

Filename: \\HD-HT\GL\AF\share\Drawings\2013\13164-Home 2 Suites Addison\Design\Drawings\13164-C-DET01.dwg Date: Friday, February 06, 2015 Time: 2:09 PM Plotted by: Jorge Gonzalez

5. The interior surfaces of the shoe and lower main valve components shall be epoxy coated in compliance with AWWA Standard C-550. The shoe and lower barrel shall be connected by stainless steel bolts, nuts and fasteners of sufficient size and strength to bear all pressures and forces that the hydrant is subject to, including corrosion, for its warranted life.
- D. Painting and Delivery
- Hydrants shall be delivered with two (2) coats of primer on upper barrel (AWWA C-502 Sec. 4.2.3). Interior and exterior shall be painted as in AWWA C-502 Sec. 4, excluding the interior of shoe which shall be painted be as noted in Sec. 2.F.
 - Hydrants shall be complete in all details when supplied. Due and customary care shall be used in preparation for shipment to eliminate damage in handling or transit. Hydrants must be drained and completely closed before shipment.
 - Manufacturer shall supply an Affidavit of Compliance verifying that the hydrant and all materials used in its construction conform to the applicable requirements of the most current form of AWWA C502 and these supplementary specification, that all specified tests have been performed and that all test requirements have been met.

X. WATER SERVICES:

The service curb stop shall be installed at a depth of eight-inches (8") to twelve inches (12") below finished grade, usually in advance of paving. After paving, the contractor shall furnish and install the meter box. The meter box is to be set within the right of way or utility easement line at or near the center of the front of the lot to be served. No meter box shall be installed in an area paved for vehicular traffic and/or parking spaces. Minimum requirements for water services:

A. General Design

- All Meters shall meet or exceed the American Water Works Association Standard C707-R92 for Encoder-Type Remote-Registration systems for Cold Water Meters when equipped with an open architecture radio MIU.
- Allowable tap and meter sizes are as follows: 3/4", 1", 1 1/2", 2", 4", 6", 8", 10" and 12". All other sizes are prohibited unless specifically approved by the Public Works Department. Taps and meters shall be the same size unless specifically waived by the Public Works Department.
- Water meter boxes shall be provided for each service as per the Town of Addison Standard Details. Water meter boxes for meters two inches (2") and smaller shall have a minimum depth of eighteen inches (18") and have four inches (4") to six inches (6") of grade 4 crushed stone and four inches (4") to six inches (6") of free airspace placed under the meter inside the box. Meter boxes and openings shall be large enough to allow access to and operation of all meter nuts/flanges/bolts and the curb stop without obstruction. Meters larger than two inches (2") are required to be in a concrete vault. Openings below the finished grade in the meter box shall be permanently closed.
- The size of services for apartments, condominiums, or multi-family services will depend on the number of units served with a minimum of one (1) meter per building.
- All service taps on existing water mains shall be inspected and approved by the Public Works Department.
- Multiple meters manifold in parallel are not permitted. In such instances a single larger meter

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shall be selected.

- Bullhead connections are not permitted unless approved by the Public Works Department.
- Domestic and fire service connections on fire hydrant leads or dead end mains shall not be permitted.
- Meters shall be set horizontally level in all directions.
- All irrigation meters, fire meters and meters four inches (4") or larger in size shall be turbine meters. All domestic meters two inches (2") or smaller in size shall be positive displacement meters, unless otherwise approved by the Public Works Department.

B. Water Services two inches (2") and smaller shall include the following design criteria:

- The service saddle shall be of one of the following:
 - Double-strap bronze with CC. (AWWA taper) threads: Mueller #BR2B, Ford #202B or McDonald #3825. Tap shall be set at 45° of vertical on the main line.
 - Mueller Servi-Seal™ style 502, 504, 506 or 508; seven inch (7") minimum length.
 - Ford Style FS303-CC.
- Corporation stop with AWWA taper threads (CC) by conductive compression connection. Following is a list of approved corporation stops:
 - For 3/4" use Mueller H-15008, Ford F1000-G or McDonald 4701BT.
 - For 1" use Mueller H-15008, Ford F1000-G or McDonald 4701BT.
 - For 1 1/2" use Mueller H-15013, Ford FB1000-G or McDonald 4701T.
 - For 2" use Mueller B25008, Ford FB1000-G or McDonald 4701T.
- 90° angle curb stop with lock-wing. Following is a list of approved curb stops:
 - For 3/4" and 1" use Mueller H-14258 or B24258, Ford KV43-332W-G or KV43-444W-G and McDonald 4646BT or 4606BT.
 - For 1 1/2" and 2" use Mueller H-14277, Ford FV43-666W-G or FV43-777W-G and McDonald 4646BT or 4606BT.
- All companion flanges shall be elliptical brass and all bolts & nuts shall be grade 316 stainless steel, 5/8-11 x 2 1/2" hex head.
- The tapping saddle and corporation stop must be poly-wrapped (8 mil) and hand backfilled with sand to a depth of twelve inches (12"). Additional backfill may be placed by mechanical equipment and may consist of material free of rocks and clods exceeding three inches (3") in diameter. The Public Works Department shall inspect the installation of the polywrap and initial backfill.
- Piping shall be type "K" copper, continuous from the corporation to the curb stop and completely embedded in sand for a distance of six inches (6") in all directions.

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- In-line curb-stops, meter yokes/setters, and/or meter risers are not permitted unless approved by the Public Works Department.
- Gate valves on the inlet side of the meter are strictly prohibited.

XI. WATER METERS

All meters with top and bottom plates shall be made of bronze and equipped with electronic absolute encoded registers, programmed to read in thousand gallon increments, and equipped with touch-pad readers.

A. Domestic (potable) Use:

- All 1.5" and smaller devices with flow capabilities ≤160 g.p.m. shall employ a nutating disc. Disc meters shall be Hersey 400 Series IIS™ or 500 Series IIS™, Sensus SRII, or Neptune T10.
- All 2" and larger commercial unit applications for domestic use having flow demands greater than 160 g.p.m. shall employ a Hersey MVR™ turbine meter.

B. Irrigation services of any size shall employ a Hersey MVR™ turbine meter.

C. Fire Service:

- Less than or equal to 2" meters shall be a Hersey MVR™ turbine meter.
- Greater than 2" shall be either a Double Check Detector Assembly, or a Reduced Pressure Zone Detector Assembly. These assemblies shall be approved by the University of Southern California Foundation for Cross Connection Control and Hydraulic Research (USC-FCCCHR), and installed in USC approved orientations and clearances. The bypass or detector shall meet the requirement of the 1.5" or smaller domestic use written above.

XII. WATER EASEMENTS:

The following minimum width exclusive water easements are required when facilities are not located within public rights-of-way or easements:

- Water mains eight inches (8") or larger in diameter shall be located within the center of a minimum fifteen-foot (15') water easement. Fire lines smaller than eight inches (8") in diameter shall be located within the center of a minimum ten-foot (10') water easement.
- In residential developments, water mains shall not cross residential lots unless specifically approved by the Public Works Department, in which case the easement shall be located within a single lot.
- Fire hydrants located outside of public rights-of-way shall be centered in a ten-foot by ten-foot (10' x 10') water easement.
- Two-inch (2") and smaller meters serving multi-family residential and non-residential developments shall be set in a minimum five-foot by five-foot (5' x 5') water easement or in the right-of-way.
- Meters larger than two inches (2") shall be in a minimum ten-foot by ten-foot (10' x 10') water easement if not located within the public right-of-way.

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Town of Addison Control Point No. COA-5. 190 feet south from the intersection of Edwin Lewis Dr & Quorum Drive. Then 2 feet from the west edge of sidewalk, 50.5 feet from the west side of median in Quorum Dr & 76 feet from fire hydrant.
NAVD 88 Elevation = 630.10'

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		Piburn & Carson, LLC <small>801 E. Campbell Road - Suite 572 Richardson, Texas 75081 Ph: (972) 338-3600 Fax: (972) 338-9332 www.piburncarson.com email: info@piburncarson.com Surveying File #120871-00 Engineering File #12024</small>				
		WATER REQUIREMENTS HOME 2 SUITES by HILTON SITE DEVELOPMENT PUBLIC WORKS DEPARTMENT TOWN OF ADDISON, TEXAS				
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
RC	JRG	2/6/15	1"=20'	PC	-	-