) two and one half (2½) inch hose nozzles and one (1) four and one half (4½) inch pumper nozzle. All nozzles shall be provided with National Standard threading. A one-half (½) cubic yard gravel sump shall be provided at each hydrant. All hydrants shall be supplied complete with a flanged by mechanical joint end auxiliary gate valve and box. Each hydrant shall also be supplied with O-ring seals, a National Standard pentagon operating nut which is designed for clockwise rotation closing, and a six (6) inch ANSI 150-pound flanged inlet.

3.14.025 COUPLINGS. Couplings shall be equal to the product of Smith-Blair or Dresser with cast iron couplings being used on all cast iron and asbestos cement pipe and steel couplings on steel pipe. Couplings shall be of the straight, transition, or reducing style as required by the specific installation. Buried steel couplings shall be protected from corrosion with an approved coating.

3.14.030 WATER SERVICE CONNECTIONS. All water service lines shall be marked in the curb with the placement of #20 steel nail in the concrete. Pipe for water services shall be 160 P.S.I. "type K" copper water tubing or shall be 200 psi Polyethylene (PE) Copper Tubing Size (CTS) Poly, with Stainless Steel Inserts used on all connections. (Three-quarter (¾) inch for single family dwellings).

A. Connections of services to main lines shall be through a corporation-type stop Mueller (Ball Corp B-25028) or Ford (FB1100). All connections shall be made using Compression type fittings.

B. Connections to main lines shall be made as specified for the various types of mainline materials, and shall require a corporation stop as specified above.

C. The following table gives the maximum size for direct tapping into Cast Iron or Ductile Iron when permitted:

<u>Pipe Size</u>	<u>Max. Tap Size</u>
4"	1"
6"	1-1/4"
8"	1-1/2"
10"	1'1/2"
12"	2"
14"	2"
16"	2-1/2"
18"	2-1/2"

D. All taps larger than those shown above must be accomplished with a tapping sleeve or equivalent.

E. All connections made to existing water lines shall be done using a "wet-tap" method.

F. Meters shall be connected through coppersettlers Mueller (B-2423-2 with Bypass for one (1) ½ inch – 2 inch and B-2434-6A ¾ inch – 1 inch) or Ford (VBHH 70 Series with Bypass for one (1) ½ inch – 2 inch and VBH ¾ inch – 1 inch) all Meter settlers shall be eighteen (18) inches and be equipped with a Dual Check Valve, all meter setter shall be staked and secured, with a metal stake, inside of the meter box to prevent movement of meter setter and inverted-key angle valve on the inlet riser, drilled for wire sealing. All materials used shall be coordinated with the Tremonton City Water Department.

G. All service lines shall be assembled as outline in the following paragraph. Service Connections and Lines shall consist of a Romac-202-N service saddle or direct tap into main when applicable, a Corporation Stop - Mueller (Ball Corp B-25028) or Ford (FB1100), a service line of 160 psi K Type Copper Tubing or 200 psi CTS PE Tubing, a Curb Stop Mueller (Ball Curb Valve B-20283) or Ford (Ball Valve Curb Stop B-11), a Brass Close Nipple, a Brass Union, a eighteen (18) inch Copper Meter Setter with Dual Check Valve Mueller (B-2423-2 with Bypass for one (1) ½ inch – 2 inch and B-2434-6A ¾ inch – 1 inch) or Ford (VBHH 70 Series with Bypass for one (1) ½ inch – 2 inch and VBH ¾ inch – 1 inch), with a Mueller (H-15451-CTS x FMIP or H-15428 CTS x MIP) or Ford (C14 - FMIP x QJCTS or C84 - MIP x QJCTS) fittings on the setter.

3.14.035 WATER METER BOXES AND LIDS. Meter boxes and lids shall be as specified in the following paragraph and shall be installed in accordance with the Drawings at the time the subdivision is developed and are the responsibility of the subdivider.

A. Meter boxes shall be round eighteen (18) inch inside diameter boxes of either concrete or corrugated metal or hope pipe. The lids for meter boxes shall be cast iron with a locking lid operated by a pentagon head, and shall have twelve (12) inch minimum opening diameter.

B. Meter Box shall not be located in the Sidewalk or Drive-Ways and shall be the responsibility of the Subdivision Developer, Building Contractor or Homeowner to see that the Meter Box is properly located and moved if necessary, at their expense, to insure that Meter Box is not in said Sidewalk or Drive-Way.