

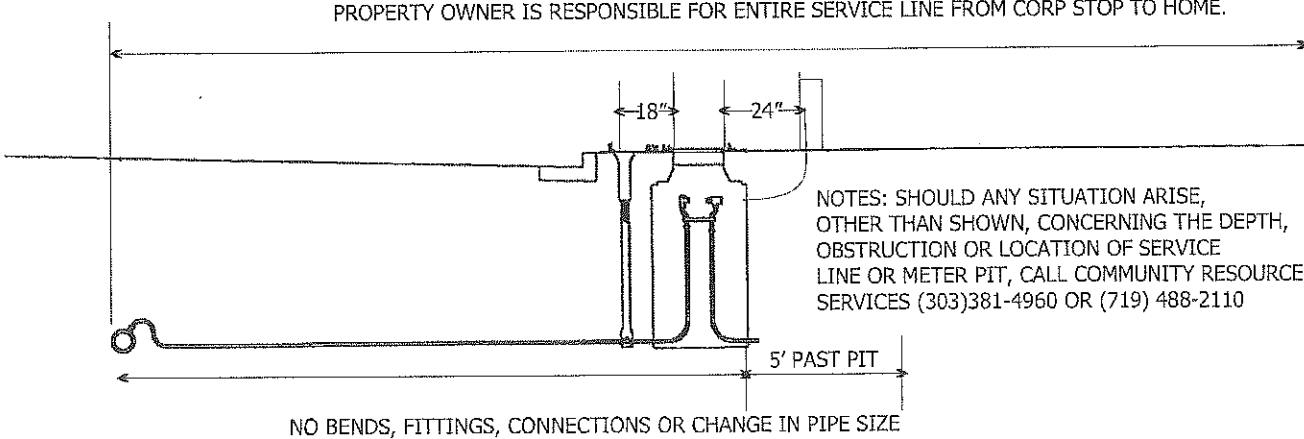
DESCRIPTION:

1. SADDLE, CORPORATION STOP AND INSULATOR
2. LOCKING SHUT OFF VALVE
3. SERVICE LINE - COPPER (TYPE K) OR PEX
4. 5/8" X 3/4" METER YOKE WITH CHECK VALVE (AURORA SP)
5. METER PIT: 24" I.D. X 28" O.D. X 4' MIN
6. METER PIT BELL AND LID
7. METER REMOTE READ MOUNTING POST 5"X5" X 18"
8. 1/2" CONDUIT FOR REMOTE READ WIRE
9. PLASTIC FROST LID

NOTES:

1. WATER METER AND REMOTE READ DEVICE FURNISHED AND INSTALLED BY FOREST VIEW ACRES WATER DISTRICT PERSONNEL.
2. SERVICE LINE MUST HAVE A MINIMUM COVER OF 4.5 FEET.
3. WATER DISTRICT PERSONNEL SHALL INSPECT THE SERVICE LINE FROM THE MAIN TO THE METER PRIOR TO BACKFILLING.
4. INSIDE METER SETTINGS WILL NOT BE PERMITTED.
5. OUTBUILDINGS SUPPLIED WITH WATER SHOULD BE CONNECTED TO PROPERTY OWNER'S SERVICE LINE NO LESS THAN FIVE (5) FEET AFTER THE METER PIT.
6. METER PITS AND CURB STOPS SHALL BE LOCATED IN GRASSY, LANDSCAPED AREAS, UNLESS OTHERWISE APPROVED BY THE BOARD OF DIRECTORS PRIOR TO INSTALLATION.
METER PITS CANNOT BE PLACED IN DRIVEWAYS, SIDEWALKS OR UNDER PARKING AREAS.
7. ALL METER SETTINGS MUST BE INSPECTED BY FOREST VIEW ACRES WATER DISTRICT PERSONNEL BEFORE BEING BACKFILLED. METERS WILL NOT BE SET/APPROVED UNLESS METER SETTING AND SERVICE LINE ARE IN FULL COMPLIANCE WITH THE RULES AND REGULATIONS, STANDARD DRAWINGS AND APPROVED PROJECT DRAWINGS AS APPLICABLE.
8. DOMESTIC WATER SERVICES SHALL RUN AT A NINETY (90) DEGREE ANGLE FROM WATER MAIN WITH NO BENDS, NO CHANGES IN PIPE SIZE OR MATERIAL, AND NO CONNECTIONS UNTIL FIVE (5) FEET PAST THE METER PIT. NO JOINTS ARE PERMITTED WITHIN THE METER PIT EXCEPT THOSE SHOWN ON THE STANDARD DRAWINGS.

PROPERTY OWNER IS RESPONSIBLE FOR ENTIRE SERVICE LINE FROM CORP STOP TO HOME.



NOTES: SHOULD ANY SITUATION ARISE, OTHER THAN SHOWN, CONCERNING THE DEPTH, OBSTRUCTION OR LOCATION OF SERVICE LINE OR METER PIT, CALL COMMUNITY RESOURCE SERVICES (303)381-4960 OR (719) 488-2110

BY ORDER OF THE BOARD OF DIRECTORS
FOREST VIEW ACRES WATER DISTRICT

METER PIT
SPECIFICATIONS DETAIL

DATE : OCTOBER 2011
REVISION: 3
SCALE: NONE

SECTION- WATER SERVICE LINES

24.01 General

All water service line construction connecting to Forest View Acres Water District Distribution System will be constructed according to these Specifications. These specifications will cover all new water service line construction and repairs to existing lines from the water main to the building plumbing.

24.02 Inspection

Water Division personnel will inspect the service line from the main to the meter before backfilling according to these Specifications. The Contractor will notify the management company 24 hours in advance to schedule inspections.

24.03 Location and Alignment of Service

Water service lines will be constructed on the shortest and straightest route possible. At no time will the service line be any closer than five (5) feet to the side property line, and no service line may be constructed through or in front of any adjoining property. When possible, the service line will be located ten (10) feet from the sewer service the entire distance from the point of connection at the water and sewer main to the building. Furthermore, the lateral shall be located no closer than four (4) feet from all other utilities and six (6) feet from all pedestals. WATER SERVICE LINES WILL NOT RUN UNDER THE DRIVEWAY WITHOUT WRITTEN PERMISSION OF THE ENGINEER AND SHALL BE INSTALLED WITHIN A SLEEVE IF LOCATED UNDER THE DRIVEWAY.

24.04 Materials

All materials used on two (2) inch and smaller water service line installations shall conform to the following specifications and applicable standard details. Three (3) inch or larger water service lines will be Class 52 ductile iron pipe.

24.04.1 Pipe:

All piping for service lines will be installed clean and will be copper tubing type K or PEX with tracer wire.

24.04.2 Meter Pits:

Meter pits will be located in landscaped areas, within the public right-of-way or in a utility easement. In addition, meter pits will be located adjacent to the nearest curb, sidewalk or valley pan according to the applicable standard detail.

Whenever an existing yoke must be reset due to grade changes or other unforeseen circumstances, the resetter shall be installed with a new check valve as manufactured by Ford Meter Box Co., 40 Series Resetter or approved equal.

24.04.3 Tapping Saddles:

Tapping saddles are required for all service taps on PVC, Ductile Iron and Asbestos Cement (AC) water main.

Tapping saddles for ductile iron pipe shall be double strap comprised of all bronze components including nuts, bolts, straps and body as manufactured by Mueller Co. or approved equal.

Tapping saddles for PVC pipe shall be Style 202BS double band saddles as manufactured by The Ford Meter Box Co. for C900 PVC pipe or approved equal.

24.06 Service Stub-Ins

Service stub-ins will extend to a curb stop or a meter pit. Terminating service stubs by coiling and capping the copper line is not allowed. The meter yoke will be installed as shown on the standard details. A District representative will inspect all service stub-ins.

24.07 Tapping the Main

24.07.1

The Contractor will make 3/4 inch taps on the pressured main after testing (if applicable on new mainline extensions), initial acceptance by the District representative and after payment of the water service connection fee. The Contractor will supply the tapping saddle, if necessary, and corporation stop with an insulator for a direct tap. Water District personnel will inspect the tap, corporation stop and the service line from the main to the meter, for all service taps, prior to the contractor backfilling the service line trench. If the tap is backfilled prior to inspection, the contractor will be required to expose the tap and service line for inspection by Water District Personnel. At the time the tap is made, the service trench must be excavated from the main to the meter pit location. The Contractor/Developer at his expense will provide shoring and full access to the main for the tapping process. The excavation for the tap will require lengthening, widening or additional shoring by the Contractor if, in the opinion of Water Division Personnel, the excavation is not adequate.

The corporation stop shall be as manufactured by the Ford Meter Box Co. Inc. or Mueller Co.

All corporation stops shall have AWWA C800 taper threads on the inlet and a flared copper connection at the outlet. The corporation stop shall be placed at forty-five (45) degrees above the horizontal center of the main. The trench shall backfilled with granular bedding material one (1) foot around the corporation stop.

24.07.2

The remainder of the service line from the meter pit to the structure is then installed according to the detail provided.

24.08 Service Line Installations

All service line installation work will conform to the standard details. Forest View Acres Water District personnel will furnish and install the water meter once the applicable connection fees have been paid. The Applicant for the water service connection will, at his sole expense, provide the trench, tap for 3/4 inch service lines, insulator, service line pipe, tapping saddle and meter yoke, where required, check valve, meter pit or vault, meter pit or vault cover, and curb stops. The Applicant is required to install same and backfill trench, all according to the specifications of Forest View Acres Water District.

All service lines will be of uniform size from the service line tap to the building structure.

All nonresidential water service taps and all fire service lines shall require a backflow prevention device, which shall include, but not be limited to clubhouses, pools, churches, etc. Backflow prevention devices will be installed per Section 25.00 of these specifications.

24.09 Additional Requirements

On new water services, no meter will be installed until the installation is according to all Specifications. Any deviation from these Specifications requires written permission from the Board of Directors of Forest View Acres Water District. The Board of Directors or authorized agent will establish the requirements of the deviations.

24.09.1

Meter pits will not be installed in or under driveways, sidewalks, streets or parking areas.

24.09.2

The meter pit will be at final grade at the time the meter is to be installed. Any adjustment in the grade of the meter pit, meter yoke or brace will be by and at the expense of the owner. Final grades may be evidenced by the presence of a curb and gutter. If curb and gutter is not present, the owner will assume responsibility for adjusting meter pits and service laterals as necessary to conform with these specifications.

24.09.3

Meter pits will be constructed such that the rings and hoods will not have spaces between them.

The pits will be free of trash and will have a minimum depth of four (4) feet from finished grades.

24.09.4

Pits will be vertically plumb.

24.09.5

Hoods will be raised with riser rings only.

24.09.6

All materials will be of new quality and free of defects.

24.09.7

Meter pits will be located no less than four (4) feet from all other utilities and six (6) feet from pedestals.

24.09.8

No lead soldered joints or compression couplings are allowed on any section of the water service lateral. Furthermore, field soldered joints are not allowed on that section of the water service lateral between the main and the meter pit.

24.09.9

Backfill around a meter pit and in the trench will be done according to Section 11.00 of these specifications.

24.09.10

All bends in the service line will have a minimum radius of twelve inches (12").

24.09.12

A copper water service will extend no less than 10 feet from the building according to the National Electrical Code (N.E.C.) if the water service will be used for grounding purposes. Other methods of grounding according to the N.E.C. must be provided if the water service is not used for such purposes.

24.10 Trench Backfilling

Backfilling will be according to Section 11.00 of these Specifications.

24.12 Construction Site Restoration

The construction site will be restored according to Section 11.00 of these Specifications.

SECTION 25.00 - BACKFLOW PREVENTION DEVICES

25.01 General

Forest View Acres Water District requires Cross Connection Control (C.C.C.) Devices according to *The Colorado Cross Connection Control Manual* published by the Colorado Department of Public Health and Environment. These devices will be installed on all commercial water services, irrigation systems and fire suppression lines. Furthermore, backflow prevention devices will be installed on all water service lines where the District has determined that a hazardous or aesthetically objectionable condition does or could exist. All service lines will be equipped with a check valve on the meter yoke for minimum protection from back siphoning.

25.02 Hazardous Condition

A hazardous condition will mean any unprotected (actual or potential) connection or structural arrangement between a public or a consumer's potable water system and any other system through which solids, liquids or gases could be introduced into any part of the potable system that would create a danger to the health and well being of the consumer.

25.02.1 Degree of Hazard:

The degree of hazard will be determined by the District through an evaluation of the potential risk to the public health and the adverse effect of the hazard upon the potable water system. The appropriate style and size of the device will be based on the degree of hazard by Water District Personnel.

___ Hazardous requires the installation of a reduced pressure principle backflow prevention assembly. A Pressure Vacuum Breaker (PVB) is allowable on sprinkler irrigation systems if the irrigation system is not subject to backpressure, the system is not looped with multiple feeds, and the device meets height requirements.

___ Aesthetically Objectionable requires the installation of a double check valve assembly. A double check valve assembly cannot be used on sprinkler irrigation systems.

25.04 Installation

25.04.1

Each backflow prevention device will be installed according to the manufacturer recommendations and these specifications. For cases in which the water cannot be shut off for 30 minutes for testing, two (2) backflow prevention devices will be installed in parallel.

Backflow Prevention Devices 25 - 2 5/1/01

25.04.2

The owner or agent is responsible for contracting a State Certified Technician to test all backflow prevention assemblies within twenty-four (24) hours of being put into service, and/or annual tests thereafter. Any repairs performed on a backflow prevention assembly require that the device be retested to ensure correct operation. All test reports must be mailed (or faxed) to:

Community Resource Services
3855 North Lewiston Street, Suite 140
Aurora, Colorado 80011
Fax (303) 381-4961

State law requires that all test reports must be mailed (or faxed) within ten (10) working days of the test.

25.04.4

No backflow prevention assembly will be altered in any way after delivery from the manufacturer.

25.04.6

Proper drainage is required whenever a backflow prevention assembly, under pressure, is installed indoors due to the large quantities of water that are vented whenever a backflow condition or malfunction of the device occurs. It is recommended that drain sizing be twice the size of the device (example, a 2" backflow preventer would need a 4" drain). An alarm system may be required for indoor installations, if applicable. Furthermore, the drain shall meet the minimum sizing requirements per S.D.#230.

The Uniform Plumbing Code requires the installation of a thermal expansion tank on water systems contained by a backflow preventer. Refer to the Uniform Plumbing Code for requirements.

25.04.7

Winterizing sprinkler systems will be accomplished by inserting air on the user side (downstream) of the backflow prevention device. In no case shall air be introduced into or upstream of the backflow prevention device. If necessary, a tap will be installed downstream of the backflow device to facilitate winterizing. Absolutely no antifreeze will be allowed to winterize irrigation sprinkler systems.

25.05 Location

25.05.1

Backflow prevention devices will be installed on all irrigation sprinkler system taps downstream from the meter vault or pit. Backflow prevention devices intended for irrigation systems only do not need to be located within a heated enclosure if placed outside the building. These devices may be placed above ground.

25.06 Testing

25.06.1

When the backflow prevention device has been installed according to City Specifications, the C.O.A. Plumbing Inspector or Cross Connection Control Section will inspect the installation and verify the Certified Testing Report of the device before final acceptance is issued. All backflow prevention devices will be inspected and tested at least annually by the user. More frequent testing might be required in certain cases where it has been determined that the hazard is exceptionally high to the public water supply.

25.06.2

A State of Colorado Certified Cross Connection Control Technician shall conduct all testing. The Colorado Department of Public Health and Environment or the District will furnish a list of certified testers on request. See the Yellow Pages

under Backflow Prevention.

25.06.3

The C.O.A. recommends the Certified tester place tags on all devices that they have tested. This tag will include the tester name, phone number, company, State Certification number, serial number of the device and the test date.

25.07 Additional Information

Refer to the Colorado Cross Connection Control Manual, published by the Colorado State Department of Public Health and Environment, for any additional information not contained in this text.