

URBANDALE WATER UTILITY
RULES AND REGULATIONS
May 1, 2025



Urbandale, Iowa

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Adopted by action of the Urbandale Water Board of Trustees on April 8, 2025, and effective May 1, 2025.

Addendum #1:

Dated **February 11, 2020**

Comments: Changes in Appendix A – Fee Schedule

Addendum #2:

Dated **October 13, 2020**

Comments: Changes to Section 105.4 Material for Service Piping

Addendum #3:

Dated **June 10, 2021**

Comments: Changes in Section 105.4 Material for Service Piping, Section 109.11 Meter Pits for 5/8” to 2” Meters, and Appendix A - Fee Schedule

Addendum #4:

Dated **June 1, 2022**

Comments: Changes made to Preface, 102.6 Customer Responsibility, 104.3 Size of Tap, 104.5 Removal of Tap or Connection, 106.5 Cross Connection – Containment Provisions, 108.1 Commercial Industrial Private Fire Protection Systems, 109.1 Water Meters General, 109.7 Size of Meters, 109.8 Installation, 109.12 Meter Pits for 3” Meters and Larger, 109.21 Automated Meter Reading Unit (AMR) & Remote Meter Installation/Repair, 110.1 Public Mains, 112.6 Water Rationing Enforcement, Fee Schedule and Drawings.

Addendum #5:

Dated **May 1, 2023`**

Comments: Fee Schedule Updated

Addendum #6:

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Comments: Fee Schedule Updated

Addendum #7:

Dated **May 1, 2025**

Comments: Changes made to 101.3 Location of Water Facilities, 102.2 Deposit, 102.3 Billing, 102.4 Default in Payment, 102.6 Customer Responsibility, 104.1 Taps and Connections – General, 109.1 Water Meters – General, 109.14 Maintenance, 112 Water Shortage Plan, Fee Schedule – Appendix A, Figures B-1, B-22 and B-23 – Appendix B.

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PREFACE

1. These rules and regulation are made by authority of Chapter 388, Division V of Chapter 384, and other pertinent sections of the Code of Iowa (latest edition) and Title IV Chapter 5 of the Urbandale City Ordinance, granting authority to the Urbandale Water Board of Trustees to make such Rules and Regulations for the conduct of the Water Utility controlled and operated by the Urbandale Water Utility. This authority includes termination of any water service for nonpayment, failure to maintain the pipes and plumbing connected with the water supply main, or noncompliance on the part of the water user with these Rules and Regulations. These Rules and Regulations are binding upon the customer(s) as one of the conditions of their service. The Urbandale Water Utility delivers water to customers through the water mains installed in public rights-of-way and occasionally in easements on private property. The mains are owned by the Urbandale Water Utility and are under its exclusive control. The property owner is responsible for maintenance and care of all piping, sewer deduct meters, appurtenances and fixtures (including corporation and stop box) from the water main. The only exceptions to this requirement are the water meter, remote reading device, meter interface unit and related wiring. These are installed and owned by the Urbandale Water Utility.
2. The Water Utility shall have the authority to bill all customers for water, sewer, solid waste and storm water. Water and sewer usage are based on the water consumed. The water rates shall be established by the Urbandale Water Board of Trustees. The sewer rates shall be established by the Sanitary Sewer Districts that serve the City of Urbandale. The solid waste and storm water fees are established by the Urbandale City Council.
3. No installation of a water service (the pipe and fixtures from the main in the street to the meter), nor repair thereof, shall be made which does not conform to these Rules and Regulations and the Standard Specifications. Inspection for conformance by the Urbandale Water Utility or a designated representative is required for all installations and repairs of water services.
4. Failure to conform to these Rules and Regulations and the Standard Specifications may result in termination of the water service as hereafter provided.
5. Grievances and Appeals
 - A. There shall be an appeals committee consisting of such as the general manager, the distribution manager, and the office manager may from time to time be available. Any person aggrieved by the application of these Rules and Regulations, including any person disputing the amount and validity of any charge for water service, shall be entitled to request a hearing before such committee. Such hearing shall be held as soon as reasonably practical, and the committee shall thereupon decide the issue presented to it in such manner as shall, in its judgment further the spirit of these rules and regulations, promote public safety, avoid unjust discrimination, and do substantial justice.
 - B. Any issues not resolved by the Appeals Committee may be brought before the Urbandale Water Board of Trustees for review. It shall there upon be decided in a fair and impartial manner with the final judgment of the Urbandale Water Board of Trustees being binding.
6. These Rules and Regulation shall take effect upon adoption by the Urbandale Water Board of Trustees. The adoption of these Rules and Regulations shall act to repeal or amend any existing Rules and Regulations that are in conflict.

7. These Rules and Regulations may be changed from time to time at the discretion of the Urbandale Water Board of Trustees in accordance with the law. The current rules are on file at the Water Utility office located at 3720 86th Street and on the Utility's website: www.urbandalewater.org.

Adopted by action of the Urbandale Water Board of Trustees on April 8, 2025, and effective May 1, 2025.

DEFINITIONS

- 1) Administrative Authority: For the purposes of this section the administrative authority shall be the Urbandale Water Utility.
- 2) AMR: AMR is the automated meter reading unit.
- 3) Approved Backflow Prevention Assembly for Containment: A backflow prevention assembly which is listed by the University of Southern California-Foundation for Cross Connection Control and Hydraulic Research as having met the requirements of ANSI-AWWA Standard C510-89, "Double Check Valve Backflow-Prevention Assemblies", or ANSI-AWWA Standard C511-89, "Reduced-Pressure Principle Backflow-Prevention Assemblies" for containment. The listing shall include the limitations of use based on the degree of hazard. The backflow prevention assembly shall also be listed by the International Association of Plumbing and Mechanical Officials.
- 4) Approved Backflow Prevention Assembly for Containment in a Fire Protection System: A backflow prevention assembly to be used in a fire protection system which meets the requirements of Factory Mutual Research Corporation (FM) and Underwriters Laboratory (UL), and the requirements of the fire code and the building code of the City of Urbandale, in addition to the requirements of the Administrative Authority. Devices sized smaller than 2-1/2" which have not been listed by Underwriters Laboratory (UL) and tested by Factory Mutual Research Corporation (FM) may be allowed if they meet the requirements of the fire code and the building code of the City of Urbandale.
- 5) Appurtenance: Anything attached to water piping that it becomes a part of that property.
- 6) Auxiliary Water Supply: Any water supply on or available to the premises other than the water purveyor's approved public water supply such as, but not limited to a private well, pond, or river.
- 7) Circulating Fire System: A system in which the water for both the domestic and the fire system needs are designed as one system.
- 8) Containment: A method of backflow prevention that requires the installation of a backflow prevention assembly at the water service entrance.
- 9) Cross Connection: Any actual or potential connection or arrangement, physical or otherwise, between a potable water supply system and any plumbing fixture or tank, receptacle, equipment, or device, through which it may be possible for non-potable, used, unclean, polluted, and contaminated water, or other substance, to enter into any part of such potable water system under any condition.
- 10) Customer: The owner, operator, occupant of a building or property which has a water service from a public water system, or the owner or operator of a private water system which has a water service from a public water system.
- 11) Degree of Hazard: The rating of a cross connection or water service that indicates if it has the potential to cause contamination or pollution.
- 12) Double Check Valve Backflow Prevention Assembly: A backflow prevention device consisting of two independently acting internally loaded check valves, four properly located test cocks, and two isolation valves.

- 13) High Hazard Cross Connection: A high hazard cross connection is a cross connection which may cause an impairment of the quality of the potable water by creating an actual hazard to the public health, through the spread of disease by sewage, industrial fluids, or waste.
- 14) Isolation: A method of backflow prevention in which a backflow prevention assembly is located at the cross connection rather than at the water service entrance.
- 15) Low Hazard Cross Connection: A low hazard cross connection is a cross connection which may cause an impairment of the quality of the potable water to a degree which does not create a hazard to the public health, but which does adversely and unreasonably affect the aesthetic qualities of such potable waters for domestic use.
- 16) Non-Circulating Fire System: A system in which the fire system piping is separate from the domestic water supply. This system requires a backflow preventer to be installed.
- 17) Private Fire Protection System: Private fire protection systems consist of a connection to the Water Utility main for any or all of the following: standpipe(s), automatic sprinkler system(s), fire pump(s), or fire hydrant(s).
- 18) Reduced Pressure Principle Backflow Prevention Assembly: A backflow prevention device consisting of two independently acting internally loaded check valves, a different pressure relief valve, four properly located test cocks, and two isolation valves.
- 19) Registered Backflow Prevention Assembly Technician: A person who is registered by the State of Iowa to test or repair backflow prevention assemblies and report on the condition of those assemblies.
- 20) Rules and Regulations: The term Rules and Regulations shall mean the Urbandale Water Utility's Rules and Regulations.
- 21) Service Line: A service line is comprised of the piping and related appurtenances including the corporation installed from the water main to the outlet connection of the first shut off device within the building to be served.
- 22) Standard Specifications: The term Standard Specifications shall mean the Urbandale Water Utility's Standard Specifications for Water Mains and Appurtenances.
- 23) Thermal Expansion: Volumetric increase of water due to heating resulting in increased pressure in a closed system.
- 24) Water Service: Depending on the context, water service is a physical connection between a public water system and a customer's building, property, or private water system, or the act of providing potable water to a customer.
- 25) Water Board: The Water Board shall mean the Urbandale Water Board of Trustees.
- 26) Water Utility: Water Utility (UWU) shall mean the Urbandale Water Utility.

100 ADMINISTRATIVE

100.1 PURPOSE

The purpose of this section is to provide for the office, powers and duties of the General Manager of the Urbandale Water Utility.

100.2 APPOINTMENT

The General Manager shall be appointed by a majority vote of the entire Water Board at a regular meeting of such body.

100.3 REMOVAL

The Water Board may remove the General Manager from the position of General Manager by a majority vote of the trustees. After completing twelve (12) months service, the General Manager may not be removed without ninety (90) days' notice or ninety (90) days' pay at the highest salary received during tenure. Such notice and compensation may be waived at the Water Board's discretion if the manager is found guilty of an illegal action in the performance of his/her duties.

100.4 COMPENSATION

The General Manager shall receive such annual salary as the Water Board shall, from time to time, determine by a majority thereof, and time of payment shall be fixed in accordance with that of other Water Utility employees.

100.5 POWERS AND DUTIES

The General Manager shall be the chief administrative officer of the Water Utility. The Manager shall be responsible to the Water Board for the administration of all Water Utility affairs placed in the Manager's charge by the Water Board. The General Manager shall have the following powers and duties:

- 100.5.1 To employ, reclassify, evaluate, suspend or remove Water Utility personnel and recommend to the Water Board compensation to be paid such employees as provided for by the Code of Iowa and Water Utility Personnel Policies.
- 100.5.2 To see that all ordinances, resolutions, contracts, Water Board directives, or laws of the State are faithfully executed.
- 100.5.3 To attend all meetings of the Water Board, unless excused by a majority of the Water Board. The Manager shall have the right to participate but shall not have the right to vote.

- 100.5.4 To keep the Water Board fully advised as to the financial conditions, current activities and future needs of the Water Utility and to make such recommendations to the Water Board concerning the affairs of the Water Utility, as the Manager may deem necessary.
- 100.5.5 To direct and supervise the administration of all departments and offices of the Water Utility.
- 100.5.6 To prepare and submit an annual budget and capital program to the Water Board of Trustees.
- 100.5.7 To conduct the business affairs of the Water Utility, including financial and personnel affairs, by modern and efficient methods and to cause accurate records to be maintained.
- 100.5.8 To make such other reports as the Water Board may require concerning Water Utility affairs.
- 100.5.9 To perform such other duties as the Water Board may request or delegate.

101 GENERAL

101.1 WATER PRESSURE

Water pressure varies throughout the distribution system depending on elevation and pressure zones. Information on pressure at a specific location may be obtained upon request to the Water Utility.

101.2 TEMPORARY INTERRUPTION OF SERVICE

The Water Utility may interrupt a customer's water supply. An effort will be made to provide 24-hour advanced notification of any interruption. In case of emergencies such as a main break, mains and services may be shut down without notification.

101.3 LOCATION OF WATER FACILITIES

101.3.1 Water mains and facilities owned or maintained by the Water Utility.

The Water Utility is a member of Iowa One Call and will furnish information, as may be available from our records, and to the best of our ability regarding locations of mains, hydrants, valves, and other fixtures owned by the Water Utility. The Water Utility will use its employees and tools in this effort at no cost to the person assisted. It should be understood that after the location of the facility is established, the Water Utility should expect the facility to be protected from damage or harm.

101.3.2 Water mains, valves, services and fixtures not owned or maintained by the Water Utility.

This section references private water mains and valves, rural water district mains, etc. On such mains and facilities the Water Utility will make available to persons having a reasonable need, information concerning these mains and facilities from records that may be on file with the Water Utility. Records on private mains and facilities and similar installations are furnished to the Water Utility on behalf of the owners of these facilities and may not be current or reflect as-built conditions. It should be understood that these facilities are not owned and maintained by the Water Utility. The Water Utility makes no assurances to the accuracy or validity of the records, field markings or information. Persons shall use their own discretion when making use of the records on private facilities.

101.4 WATER AVAILABILITY

All requests for water service will be evaluated on whether adequate capacity is available at the desired location. If adequate service is not available, alternatives may be provided to the owner to obtain service. In some locations, main installation, front footage pay back, or other capital contribution may be required.

101.5 WATER CONNECTION TO OTHER WATER SUPPLIES

Any Urbandale property owner shall not be connected to any other water system other than Urbandale Water Utility's distribution system unless written permission is obtained from the General Manager.

101.6 MATERIAL AND INSTALLATION PRACTICES

All material and installation practices shall comply with the Urbandale Water Utility's Standard Specifications for Water Main and Appurtenances.

102 APPLICATION FOR THE USE OF WATER

102.1 APPLICATION

- 102.1.1 Applications for the use of water shall be made in writing on forms provided by the Water Utility and shall be signed by the customer. If a customer has an unpaid balance for water service at a previous location in Urbandale, this balance shall be paid, or arrangements made for payment, before service can be turned on.
- 102.1.2 At the time of application, a fee shall be charged to every customer desiring service in Urbandale (see Appendix A - Fee Schedule). The Water Utility will read the meter and turn on the water to the premises for which the consumer has signed. The Water Utility will issue a receipt for the fee.
- 102.1.3 The Rules and Regulations and rates for water herein and hereafter adopted, shall be a part of the contract with the water consumer, and every person, firm or corporation, whether signing an application contract or not, by taking water, shall express their assent to be bound thereby.
- 102.1.4 If there is no water service to the premise, see Section 103.0.
- 102.1.5 In the case of a customer who has been disconnected or for whom a balance due is pending, service will not be reconnected or continued in the name of another occupant or user of the place if the previous customer or any person liable for payment of the delinquent bill(s) continues to occupy or receive benefit of the water services provided at the place, unless arrangements are made to pay for unpaid service at the place.

102.2 DEPOSIT

- 102.2.1 All customers of the Water Utility shall, before receiving water, deposit with the Water Utility as security for payment of bills when due, an amount as determined by the Water Board based on the largest water meter on the premise (see Appendix A - Fee Schedule). **The Water Utility reserves the right to charge past due bills of such customers against such deposit and shall require the deposit to be restored in full as a condition for receiving water. Such deposit shall be returned after a two (2) year period, if the customer has not received a "Reminder" notice for 24 consecutive months. When a person ceases to be a customer of the Water Utility, their deposit less any unpaid bills for water, repairs, or supplies shall be refunded.**
- 102.2.2 Customers who have had previous water service in Urbandale and have established a good pay record with the Water Utility will not be required to pay the deposit a second time. However, if a customer's pay history has been unsatisfactory, a deposit will be required.

102.3 BILLING

- 102.3.1 Meters will be read periodically and bills will be mailed/emailed monthly. Bills will be based on water consumption and billed according to the current rate structure (see Appendix A - Fee Schedule). All bills for water service shall be due and payable upon receipt. Water bills not paid on or before the twentieth (20th) of the month will be charged an administrative fee to help defray the cost of additional handling required by delinquency (see Appendix A - Fee Schedule). Payment may be made by mail, phone, direct deposit, or in person at the Water Utility Office, 3720 86th Street, Urbandale, Iowa, or at other designated pay stations. Those addresses are available from a Customer Service Representative.
- 102.3.2 All customers shall make it possible for the Water Utility representatives to obtain readings of any water meter(s) attached to the water service serving the premises. The water service may be discontinued if the Water Utility is not allowed to read the meter(s).
- 102.3.3 When a customer has been overcharged as a result of incorrect reading of the meter, incorrect application of the rate schedule, incorrect connection of the meter installation, or other similar reasons, the amount of the overcharge shall be adjusted. Refund or credit to the customer's bill shall not exceed five years unless otherwise ordered by the Water Board.
- 102.3.4 When a customer has been undercharged as a result of incorrect reading of the meter, incorrect application of the rate schedule, incorrect connection of the meter installation, or other similar reasons, the Water Utility may provide for billing the amount of undercharge to the customer. The time period for which the Water Utility may adjust for the undercharge is not to exceed five years unless otherwise ordered by the Water Board.
- 102.3.5 If a payment is returned due to insufficient funds (NSF), a charge will be posted to the bill to cover the return payment. (see Schedule A – Fee Schedule). NSF will be considered a default in payment. Cash, money order, **debit or credit card** will be required.
- 102.3.6 **Website or Pay-by-phone options are operated by a third-party processor who sets a maximum payment of \$200.00 and a fee of \$2.15 per transaction.**

102.4 DEFAULT IN PAYMENT

- 102.4.1 When a customer is in default of payment of an account for water supplied to his/her premises, or for fire service, or fails to comply with these Rules and Regulations, the water service may be terminated **and a charge assessed in accordance with the Late Notice/Disconnect Policy.** (see Appendix B, figures B-1) then in effect.
- 102.4.2 Where a water service has been turned off because of violation of the Rules and Regulations, or nonpayment of the bills due, the assessed charge shall be collected before restoring service as established by the Water Board. (see Appendix A – Fee Schedule)

102.5 UNAUTHORIZED USE OF UNMETERED WATER

- 102.5.1 Where a water service has been turned off at the stop box or the water main for any reason and it is subsequently found turned on without proper authority, the Water Utility may disconnect the water service. The water service shall not be reactivated until a new application for service is executed and payment for the expense of disconnecting/reconnecting such water service is made.
- 102.5.2 The unauthorized use of water is in violation of Chapter 714.1.7, Code of Iowa. The watering of sod, seeding or landscaping during construction is unauthorized use.(see Section 109.1.4), The following charges will be made against the customer in such cases:
- 1) Cost for removal of piping and all other incidental costs.
 - 2) An estimated bill for water consumption as determined by the Water Utility.
 - 3) A penalty outlined in Appendix A – Fee Schedule as established by the Water Board shall apply.
- 102.5.3 In addition to the above charges, the Code of Iowa provides for punishment for each offense as outlined in Appendix A – Fee Schedule, or by imprisonment in the County Jail for a period of not more than 30 days, or by both fine and imprisonment.

102.6 CUSTOMER RESPONSIBILITY

- 102.6.1 The owner or occupant of the premise shall be liable for the water consumed until provisions are made for the Water Utility to turn off water service or remove the meter.
- 102.6.2 When a customer is moving out of a premise and orders the water meter read on a certain day, the water may be turned off when the meter is read, unless there is an application already on file from a prospective customer or the property owner.

- 102.6.3 The customer shall protect and safeguard water, service pipes and fixtures. The owner, at his/her expense, shall keep service pipes from the water main and all appurtenances in good working order. The Water Utility is not responsible for service pipes and fixtures. No claims shall be made or maintained against the Water Utility for damages due to the breakage of any service pipes, curb stops or any other appurtenances including but not limited to the operation of a stop box during disconnection.
- 102.6.4 Whenever it shall come to the knowledge of the Water Utility that water service, stop box, valve, meter pit (including its cover) or any other appurtenances is broken, inoperable, or otherwise in a dangerous or unsafe condition, the Water Utility will make reasonable efforts to notify the occupant of the premise and, if different, the customer and the person who owns the property. Such notification will require the immediate repair and restoration of the facility. For any such owner's appurtenance to the Water Utility's distribution system, the Water Utility may terminate water service to the premises until such repairs are made, in case such condition poses a hazard to the public or adjoining property, or contains a repair to an inoperable stop box, it may make or cause to be made such repairs as are necessary. The cost of such termination and repairs, if any, shall be invoiced or included in the next water bill and if not paid, may result in termination of service to the premises.
- 102.6.5 The customer shall operate valves and other appurtenances of their water piping system in such a manner that pressure surges are not transmitted to the water distribution system.
- 102.6.6 The property owner shall provide a proper address that is visible from the street for the premise.
- 102.6.7 The customer is responsible for keeping the curb stop in good working order.
- 102.6.8 **If a customer misses a scheduled appointment, a service fee may be applied to their bill.** (see Appendix A – Fee Schedule).

102.7 SHUT-OFF NOTICE DELIVERY

If the customer requires a shut-off notice, a delivery charge will be posted to their bill. (see Appendix A – Fee Schedule).

103 APPLICATION FOR INSTALLATION OF WATER SERVICE

103.1 APPLICATION FOR WATER SERVICE PERMIT

The City of Urbandale Building Department will issue a permit for the installation of water service from the water main up to and including the meter. Each service shall have its own tap to the water main. No work of any nature shall be done in connection with the tapping of any water main or the introduction of water into the premises (public or private) between the water main and the meter, unless permission has been obtained from the Water Utility for such work. Each residence or premise requiring water shall have an individual service, which does not take water from another domestic service.

103.2 APPLICATION REQUIREMENT FOR FIRE SERVICES AND DOMESTIC SERVICES 1 1/4" IN DIAMETER AND LARGER

103.2.1 GENERAL REQUIREMENTS

- 1) A site plan (24" x 36") showing buildings, pavement, right-of-way lines, existing water mains, valves, hydrants, and the proposed service line.
- 2) Plumbing plans that show water meter and backflow preventer locations in the building.
- 3) Fire sprinkler system plans or a written description of the system and a detail of the riser piping.
- 4) An estimate of peak domestic demand to assist in selecting and sizing the water meter. If large flow fluctuations are anticipated, a load profile may be required. A load profile is defined as a written or graphical estimation of the lowest measurable flow, average, and peak gallon consumption for each hour of a 24-hour period. Peak flows felt to be unrealistic will be checked and further verified.

103.2.2 The tap will be scheduled after the submitted information has been reviewed by the Water Utility.

103.2.3 The contractor who desires the tap will be billed for the tap based on current rates as established by the Water Board (see Appendix A - Fee Schedule).

103.3 OBLIGATION OF CONTRACTOR

Any contractor performing work on the Water Utility distribution system shall have a permit to do so. The Water Utility will refuse to recognize any contractor who fails to comply with these Rules and Regulations.

103.4 PLUMBING INSPECTION

As soon as all pipe work from the water main to inside the building has been completed, and before any back filling is done in the ditch, the Water Utility or its agent shall be notified and shall inspect and test the work as to workmanship and material. No water pipe laid underground shall be covered or trenches filled until after the water has been turned into the pipe laid therein and such pipes have been tested and found to be watertight. If the Water Utility refuses to approve the work, the contractor or owner shall proceed immediately to correct the work so that it will meet the approval of the Water Utility.

104 TAPS AND CONNECTIONS

104.1 GENERAL

104.1.1 All taps and/or connections to water mains, public and private, shall be made by the Water Utility or its authorized contractors. Taps will be made only after application is completed by the contractor or owner as outlined in Section 103 of these Rules and Regulations.

104.1.2 The Water Utility will assess charges to the contractor if the site is not ready for the tap to be made prior to the dispatching of the tapping crew (see Appendix A - Fee Schedule).

104.1.3 No new tap shall be installed where a water service or stub already exists unless prior approval has been obtained from the Water Utility.

104.1.4 A minimum of 48-hour advanced notification is requested for taps. Before a tap request is made, the appropriate documents must have been completed and filed in the Water Utility's office in accordance with Section 103 of these Rules and Regulations.

104.1.5 All residential, domestic and fire demands shall be supplied by a single tap.

104.1.6 All Tapping sleeves and valves shall pass a pressure test as approved by the Water Utility staff prior to making the tap.

104.2 LOCATION OF TAP

104.2.1 Generally, taps will be made for 1" services at a 45-degree angle on the main within the projected lot lines of the property to be served. Taps 1-1/4" and larger will be made at a 90-degree angle.

104.2.2 Taps on the backside of the main will be made only after the proper side of the main has been exposed and the Water Utility personnel has verified that obstacles make it impossible to tap the house side of the main.

104.2.3 Tapping Saddles shall not be located:

- 1) Closer than 18" from another tap, joint or pipe fitting;
- 2) On hydrant branches; or
- 3) Within an intersection.

104.2.4 Tapping sleeve and valve (TS &V) or tee service connections shall not be located closer than 3' from another TS &V, pipe joint or fitting.

104.3 SIZE OF TAP

104.3.1 Minimum size tap allowed is 1”.

104.3.2 1” thru 2" taps require a saddle and corporation.

104.3.3 Taps larger than 2" will be made by the installation of a tapping sleeve & valve at the main, or a similar manner, as prescribe by the Water Utility.

104.3.4 Taps of a size equal to the main may be allowed.

104.4 EXCAVATION FOR TAP

104.4.1 The contractor shall make the excavation required for the tapping of the water main. For 1" through 2" taps the floor of the excavation shall be level leaving a clearance of at least 12" around the main (see Appendix B, figures B-2 and B-3). For taps larger than 2” (see Appendix B, figures B-4).

104.4.2 The excavation shall be shored in accordance with OSHA (Occupational Safety and Health Administration) and the Iowa Occupational Safety & Health Standards for the Construction Industry (IOSH) rules. Water Utility employees will not enter an excavation or trench that does not conform to OSHA and IOSH requirements. Contractors shall be solely responsible for compliance to OSHA and IOSH excavation and trench protection.

104.4.3 Tapping of a main with structures or obstructions overhead will be permitted only if IOSH standards are met.

104.5 REMOVAL OF TAP OR CONNECTION

- 104.5.1 For Services having a corporation tap that are to be disconnected from the corporation stop, the corporation shall be capped and the stop box and rod shall be removed in accordance with these Rules and Regulations. This work shall be performed at the owner's expense by a licensed plumbing contractor and inspected by a representative of the Water Utility.
- 104.5.2 When services are connected to the main by a tee or tapping sleeve and valve they are to be removed from the main and replaced with a short length of pipe or repair sleeve. This work to be at the owner's expense.
- 104.5.3 Removal of taps or connections through a tunnel, with dirt or concrete overhead, will not be permitted due to the hazard incurred by workers.
- 104.5.4 With proper application, a service connection may be left as a stubbed service for up to one year.
- 104.5.5 When service is left as a stub, it shall be plugged at the stop box and inspected by the Water Utility.
- 104.5.6 A blind flange may be installed on the abandoned tee with prior approval from the Utility Distribution Supervisor.

105 WATER SERVICE INSTALLATION

105.1 APPLICATION

Refer to Section 103.

105.2 GENERAL LOCATION REQUIREMENTS

All service lines shall conform to the following requirements:

105.2.1 The water service shall normally be installed perpendicular to the main and tapped in front of the property to be serviced.

105.2.2 A clearance of not less than 12" shall be maintained between the service line and any pipe, cable, or conduit in the same trench.

105.2.3 Service lines shall be buried a minimum of 5' deep unless circumstances prevent the installation at 5'. If a depth of 5' cannot be maintained, appropriate measures shall be taken to prevent the service line from freezing.

105.2.4 All residential, domestic and fire demands shall be supplied by a single tap.

105.3 SIZE OF WATER SERVICE LINES

105.3.1 New or replacement service lines shall not be less than 1" inside diameter.

105.3.2 Commercial, industrial, and fire service lines shall be properly sized for the required demand.

105.4 MATERIAL FOR SERVICE PIPING

105.4.1 All water service pipes through 2" diameter shall be type 'K' heavy, soft annealed copper, seamless ASTM B88 or PEXa Municipex 200 psi pipe meeting AWWA C-904 specifications or Yelomine Certa-Lok pipe, SDR 17, 250psi pipe. PEXa and Yelomine applications can only be used as specified in Section 4.1.1.

- 1) Can only be installed after the meter and extended to the premise (such as in a meter pit situation or when extending water line after a meter setting). Type K copper is required from the tap to the meter setting.
 - a. Shall not be used for repairs or partial replacement.
 - b. PEXa shall be blue in color for all installations.
 - c. Splicing of pipe between the meter and the premise is discouraged and will only be approved under special circumstances.
 - d. Tracer wire shall be installed. In the case of a meter pit it shall be extended from the meter setting into the interior of the premise

and secured. Tracer wire shall be #12 AWG (HS-CCS) and installed alongside the pipe and shall be zip tied to the pipe every 5 feet. The use of tape to secure wire to the pipe is not allowed.

- e. An Anode Ground Rod: 1# 1.315" D x 18.5" L, magnesium drive in anode manufactured by Copperhead Industries, or approved equal, shall be attached to the tracing wire.
- f. Anode ground rod shall be spliced to tracer wire using Dryconn Direct Bury Lug, Part #3WB-01.
- g. A tracer wire inspection is required for all service line installations. Contact Urbandale Water Utility to schedule an inspection.

105.4.2 All pipe larger than 2" shall be ductile iron (DI), cement mortar lined, ANIS 21.50, Class 52 mechanical or push joint or PVC (polyvinyl chloride), AWWA C-900, Class 150 (DR 18) with cast iron outside diameter. Pipe joints shall be elastomeric gasket push-on type joints.

105.4.3 All new water lines installed within 200 feet of an underground fuel storage container shall be copper for 2" and smaller, 2" and above shall be ductile iron with nitrile gaskets.

105.5 SERVICE LINE APPURTENANCES

All service lines shall include a curb stop or valve between the water main and the property line. The design of all curb stop and valve boxes shall meet the standards of the Water Utility.

105.5.1 All stop box extensions shall be secured in such a way so that it becomes one permanent pipe, such as welding, Red Loctite or set screws.

105.5.2 Service lines of 2" in diameter or less shall have a curb stop located on public property. The curb stop shall be installed within a stop box.

1) CURB STOP/VALVE STANDARD

A main shut-off on the water supply line for each customer shall be provided on public property in front of the premise served, or another location approved by the Water Utility. All shut-offs for new and existing services shall consist of a ¼ turn curb stop. See Urbandale Water Utility Standard Specifications for details. The 'T' handle, on the curb stop will be parallel with the curb when the water is turned off. When installed the curb stop shall not exceed 6' below the surface of the ground.

2) STOP BOX STANDARD (CURB BOX)

Stop boxes for 1" through 2" water service lines shall be sliding extension type, arch pattern base with stationary stainless steel rod, AY McDonald 5607 and lid 5607-L or approved equal. All stop box installations shall be completed in such a manner that the lid is level

with the surrounding surface and does not present a hazard to the public (see Appendix B, figures B-5, B-6 and B-7). Where the stop box lid is located in concrete/asphalt surface, sleeves shall not be permitted.

- 3) No union shall be permitted on new copper services 2" or less in diameter between the corporation stop and the curb stop when the distance is less than 100'.
 - 4) Curb stop boxes and valve boxes shall be installed so that they will function properly and so that an access to the shut-off device is maintained. Boxes shall be set vertically so the top is flush with the surrounding surface so as not to be a hazard to the public. If conditions change that cause the curb stop to become a hazard to the public it is the customer's responsibility to correct the problem immediately. The use of curb stop sleeves will not be permitted to be installed in concrete.
- 105.5.3 Services larger than 2" in diameter, the valve between the water main and the property line shall be immediately adjacent to the water main. The gate valve at the main shall open left (counter clockwise) and may serve as the shut off. The valve shall be installed in a roadway box (see Appendix B, figure B-8).
- 105.5.4 All valves and roadway boxes shall have the approval of the Water Utility.
- 105.5.5 There shall be no mechanical coupling located under the house foundation and/or slab.
- 105.5.6 Curb stop boxes and roadway boxes shall be installed so that they will function properly and so that an access to the shut-off device is maintained.
- 105.5.7 All service lines shall have a shut-off device or valve inside the building where the service enters the building. There shall be no appurtenances between this valve and the main, other than the curb box or valve as previously described, or when an outside meter is approved (see Appendix B, figures B-12a & 12b and B-15a & 15b).

105.6 COMMERCIAL COMBINATION SERVICE PIPES

A commercial property requiring a domestic service line and a fire protection service line may be served from a single tap. When a single tap is used, the fire protection service line or combination service line shall extend straight from the public main to the property line. The domestic service line shall 'tee' off the fire line or combination service line and have its own shut-off valve located a minimum of 5' outside the building. A domestic service tee may not be placed on an existing fire line or combination service main without written permission of the Water Utility.

105.7 MAINTENANCE OF WATER SERVICES

If an existing water service is to be repaired, the materials used for the repair shall be of the type and size specified for new services. If it is determined that half or more of either section of the service, between the main and the curb stop or the curb stop and the building, shall be replaced, then that entire section shall be replaced with materials as approved for new services. Dissimilar metals may not be used in the repair of a service line unless insulators are used. Any premise being demolished must meet the current Urbandale Water Rules and Regulations water service specifications before rebuilding.

106 CROSS CONNECTIONS AND BACKFLOW PREVENTION

106.1 GENERAL

Cross connection from any well or other source of water to any piping system connected to the Water Utility distribution mains shall not be permitted.

106.2 BACKFLOW PREVENTION

106.2.1 The customer shall prevent pollutants and contaminants from entering his/her potable water supply system or the Water Utility distribution mains by backflow or back siphoning.

106.2.2 All water-using devices shall be so designed so that backflow or back siphoning to the system cannot occur.

106.2.3 Where harmful contaminants or pollutants are used with any device or process connected to the water system, the customer shall install and maintain a reduced pressure backflow prevention assembly in accordance with these Rules and Regulations and any applicable plumbing code requirements.

106.2.4 All permanently installed underground irrigation systems shall contain a reduced pressure principle backflow assembly to prevent backflow or back-siphoning to the Water Utility's distribution system.

106.2.5 Water activated sump pumps shall require a reduced pressure zone backflow assembly.

106.2.6 All new commercial and industrial construction is required to have a backflow assembly installed on the domestic water line immediately following the domestic water meter.

106.3 REQUIRED INSTALLATION

The approved backflow prevention assembly shall be installed:

106.3.1 For all new commercial, industrial and multi-level buildings over two stories when constructed.

106.3.2 For existing facilities, when major plumbing changes are made.

106.3.3 For any residence, plant, or facility where a hazardous condition is found.

106.3.4 When required by other codes or statutes.

106.4 INTERCONNECTED SERVICES AND/OR FIRE LINES

When a commercial property is served by two or more interconnected services and/or fire lines connected to different Water Utility distribution mains, the customer shall install and maintain, at his/her expense, on each service and/or fire line, an approved check valve according to the latest edition of the AWWA Standard C508.

106.5 CROSS CONNECTION CONTROL - CONTAINMENT PROVISIONS

106.5.1 Administrative Authority

- 1) The Water Utility shall have the right to enter, with the consent of the customer or upon the basis of a suitable warrant issued by a court of appropriate jurisdiction, any property to inspect for possible cross connections.
- 2) The Water Utility shall maintain records of cross connection hazard surveys, and the installation, testing, and repair of all backflow prevention assemblies installed for containment purposes.

106.5.2 New Water Services

- 1) Plans shall be submitted to the Water Utility for review on all new water services in order to determine the degree of hazard.
- 2) The Water Utility shall, in consultation with the Building Department, determine the type of backflow prevention assembly required for the containment based on the degree of hazard.
- 3) The Water Utility and/or the Building Department shall inspect the installation of the required backflow prevention assembly for containment before the initiation of water service.

106.5.3 Existing Water Service

- 1) Upgrades of existing water services shall be treated as new water services for the purpose of this section.
- 2) The Water Utility shall, on the basis of information received from customers, surveys, or gathered through on-site investigations; determine the type of backflow prevention assembly required for containment based on the degree of hazard.
- 3) Within the time frame specified by the Water Utility, the customer shall install a backflow prevention assembly for containment as required by the Water Utility.
- 4) For existing water services, the Water Utility may inspect the premises to determine if a hazardous connection to the water system exists. When found, the Water Utility at its sole discretion shall develop a schedule of compliance which the customer shall follow or water service may be terminated until the required backflow assembly has been installed.

- 5) Failure of the Water Utility to notify a customer that they are believed to have a hazardous cross connection in no way relieves a customer of the responsibility to comply with all requirements of this section.

106.5.4 Customer

- 1) The customer shall be responsible for ensuring that no cross connection exist without approved backflow protection within his/her or premise starting at the point of service from the public potable water system.
- 2) The customer shall, at his/her expense, cause installation, operation, testing, and maintenance of backflow prevention assemblies.
- 3) The customer shall ensure that copies of records of the installation and all tests and repairs made to the backflow prevention assembly are delivered in an electronic format to its record keeping representative within fifteen (15) days after testing and/or repairs are completed.
- 4) In the event of a backflow incident, the customer shall immediately notify the Water Utility of the incident and take steps to confine the contamination or pollution.

106.5.5 Required Backflow Prevention Assemblies for Containment - Water Services

- 1) An air gap or an approved reduced pressure principle backflow prevention assembly is required for water services having one or more cross connections which the administrative authority has classified as high hazard.
- 2) An approved double check valve assembly is required for water services having no high hazard cross connections but having one or more cross connections which the Water Utility has classified as a low hazard.

106.5.6 Required Backflow Prevention Assemblies for Containment - Fire Protection Systems

- 1) A reduced pressure principle backflow prevention assembly shall be installed on all new and existing fire protection systems which the Water Utility has determined to have any of the following:
 - a) Direct connections from public water mains with an auxiliary water supply on or available to the premise for pumper connection.
 - b) Interconnections with auxiliary supplies such as reservoirs, rivers, ponds, wells, mills, or other industrial water systems.
 - c) Use of antifreezes or other additives in the fire protection system.
 - d) Combined industrial and fire protection systems supplied from the public water mains only, with or without gravity storage or pump suction tanks.
 - e) Any other facility, connection, or condition which may cause contamination.

- 2) A double check valve assembly will be required for all other fire protection systems. The double check valve assembly shall be required on all new systems at the time of installation and on existing systems at the time they are upgraded.
- 3) Submittal of proposed backflow prevention assembly to the Water Utility does not relieve the designer or the sprinkler contractor of the responsibility of submitting plans, including backflow prevention assembly to the fire marshal for approval.

106.5.7 Backflow Prevention Assembly Technicians

A Backflow Prevention Assembly Technician registered by the State of Iowa shall include his/her registration number, the expiration date of the license, company name, address and phone number on all correspondence and forms required by or associated with this section.

106.5.8 Registered Backflow Prevention Assembly Technician Noncompliance

- 1) Noncompliance with any of the following by a registered technician shall be grounds for reporting said individual to the State Health Department.
 - a) Improper testing or repair of backflow prevention assemblies.
 - b) Improper reporting of the results of testing or of repairs made to backflow prevention assemblies.
 - c) Failure to meet registration requirements.
 - d) Related unethical practices.

106.5.9 Installation of Backflow Prevention Assemblies

- 1) The required backflow prevention assemblies for containment shall be installed in the horizontal plumbing immediately following the water meter or as close to that location as deemed practical by the Water Utility. In any case, it shall be located upstream from any branch piping. Installation at this point does not eliminate the responsibility of the customer to protect the water supply system from contamination or pollution between the backflow prevention assembly and the water main.
- 2) Reduced pressure principle backflow prevention assemblies shall be installed so as to be protected from flooding.
- 3) Reduced pressure principle backflow prevention assemblies shall not be installed in underground vaults or pits.
- 4) All backflow prevention assemblies shall be protected from freezing. Those assemblies used for seasonal water services may be removed in lieu of being protected from freezing; however, the assemblies shall be reinstalled and tested by a registered backflow prevention technician prior to service being reactivated.
- 5) If hot water is used within the water system, thermal expansion shall be provided for when installing a backflow prevention assembly for containment.

- 6) Provisions shall be made to convey the discharge of water from reduced pressure principle backflow prevention assemblies to a suitable drain.
- 7) The backflow prevention assemblies will not be installed where they would create a safety hazard; such as but not limited to over an electrical panel, or above ceiling level.
- 8) If interruption of water service during testing and repair of backflow prevention assemblies for containment is unacceptable, another backflow prevention assembly, sized to handle the temporary water flow need during the time of test or repair, should be installed in parallel piping.
- 9) All backflow prevention assemblies shall be installed so that they are accessible for testing as stated in Section 1003 of the Plumbing Code.
- 10) All shut-off valves shall conform to the current edition of the Manual of Cross-Connection Control (University of Southern California) requirements for either ball or resilient seat gate valves at the time of installation. Ball valves shall be used on assemblies installed in piping two inches and smaller and resilient seat gate valves on assemblies installed in piping larger than two inches.
- 11) Location and protection of the containment assembly shall be approved by the Water Utility prior to installation.
- 12) The piping used at the irrigation meter setting shall be copper at both the inlet and the outlet side of the meter. The copper piping on the outlet side of the meter shall extend to the backflow assembly and securely fastened for maximum rigidity. If the backflow assembly is located on the outside of the residence, copper piping shall be used from the meter to the floor joist and securely fastened prior to transitioning to PEX piping. Copper piping shall also be used for the penetration of the exterior wall for the irrigation system.
- 13) All drain down valves shall require the installation of a vacuum breaker backflow device.

106.5.10 Testing of Backflow Prevention Assemblies

- 1) Testing of backflow prevention assemblies shall be performed by a registered backflow prevention assembly technician. The costs of tests required in the following paragraphs 2-5 shall be borne by the customer.
- 2) Backflow prevention assemblies shall be tested upon installation and tested and inspected at least annually.
- 3) Backflow prevention assemblies that are in place, but have been out of operation for more than three months, shall be tested before being put back into operation. Backflow prevention assemblies used in seasonal applications shall be tested before being put into operation each season.
- 4) Any backflow prevention assembly that fails a periodic test shall be repaired or replaced. When water service has been terminated for noncompliance, the backflow prevention assembly shall be repaired or replaced prior to the resumption of water service. Backflow prevention

assemblies shall be retested by a registered backflow prevention assembly technician immediately after repair or replacement.

- 5) The Water Utility may require backflow prevention assemblies to be tested at any time in addition to the annual testing requirement.
- 6) The registered backflow prevention assembly technician shall report the successful test of a backflow prevention assembly to the customer and in an electronic format to its record keeping representative within fifteen (15) days of the test.
- 7) The Water Utility may require, at the owner's expense, additional tests of individual backflow prevention assemblies, as it shall deem necessary to verify test procedures and results.

106.5.11 Repair of Backflow Prevention Assemblies

- 1) All repairs to backflow prevention assemblies shall be performed by registered backflow prevention assembly technicians.
- 2) The registered backflow prevention assembly technician shall not change the design, material, or operational characteristics of a backflow prevention assembly during repair or maintenance, and shall use only original manufacturer replacement parts.
- 3) The registered backflow prevention assembly technician shall report the repair of a backflow prevention assembly to the customer and in an electronic format to its record keeping representative within fifteen (15) days of the repair. The report shall include the list of materials or replacement parts used.
- 4) Any time fire services are disconnected for a period of time longer than necessary to test the backflow assembly; the tester is required to notify the fire marshal's office that the fire services are shut off for repair.

106.5.12 Customer Noncompliance

- 1) The water service may be discontinued in the case of noncompliance with this section. Noncompliance includes, but is not limited to, the following:
 - a) Refusal to allow Water Utility personnel access to the property to inspect for cross connections.
 - b) Removal of a backflow prevention assembly which has been required by the Water Utility.
 - c) Bypassing of a backflow prevention assembly which has been required by the Water Utility.
 - d) Providing inadequate backflow prevention when cross connections exist.
 - e) Failure to install a backflow prevention assembly which has been required by the Water Utility.
 - f) Failure to test and/or properly repair a backflow prevention assembly as required by the Water Utility.

106.5.13 Inactive Agreement

In the event a resident chooses not to use an irrigation system, an Inactive Agreement must be signed and returned to the Utility. Signing the agreement does not release the resident of their obligation to protect the water supply system.

107 PUBLIC FIRE PROTECTION

107.1 OPERATION OF FIRE HYDRANTS

- 107.1.1 Public fire hydrants are installed primarily for fire protection. They may also be used by the Water Utility to flush water mains and by other governmental agencies for street sweeping and sewer flushing.
- 107.1.2 Hydrants may be used by others by agreement with the Water Utility under the conditions and rates established by the Water Board for such services. All non-emergency use of a fire hydrant shall not be permitted without prior approval from the Water Utility.

107.2 PENALTY FOR UNAUTHORIZED USE

Anyone who shall operate or attempt to operate a fire hydrant without permission of the Water Utility may be prosecuted as provided by law and as stated in Section 102.5. The Code of Iowa provides for punishment for each offense by a fine as outlined in Appendix A – Fee Schedule or by imprisonment in the County Jail for a period of not more than 30 days, or by both fine and imprisonment.

107.3 RELOCATION OF PUBLIC FIRE HYDRANTS

Where an existing public fire hydrant interferes with a property owner's use or proposed use of his/her property, the hydrant may be relocated at the property owner's expense. Approval from the Water Utility shall be obtained prior to any work being done.

107.4 CHANGE OF GRADE

Where the grade of an existing street or property is changed at the request of the property owner, such that an existing public fire hydrant will not be at proper elevation with respect to the ground, the hydrant will be raised or lowered at the expense of the property owner.

107.5 OBSTRUCTION OF HYDRANTS

- 107.5.1 Nothing shall be erected or planted which shall interfere with the use of a fire hydrant. Sufficient clearance shall be maintained around the hydrant to permit easy connection of hoses and full circle operation of the hydrant using regular hydrant wrenches and hose spinners.
- 107.5.2 Shrubs, trees, flowers or weeds shall not be planted nor permitted to grow so as to prevent full view of a fire hydrant from the street.

107.6 PAINTING OF PUBLIC HYDRANTS

Painting of fire hydrants will be done by the Water Utility exclusively.

108 PRIVATE FIRE PROTECTION

108.1 COMMERCIAL/INDUSTRIAL PRIVATE FIRE PROTECTION SYSTEMS

108.1.1 OPERATION OF PRIVATE FIRE PROTECTION SYSTEMS

Private fire protection systems are installed primarily for fire protection for the property on which they are installed and are not to be used for any other purpose without the express written permission of the Water Utility.

108.1.2 DESIGN OF PRIVATE FIRE PROTECTION SYSTEMS

Fire service connections and fire lines shall comply with applicable portions of Sections 105 (Water Service Installation), and 106 (Cross Connection and Backflow Prevention) of these Rules and Regulations.

108.1.3 COMBINATION SERVICE FROM FIRE LINE

A combination domestic service line and fire protection service line, as outlined in Section 105.7 of these Rules and Regulations, may be installed if approved by the owner's fire underwriter. In addition to the valve required at the main, an additional valve shall be installed on the domestic service line so that it may be controlled independently (see Appendix B, figure B-8). Access agreements shall be granted to the Water Utility to allow the access and operation of these valves. Domestic service branches shall be metered in accordance with Section 109 of these Rules and Regulations.

108.1.4 ALTERATIONS TO PRIVATE FIRE PROTECTION

When requested by the owner and approved by the Water Utility, a private fire system can be altered by a building owner who shall be responsible for any fees charged by the Water Utility.

108.1.5 PRIVATE FIRE HYDRANTS

- 1) Fire hydrants located on private mains are the responsibility of the owner and are to be used for fire protection only. These hydrants are designated "private fire hydrants". Where it is the owner's intention that these hydrants be used by the public Fire Department, these hydrants shall conform to the requirements of section 107 of these Rules and Regulations and also to the Standard Specifications (see Appendix B, figure B-11). Copies of the Standard Specifications are on file at the office of the Water Utility, 3720 86th Street in Urbandale, Iowa.
- 2) Private fire hydrants may be painted but shall meet the Water Utility's paint specifications. Paint may be purchased from the Water Utility.
- 3) Private hydrants installed at the owner's expense, in accordance with these Rules and Regulation, shall be reviewed by the Water Utility and

- 4) the Fire Department. Replacement of obsolete hydrants and repair or replacement of hydrants, broken parts, damage caused by physical abuse or improper operation or change of grade will be done at the owner's expense. Standards are available upon request to the Water Utility.
- 5) If a customer would like to hire the Urbandale Water Utility to perform maintenance on his/her privately owned hydrants, a Private Hydrant Maintenance Agreement will need to be completed. Maintenance will include painting, operating, checking drainage, lubricating, replacing cap gaskets as necessary and recording pressure readings. Any additional parts or repairs will be at the owner's expense (See Fee Schedule XXVII).

108.1.6 PENALTIES FOR IMPROPER USE

When the owners or occupants of any premises are found to be using water from a private fire protection system for any purpose other than fire protection, the Water Utility may discontinue fire service. The Water Utility also reserves the right to require the installation of an approved fire line meter, or additional line meter, at the owner's expense. A penalty may also be imposed against the property owner at a rate as established by the Water Board.

108.2 RESIDENTIAL FIRE PROTECTION SYSTEMS

All residential fire sprinkler systems shall be metered.

The service line shall be sized according to the combined total of the domestic, Irrigation and fire system demands.

108.2.1 CIRCULATING FIRE PROTECTION SYSTEMS

This system shall utilize one meter servicing both the domestic and fire demand. (See B-12b)

A circulating system will not be allowed if the total combined flow of the domestic and fire system exceeds 50 gallons per minute (gpm).

This system shall be designed to ensure that there is no stagnant water within the system.

108.2.2 NON-CIRCULATING PROTECTION SYSTEMS

The fire/irrigation demand shall be combined to utilize one water meter. The fire/irrigation meter shall be teed off the service line, after entering the building, so the domestic and the fire/irrigation systems are independently metered. (See B-12a)

Fire/irrigation meters shall be installed not more than 4 feet from the domestic meter. There shall be a valve on each side of the water meter.

This system shall have an approved backflow device as described in Urbandale Rules and Regulations, Chapter 106. The backflow device shall be installed inside the house directly after the fire/irrigation meter.

109 WATER METERS

109.1 GENERAL

All meters to be used for billing purposes shall be provided by the Water Utility. The Water Utility reserves the right to read, inspect, test or replace the meter at any reasonable time or with such frequency as deemed necessary.

All water used shall be metered except:

- 109.1.1 Water authorized by the Water Utility for the use by other governmental agencies for the purpose of firefighting or street and sewer flushing. Non-emergency use shall be approved by the Water Utility.
- 109.1.2 Water used in flushing or maintaining new and existing mains under supervision of the Water Utility.
- 109.1.3 Water for special purposes or demonstrations when approved by the General Manager, or designated representative.
- 109.1.4 Water for construction purposes. All persons, firms, or corporations shall obtain a construction water permit from the Urbandale Building Department at the same time as the building permit is issued. **See Appendix A – Fee Schedule for residential and commercial construction.** No watering of grounds, including sod, seeding, or landscaping, will be permitted before the water meter has been set and the appropriate fees have been paid.

109.2 RESIDENTIAL

- 109.2.1 Each single-family dwelling shall have its own meter.
- 109.2.2 The piping used for meter settings shall be copper at both the inlet and the outlet side of the meter. The copper piping on the outlet side of the meter shall extend from the meter to the floor joist and securely fastened prior to transitioning to PEX piping

109.2.3 RESIDENTIAL FIRE SERVICE METERS

- 1) All residential fire sprinkler systems shall be metered.
- 2) All meters must be purchased from the Water Utility.
- 3) The service line shall be sized according to the combined total of the domestic, irrigation and fire system demands.
- 4) Provide the total of the irrigation and fire system demand to the Water Utility.
- 5) Irrigation/fire meters shall be installed no more than 4 feet from the domestic meter. There shall be a valve on each side of the meter.
- 6) The irrigation/fire demand shall be combined to utilize one water meter. The irrigation/fire meter shall be teed off the service line, after entering the building, so that the domestic and irrigation/fire systems are independently metered from one another.

- 7) All fire systems shall have an approved backflow prevention assembly as described in the Urbandale Rules and Regulations, Chapter 106. The backflow assembly shall be installed inside the house directly after the fire meter.
- 8) An initial test of the backflow device must be performed by a certified tester and a copy of the test results are delivered in an electronic format to its record keeping representative within fifteen (15) days after testing and/or repairs are completed.
- 9) For more information on the requirements for cross connection and backflow prevention, refer to Urbandale Rules and Regulation, Chapter 106.

109.2.4 CIRCULATING FIRE SYSTEM METERS

This system shall utilize one meter servicing both the domestic and fire demand. System demand shall not to exceed 50 gpm. (See B-15b)

109.2.5 NON-CIRCULATING FIRE SYSTEM METERS

- 1) The fire/irrigation demand shall be combined to utilize one water meter. The irrigation/fire meter shall be teed off the service line, after entering the building, so the domestic and the fire/irrigation systems are independently metered. (See B-15a)
- 2) A total of the irrigation and fire system demand must be provided to the Water Utility before a meter will be installed.
- 3) Irrigation/fire meters shall be installed not more than 4 feet from the domestic meter. There shall be a valve on each side of the water meter.

109.3 APARTMENTS, DUPLEXES, CONDOMINIUMS, AND INSTITUTIONS

- 109.3.1 Apartments, duplexes, condominiums, and other institutions with more than one building on the same property shall be master metered unless individual services are installed to each building. Individual water meters for each tenant may be installed providing there is an individual service and stop box from the main to each unit to be metered. For buildings not able to meet the meter location requirements, such as multiple story or multiple tenant, an exception may be allowed. In such cases, the building could be served by a single service line with all meters located in a common heated closet. The Urbandale Water Utility must be provided access to the closet. Any exemption or variance shall be granted by the Water Utility. Stop boxes shall be located and installed according the Standard Specifications.

109.3.2 All buildings shall be owned by one entity. If one of the buildings is sold, the Water Utility may require, at the owner's expense, installation of a separate service line to that building.

109.3.3 If the premises to be served are multiple and one meter is to serve more than one tenant, it will be necessary for the owner of the premises or his/her authorized agent to apply for the meter.

109.4 SHOPPING CENTERS AND STRIP MALLS

109.4.1 Shopping center complexes and strip malls shall be master metered, providing the buildings are not separated by a thoroughfare.

109.4.2 Additional water meters may be purchased and installed by the owner for the tenants in the same building but may not be billed by the Water Utility.

109.5 INDUSTRIAL

Plants or industrial complexes shall be master metered providing the buildings are all required for central operation and are not separated by a public thoroughfare.

109.6 TYPES OF METERS

The types and makes of water meters used will be specified by the Water Utility. When a compound, turbine, fire, or special metering device is required for proper metering, special piping will be required to facilitate meter testing (see Appendix B, figures B-13 and B-14).

109.7 SIZE OF METERS

109.7.1 Water meter sizing shall be based on flow requirements only and not on pressure loss through the meter. The following information shall be supplied by the prospective user or his/her agent before a water meter can be sized.

- 1) Maximum rate of flow
- 2) Average rate of flow
- 3) Minimum rate of flow

Water meters 5/8" through 1" will be sized by the Water Utility based on the recommended applications listed below.

| <u>Meter Size</u> | <u>Recommended Applications</u> |
|-------------------|---|
| 5/8" | Normal operating flow rate .11 to .35 gpm |
| 1" | Normal operating flow rate .4 to 55 gpm |

109.7.2 Water meters 1-1/2" and larger shall be sized by the Water Utility based on information provided by the owner.

109.8 INSTALLATION

- 109.8.1 All water meters will be installed by the Water Utility. On all meter settings a properly bonded ground consisting of a copper cable or wire not less than 1/8" diameter shall be installed across the meter setting to avoid electrical shock when the meter is removed.
- 109.8.2 Seals are placed on water meters at the time of installation. If a plumbing contractor or others finds it necessary to break the seal for any purpose, they shall notify the Water Utility.
- 109.8.3 Meters will be installed on a properly drained concrete floor since it is possible for water to escape at the time of a water meter change or from leakage. The drain shall be within 8' of the water meter setting with no obstructions.
- 109.8.4 All new water meter installations shall have a radio read device.
- 109.8.5 All residential and commercial buildings, shall install a 3/4" flexible tubing conduit with a pull string from the meter setting on the inside of the building to within three feet of the gas meter on the outside of the building. It is the owner/contractor's responsibility to ensure wires can be run to the outside using the 3/4" flexible tubing conduit.

109.9 METER VALVES

Water meters shall be equipped with a shut-off at each end. Water meters larger than 3" shall have gate valves attached at each end. Spacing required between the inlet and outlet shut-offs for meter installations is as follows (see Appendix B, figures B-2, and B-3):

| <u>Size of meter</u> | <u>Distance face to face of stops</u> |
|----------------------|---------------------------------------|
| 5/8" | 12" |
| 1" | 15" |
| 1-1/2" | 13" |
| 2" | 17" |

- 109.9.1 When 1/4-turn ball valves or quick closing valves are used, they shall be operated in such a manner that pressure surges will not be transmitted to the Water Utility distribution system.
- 109.9.2 Not more than one shut-off will be allowed between where the service enters the building and the water meters (see Appendix B, figures B-2 and B-3).

109.10 METER LOCATION

- 109.10.1 All water meters installed within buildings shall be in a horizontal

position, at a minimum height of 12" from the floor where they may be easily maintained and as near as possible to the point where the water service enters the building. All water meters shall be an encoded water meter with an AMR. All AMR devices shall be installed on the exterior of the structure or at a location acceptable to the Water Utility.

109.10.2 Meters shall not be exposed to damage by freezing. After 2 meters have been removed due to freezing, corrections to prevent freezing will have to be made before the third meter will be installed.

109.10.3 Water meters shall be accessible at all times. No appliances or other fixtures may be built over or in front of the meter setting. If obstructions exist which interfere with meter reading or maintenance of the meter, the water service may be discontinued until the obstructions are removed.

109.10.4 Installation of a 5/8" through 1" meter shall be as follows:

The inlet valve for the meter setting shall not be more than 18" from the point where the service enters the building (see Appendix B, figure B-2).

109.10.5 Installation of 1-1/2" to 2" meters shall be as follows:

The inlet valve for the meter setting shall not be more than 36" from the point where the service enters the building (see Appendix B, figure B-3).

109.10.6 No devices or connections of any kind, such as regulators or check valves, shall be installed between the meter outlet and the test tee. There shall be no additional valves or appurtenances from the service inlet and the inlet valve to the meter.

109.11 METER PITS FOR 5/8" to 2" METERS

109.11.1 Meter pits for 5/8" to 2" meters may be required if unusual circumstances exist. If required, the meter pit shall meet the following requirements and be installed at the owner's expense. Before an existing meter pit is reused or a new one is installed, the Water Utility shall inspect the proposed installation and determine if the meter pit is necessary to serve the customer.

- 1) When required:
 - a) When a location satisfactory to the Water Utility, is not available inside the building:
 - b) When the building is more than 250' from the property line; such case shall be reviewed by the Distribution Manager.
 - c) When the water service is installed within an easement and crosses property lines.
- 2) Location of pit:

Meter pits shall be located on private property as near as practical to the property line or the point of connection.

3) Pit requirements:

See detail of Standard Meter Pit

5/8" to 1", see Appendix B, figure B-9.

1-1/2" to 2", see Appendix B, figure B-10.

4) Pit abandonment:

When a meter is removed from a meter pit and the pit is not to be reused, it is the responsibility of the property owner to see that the rim and lid are removed, the valves are removed from the service line and the pit filled to grade with a substance approved by the Water Utility. Before the pit is filled, the property owner shall notify the Water Utility so that it may verify that the valves have been removed from the service line. The service line shall be capped at the main.

109.11.2 There shall be no additional valves or appurtenances from the service inlet and the inlet valve to the meter.

109.12 METER PITS FOR 3" METERS AND LARGER

Where unusual circumstances exist, an outside meter may be required. If required, the meter shall be installed in a pit constructed at the owner's expense to meet the following requirements.

109.12.1 The pit shall be reinforced concrete, pre-cast concrete, or concrete construction.

109.12.2 The pit shall not be less than 6, nor more than 8, feet in depth.

109.12.3 The sides of the pit shall be vertical.

109.12.4 The pit shall be rectangular.

109.12.5 The length and width of the pit shall be determined by the size of the pipe and the amount of piping to be installed.

- 1) The end walls shall be a minimum of 8" from the closest flange on any fitting installed inside the pit.
- 2) One sidewall shall be a minimum of 18" from the centerline of the nearest piping or a minimum of 10" from the widest portion of the meter, whichever is widest.
- 3) The other wall shall be a minimum of 2'6" from the centerline of the nearest piping or a minimum of 2'0" from the widest point of the meter, whichever is wider.
- 4) Minimum pit size shall be 4'0" wide by 5'0" long.

109.12.6 The pit shall have concrete roof and floor slabs.

- 109.12.7 The pit shall have a 24" by 24" square hatch with compression spring operators.
- 109.12.8 The pit shall have manhole steps placed at 16" on center, directly below the access hatch.
- 109.12.9 The pit roof slab shall be removable for meter installation or a secondary access large enough to allow the meter to be removed shall be provided directly over the meter setting.
- 109.12.10 There shall be a minimum distance of 10' between the meter pit and any hydrant or standpipe.
- 109.12.11 Meters 3" and larger shall be set level and in a horizontal position on a solid base not more than 24" high. There shall be at least 6' clearance above and not less than 12" behind the meter. Meters may be suspended or supported by piping. There shall be an adequate floor drain or pit within 8' of the meter setting for disposal of water. An outside test header will be installed in a suitable location so that the meter can be tested annually (see Appendix B, figure B-14).

109.13 METER BY-PASS

- 109.13.1 By-pass lines for emergency service will not be permitted around meters 2" in diameter or less except in cases where the customer also provides a meter in the by-pass line.
- 109.13.2 By-pass lines around meters 3" in diameter and larger shall be locked, with a lock supplied by the Water Utility, and sealed to prevent unauthorized usage.
- 109.13.3 By-pass lines shall be designed, valved and installed in accordance with these Rules and Regulations (see Appendix B, figures B-13 and B-14).

109.14 MAINTENANCE

The Water Utility will provide the following maintenance on the meter:

109.14.1 Residential:

- 1) Repair or replace the meter with a new or rebuilt meter of the same size if the meter becomes inoperative through no fault of the customer. If there is evidence of physical damage externally or on the interior of the meter from hot water, freezing, or other casualties, through carelessness or neglect by the customer, the customer will be billed for the cost of the repairs (see Appendix A - Fee Schedule).
- 2) The Water Utility will test or exchange the meter periodically to ascertain its accuracy.

- 3) The Water Utility will test any meter upon application by the customer. **If the meter test is found to meet applicable accuracy specifications in accordance with American Water Works Association,** the customer will be billed a fee as established by the Water Board (see Appendix A - Fee Schedule).

109.14.2 Industrial and Commercial:

- 1) Meters 2" and smaller will be maintained in the same manner as residential meters.
- 2) Meters 3" and larger will be repaired at no cost to the property owner providing there is no evidence of physical damage as described above.
- 3) The Water Utility will test any meter upon application by the customer. If the meter test indicates less than 2% fast, the customer will be billed a fee as established by the Water Board (see Appendix A - Fee Schedule).
- 4) Water meters shall be equipped with shut-off valves at each end. Water meters larger than 2" shall have shut-off valves at each end and the outlet end of the meter shall be provided with a 4" tee fitting for testing purposes. The branch of the tee shall face upwards and be provided with a 4" valve threaded cap and plug (see Appendix B, figures B-13 and B-14).

109.15 SEWER DEDUCT METERS

Sewer deduct meters are meters that measure water which has already been metered by another meter for billing purposes, for example irrigation water. The reading of these meters will be done as required by the Sanitary Sewer Districts that serve the City of Urbandale for the purpose of measuring water not returning to the sewer system. Meters shall be located within 4' of the master meter. Sewer deduct meters shall be wired to an AMR and readings shall be received by the Water Utility in order to receive the sewer credit, a deduction of no larger than the current bill will be credited if regular readings are not provided. All maintenance, repairs, and testing of sewage deduct meters will be at the owner's request and expense.

109.16 NON-DEDUCTING SEWER METERS

Non-deducting sewer meters are used to measure water that is used but not returned to the sanitary sewer system. As of May 1996, all non-sewer use meters will be set up as a non-deducting system (see Appendix B, figure B-15a & 15b). The non-deducting meter will be branched off the service line separate from the house meter and placed within 4' of the house meter. The non-deducting meter shall be purchased from the Water Utility and, once installed, will be maintained by the Water Utility. The meter shall also be wired to the AMR. Non-deducting sewer meters will be subject to a service availability fee.

109.17 SUB-METERS

Sub-meters are meters installed by the customer to monitor water usage downstream of the master meter. Sub-meters are not read or billed by the Water Utility. Sub-meters may be repaired by the Water Utility's Meter Shop at the customer's/owner's expense, provided they are delivered to the Water Utility's Meter Shop (see Appendix A - Fee Schedule).

109.18 TEMPORARY METERS

Where a meter is required prior to completing the plumbing for a building, a temporary meter may be requested. (see Appendix A - Fee Schedule).

109.19 CHANGES IN LOAD

In cases where changes in water consumption result in a meter being substantially undersized or oversized, the Water Utility may need to install a larger or smaller meter. Any alterations required in the meter setting will be at the owner's expense.

109.20 USES OF HYDRANT METERS

109.20.1 ELIGIBILITY

The Water Utility will issue hydrant meters to contractors or civic organizations, etc., when alternate methods of water supply are not available. At the time of application, the applicant shall state the location and purpose for which the meter will be used, the name and telephone number of a contact person.

109.20.2 APPLICATION & DEPOSIT

A deposit is required for a hydrant meter (see Appendix A - Fee Schedule). This deposit shall be paid at the time the meter application is made with a Customer Service Representative at the Water Utility located at 3720 86th Street, Urbandale, Iowa. This deposit will be held by the Water Utility until the meter is returned. Upon return of the meter and payment of the final bill, the deposit will be mailed to the applicant, less any outstanding charges due to the Water Utility.

109.20.3 METER PLACEMENT

Applicant is responsible for notifying the Water Utility for the placement and location or relocation of the hydrant meter.

109.20.4 DAMAGE TO WATER UTILITY PROPERTY

It will be the obligation of the applicant to protect the meter, hydrant, and other Water Utility property from damage due to weather or use of the

facility. The repair of any damaged property will be completed by the Water Utility and charged to the applicant.

109.20.5 METER READING

The Water Utility will periodically read the meter and water consumption will be billed accordingly.

109.21 AUTOMATED METER READING UNIT (AMR) & REMOTE METER INSTALLATION/REPAIR

- 109.21.1 If a customer does not permit the installation or repair of an AMR or remote reading device upon request, then the customer shall be notified that water service may be discontinued in accordance with the procedures then in effect.
- 109.21.2 All new water meter installations shall have a radio read device.
- 109.21.3 All residential and commercial buildings, shall install a ¾" flexible tubing conduit with a pull string from the meter setting on the inside of the building to within three feet of the gas meter on the outside of the building. It is the owner/contractor's responsibility to ensure wires can be run to the outside using the ¾" flexible tubing conduit.

109.22 AUTOMATED METER READING OPT OUT

If a customer requests to opt out of the AMR program, they will present their request to the Appeals Committee. If their request is granted they must sign and agree to the parameters of the Opt Out Agreement. An AMR opt-out agreement allows for the removal of radio frequency (RF) emitting equipment used for the purposes of collecting a meter reading at a premises and replacing it with non-RF equipment. (See Appendix A-Fee Schedule)

110 MAIN EXTENSIONS

110.1 PUBLIC MAINS

A public main is any main owned and maintained by the Water Utility. Any installation of water mains or extensions of existing mains shall not be constructed until the plans are approved by the Water Utility. The Water Utility shall have the power to direct the manner of construction and the location of proposed mains. Mains shall be extended to the furthest property line of the development. Contractors or developers may be required to upsize existing water mains where development occurs to provide adequate fire flow. Contractors or developers installing water mains or extending existing water mains shall pay all costs incidental thereto.

110.2 TRANSMISSION MAINS

Transmissions mains cannot be tapped without permission from the Distribution Manager of the Water Utility or their designated representative.

110.3 PRIVATE MAINS & SERVICES

A private main is a privately owned and maintained water service to a single property. The location of new private mains and connections/alterations to existing private mains shall be reviewed by the Water Utility prior to construction to insure all Water Utility requirements are met.

110.4 SHARING OF MAIN COSTS

Where there are properties being developed that are separated by public access or streets and the properties can be served by one water main, the Water Utility shall determine the side of the street on which the main will be located. The cost of installation of the main shall be borne by the developer who first develops the adjacent public access. Any person, firm or corporation who develops the property on the opposite side of the public access, shall be required to pay the developer who originally installed said main, one-half the per foot cost of installation times the number of frontage feet owned by the person, firm or corporation desiring to make said connection, subject to the following terms and conditions:

110.4.1 All agreements entered into pursuant to this policy shall provide the cost to the original developer and to the maximum amount of permissible reimbursement prior to actual installation which agreement may not thereafter be modified.

110.4.2 All agreements allowing for reimbursement shall become null and void after the expiration of ten years from the acceptance of the final plat.

- 110.4.3 For mains required to be 16" in diameter, the Water Utility shall reimburse the developer for the material cost difference between a 12" diameter pipe and the 16" diameter.
- 110.4.4 For mains required to be larger than 16" in diameter, the Water Utility shall reimburse the developer for the labor and material cost difference between a 12" installation and the size of the transmission main installed.
- 110.4.5 Any person, firm or corporation which becomes insolvent or ceases to do business after the signing of an agreement contemplated by this policy shall not be entitled to reimbursement and any agreement shall become null and void.
- 110.4.6 The Water Board's decision on any disputed matter concerning this policy shall be final.

111 PLAN SUBMITTALS AND PROCEDURES

111.1 PLATS

111.1.1 Following are the procedures for a developer or other individuals who desire to connect into a water main owned by the Water Utility with a main that will be dedicated to the Water Utility:

- 1) Submit a plat plan (24" x 36") to the Water Utility indicating the following information:
 - a) Existing Water Utility owned main, hydrant(s), and valve(s) with size and relative location with respect to right-of-way lines and existing curb lines.
 - b) Location of the proposed tap(s), hydrant(s), valve(s), and all other appurtenances and routing of proposed main within public right-of-way.
 - c) Location of existing and proposed streets and lots to be served by main.
 - d) Legal description of property to be served.
 - e) Any dimensions required for clarity.
 - f) Include statement that all main work to be completed according to the Standard Specifications.
- 2) Pay required Main Sharing Costs (see section 110.4).

111.1.2 One (1) 'as-built record drawing' of the main is to be submitted to the Water Utility within 30 days after the completion of the water main installation, unless otherwise approved by the Distribution Manager. Prior to the acceptance of the public improvements, as-built record drawings (horizontal and vertical as-built data in state plane coordinates and NAD 1983 State Plane Iowa South datum) for all water piping and associated appurtenances will be provided. Submittals are preferred electronically but a pdf format is acceptable.

111.2 SITE PLANS

111.2.1 Following are the procedures for a developer or other individuals who desire to connect into a water main owned by the Water Utility with a service main:

- 1) Submit a site plan to the Water Utility indicating the following information:
 - a) Existing Water Utility owned main, hydrant(s), and valve(s) with size and relative location with respect to right-of-way lines and existing curb lines.

- b) Location of the proposed tap, proposed valve location(s) and routing of proposed service main within public right-of-way and on private property. In general, valves located on private property for the individual fire and domestic service(s) shall be located in paved, non-parking areas such as driveways, drive areas, sidewalks, etc. Valves shall be located in such a manner as to permit operation by the Water Utility 24 hours a day. The service mains shall be routed accordingly.
 - c) Location of proposed or existing building(s) on property to be served by service main.
 - d) Legal description of property to be served.
 - e) Proposed paved areas for parking lots, driveways and sidewalks.
 - f) Any dimensions required for clarity.
 - g) Show all hydrants, valves and fittings.
 - h) Include statement that all service main work to be completed according to the Standard Specifications.
- 2) Submit total fire flow requirements (if applicable for the site).
 - 3) Submit load profile for any domestic, irrigation or process service line 2" or larger in diameter (see section 103.2.1.4).
 - 4) Pay required Connection Fees (see Appendix A - Fee Schedule).
 - 5) Submit mechanical drawing showing the location and type of backflow prevention device, if required.

111.2.2 Once items 111.2.1-5 above are completed to the satisfaction of the Water Utility, the Agreement for Water Service is to be signed.

111.2.3 One (1) "as-built record drawing" of the service main is to be submitted to the Water Utility within 30 days after the completion of the water main installation of its construction and before the meter is set, unless otherwise approved by the Distribution Manager. Prior to the acceptance of the public improvements, as-built record drawings (horizontal and vertical as-built data in state plane coordinates and NAD 1983 State Plane Iowa South datum) for all water piping and associated appurtenances will be provided. Submittals are preferred electronically but a pdf format is acceptable.

111.3 MATERIALS FOR SERVICE MAINS

All service main materials shall comply with the Urbandale Water Utility Standard Specifications and the City of Urbandale Plumbing Code.

111.4 PRESSURE TESTING

- 111.4.1 All service mains and appurtenances shall be tested for leakage in compliance with the Standard Specifications.
- 111.4.2 The plumbing contractor shall notify the Water Utility when the service main is installed and ready to be filled for pressure testing and disinfection.
- 111.4.3 The pressure test, when applied to service mains shall be witnessed by Water Utility personnel or a designated representative. Upon completion of the test, a certificate of compliance shall be completed stating the test pressure, duration of the test, total leakage, allowable leakage and that the test met all requirements. Contact the Water Utility 48 hours prior to starting a test.

111.5 DISINFECTION

- 111.5.1 Following satisfactory pressure tests, in accordance with the current revision of AWWA Standard C651, all service mains shall be disinfected, sampled and tested as follows:
 - 1) The form of chlorine used and procedures for disinfection shall be as outlined in AWWA Standard C651. A minimum free residual chlorine concentration of 10 mg/l at the end of the test period.
 - 2) After the 24-hour disinfection period, the service main shall be flushed to remove the chlorine. The Water Utility shall be notified when the flushing of the water main is scheduled.
 - 3) Water used for flushing and sampling shall be provided by the Water Utility for the first test of the main. If the first test samples do not pass laboratory tests, any labor and equipment costs incurred by the Water Utility for further disinfection, flushing and sampling shall be billed to the contractor (see Appendix A – Fee Schedule A).
 - 4) After final flushing, two consecutive sets of acceptable samples, taken at least 24 hours apart, shall be collected from the new main. At least one set of samples shall be collected from every 1,000 feet of the new water main, plus one set from the end of the line and at least one set from each branch. All samples shall be tested for bacteriological (chemical and physical) quality in accordance with Standard Methods for the Examination of Water and Wastewater; and shall show the absence of coliform organisms; and, if required, the presence of a chlorine residual.
 - 5) All samples shall be taken within 21 days of the water main installation.

111.6 TRACING WIRE TEST

- 111.6.1 The tracing wire system shall be tested to ensure continuity. Tracing wire test shall be scheduled with the Water Utility.

112 WATER SHORTAGE PLAN

The water shortage plan below is adopted by Urbandale Water Utility effective as of May 1st, 2025. Such Water Shortage Plan may be amended by Board action at any time.

112.1 INTRODUCTION

This plan will apply to all Central Iowa Water Works (CIWW) Member Agencies and shall be implemented by each Member Agency with its customers.

The intent of the CIWW water shortage plan is to manage system demand so customers do not experience pressure, quality, or availability issues during periods of extreme water demand or during other times when water availability may be limited due to other events, such as raw water shortage, water quality events, or mechanical failures.

The goal at each stage in the plan is to reduce CIWW system demands to 85% or less of the “Current Capacity” of CIWW to produce safe drinking water, as defined in this plan.

The premise of Stage I is that reducing lawn watering is the most effective way to reduce demand without undue hardship during periods when lawn watering is a significant source of demand. Stage I may be skipped if a water shortage occurs during a time of year when lawn watering demand is not significant.

The premise of Stage II is that particularly high demand may occur when heavy lawn watering events occur. Stage II may be skipped if a water shortage occurs during a time of year when lawn watering is not significant.

The premise of Stage III is that lawn watering comprises the most readily curtailed use during water shortage events. Stage III may be skipped if a water shortage occurs during a time of year when lawn watering demand is not significant.

Limiting consumption to a representative average of off-peak months, plus or minus a small allowance, will result in a significant demand reduction compared to peak consumption. This is the premise of Stage IV.

The stages of this plan are not necessarily consecutive. When a water shortage occurs, the stage deemed most appropriate for the conditions will be implemented.

Urbandale Water Utility (UWU) purchases all of its water from CIWW. As a result, this plan will mirror the CIWW plan in the event of a regional water shortage and provide for a local strategy in the event of a UWU shortage. If the event only affects the Urbandale system, the stages, triggers, and goal deduction percentages will be the same but be based on the “current capacity” (CC) of the UWU’s ability to provide water.

112.2 CURRENT CAPACITY TO PRODUCE SAFE DRINKING WATER AND EXPECTED PEAK DEMAND

1. Current Capacity. The Current Capacity to produce safe drinking water on any day is referred to “Current Capacity” or C total. Current capacity is defined as the amount of water CIWW can deliver on any day taking into consideration raw water availability and quality, seasonal treatment efficacy, and any mechanical or operational issues on that given day. The number will vary seasonally and may vary day to day depending on specific water quality and operational conditions. Current Capacity is computed as the sum of the daily capacities of the individual CIWW source treatment plants and may be expressed in the following formula:

$$C \text{ Total} = C \text{ Fleur} + C \text{ McMullen} + C \text{ Saylorville} + C \text{ WDMWW} + C \text{ Polk City} + C \text{ Grimes} + \text{any new plant capacity}$$

Current Capacity will be evaluated on a daily basis when there is potential for a water shortage. Producers responsible for CIWW water production will perform the daily evaluation and report the Current Capacity in Million Gallons per Day (MGD).

2. Expected Peak Demand. “Expected Peak Demand” is defined as the peak daily demand that is expected by CIWW without implementation of water shortage measures under this plan.

112.3 PLAN STAGE I: VOLUNTARY 25% REDUCTION IN LAWN WATERING

1. Trigger. During a period of substantial lawn watering demand, when expected peak demand reaches 90% of current capacity or system demand is generating a high number of areas with low pressure, or there are other indications that without wise usage of water, a shortage will occur.
2. Anticipated Impact. It is anticipated that Stage I will most likely be triggered during peak lawn watering season. In a typical year lawn watering can account for as much as 40% of demand on peak day. If this is the case, a 25% reduction in lawn watering will result in a 10% reduction in total demand.
3. Goal. A 10% reduction in CIWW system demands as compared to Expected Peak Demand.
4. Actions.
 - a. Request a metro-wide 25% reduction in lawn watering.
 - b. Encourage customers to optimize their lawn watering systems so water is not directed onto impervious surfaces and lawns are not overwatered.
 - c. Continued reinforcement that customers water on alternate days and excluding Mondays (historically a peak demand day), by a system under

which even numbered addresses water only on Wednesday, Friday, and Sunday, and odd-

numbered addresses water only on Tuesday, Thursday, and Saturday.

- d. Suspend all hydrant flushing programs except for water quality purposes.
- e. Request that City officials minimize high water use activities such as street sweeping and watering golf course fairways.
- f. Coordinate with Member Agencies to ensure they are relaying the same message.

- 5. Enforcement. There will be no enforcement at this stage.

112.4 PLAN STAGE II: VOLUNTARY 50% REDUCTION IN LAWN WATERING

- 1. Trigger. During a high period of substantial lawn watering demand, after Stage I has been implemented and failed to achieve an adequate reduction in consumption, when Expected Peak Demand exceeds 90% of Current Capacity, or system demand continues to generate areas of low pressure, or there are other indications that without further reductions in demand, a shortage could occur.
- 2. Anticipated Impact. It is anticipated that Stage II will most likely be triggered during the peak outdoor water use season. In a typical year, lawn watering can account for as much as 40% of demand on a peak day. If this is the case, a 50% reduction in lawn watering will result in 20% reduction in total demand.
- 3. Goal. A 20% reduction in system demands as compared to Expected Peak Demand.
- 4. Actions. Request customers further reduce water consumption by taking the following measures in addition to those implemented in Stage I:
 - a. Request a metro-wide 50% reduction in outdoor water use.
 - b. Remind customers to optimize their lawn watering systems so water is not directed onto impervious surfaces and turf is not overwatered.
 - c. Reinforce the recommendation for customers to irrigate on alternate days and excluding Mondays.
 - d. Encourage wise use of water during outdoor activities including washing cars, playing in the sprinkler, playing with water toys, and filling swimming pools.
 - e. Encourage wise use of indoor water including identifying and repairing leaking fixtures, washing only full loads in dishwashers and washing machines, shorter showers, etc.
 - f. Coordinate with Member Agencies to ensure that they are relaying the same message.

- g. Request that public agencies (City, County, or State) set an example by: closing recreational facilities with known water inefficiencies and suspend the operation of decorative fountains.

5. Enforcement. There will be no enforcement at this stage.

112.5 PLAN STAGE III. LAWN WATERING PROHIBITED AND NO USE OF AUTOMATIC LAWN WATERING SYSTEMS

1. Trigger. During a period of substantial lawn watering demand, after Stage I and Stage II have been implemented and failed to achieve adequate reduction in consumption, when Expected Peak Demand exceeds 90% of Current Capacity, or system demand continues to generate areas of low pressure, or there are other indications that without further reductions in demand, a shortage could occur.
2. Anticipated Impact. It is anticipated that Stage III will most likely be triggered during peak lawn watering season. In a typical year, lawn watering can account for as much as 40% of demand on peak day. If this is the case, prohibiting lawn watering will result in 40% reduction in total demand.
3. Goal. A 40% reduction in system demands as compared to Expected Peak Demand.
4. Actions. Require members to further reduce water consumption by suspending all lawn watering and the use of all automatic lawn watering systems of their customers. This reduction is in addition to all steps implemented in Stage I and Stage II. The requirement for placing a new sod should be suspended until Stage III is lifted.
5. Enforcement. Customers observed by CIWW of Member Agencies watering their lawn in violation of this policy will be notified. If lawn watering is not suspended within 48 hours, water service will be terminated by Member Agency and any published fees will apply. Water service will be restored only upon receipt of an undertaking by the customer that the customer understands and will comply with the mandatory conservation measures. Any subsequent violation will result in further termination of service. In addition, the use of water for lawn watering in violation of this plan shall be deemed an unauthorized use of water and Charges for the Unauthorized Use of Water/Metering Tampering shall apply and must be paid before service will be restored.

112.6 PLAN STAGE IV: WATER RATIONING

1. Trigger. During periods of substantial lawn watering demand, or other potential shortage after Stage I, II and III have been implemented a failed to achieve an adequate reduction in consumption, when Expected Peak Demand exceeds 90% of Current Capacity, or system demand is generating a high number of areas with low

pressure, limited source water supply, or there are other indications that without wise usage of water, a shortage could occur. Stage IV may also be invoked, without resort to Stages I through III, if Expected Peak Demand for any reason and/or limited source water supply cannot be addressed by the measures contemplated by Stages I through III.

2. Anticipated Impact. It is anticipated that Stage IV will only be triggered in the event of a significant and severe water shortage, or other event, which severely reduces capacity relative to demand. In this case a reduction in demand to the lowest level which will meet public health and safety standards and, when reasonably possible, animal health and safety standards for livestock producers will be sought.

The definition of “livestock producer” is the same as stated in 7 U.S.C § 147(1) to be “(A) a person that is actively engaged in farming and that receives a substantial amount of total income from the production of grain or livestock, as determined by the Secretary, that is:

- i. An established producer or husbander of livestock or a dairy producer who is a citizen of, or legal resident alien, in the United States; or
 - ii. A farm cooperative, private domestic corporation, partnership, or joint operation in which majority interest is held by members, stockholders, or partners who are citizens of legal resident aliens”
3. Goal. A reduction in system demands as compared to Expected Peak Demand sufficient to allow the CIWW to meet public health and safety standards, and when reasonable possible, animal health and safety standards.
4. Actions. Water rationing measures will be required to be implemented by all Member Agencies and enforced by application of an Emergency Water Shortage Rate. In order to implement such a demand, Member Agencies in consultation with the CIWW Technical Committee shall set a target level for demand consistent with its Current Capacity and shall use such a target to establish a “Rationed Demand” as defined in this plan. All Member Agencies will be responsible for asking their customers to reduce their consumption to a level to meet the "Stage IV Rationed Demand”. Member Agencies will be expected to initiate efforts to reduce consumption above such a level and will be charged at the Emergency Water Shortage Rate intended to strongly discourage consumption above such level.
 - i. Water rationing shall consider livestock health and safety needs. The expected decrease for members supplying such needs shall be set by the Technical Committee taking into consideration livestock health and safety needs.

- ii. At Stage IV, Member Agencies with alternative available sources of water meeting state drinking water standards shall supplement and/or replace CIWW water from those sources.
- 5. Enforcement. “Stage IV Rationed Demand” means for each Member Agency will be responsible for implementing measures to ensure this Rationed Demand is not exceeded. Should the “Stage IV Rationed Demand” be exceeded, the Member Agency will be subject to an Emergency Water Shortage Rate which will be equal to 10 times the established variable rate for any amount in excess of the Rationed Demand.

113 SCHEDULE OF CHARGES

113.1 METERED WATER

All water shall be supplied to customers by meter measurement, except as herein otherwise provided, at rates established by the Water Board (see Appendix A - Fee Schedule).

113.2 FIRE PROTECTION CHARGES

- 113.2.1 The annual standby charge for fire hydrants outside the city shall be paid by the owner of the property on which the hydrant is placed (see Appendix A - Fee Schedule). If such property is owned by a public agency or is part of a public thoroughfare, the responsible agency or government desiring to establish and maintain the hydrant shall agree, in writing, to make the payments and show evidence of their ability to make proper levy to obtain funds for such propose.
- 113.2.2 In consideration of the annual charge made for such hydrants outside the city, the Water Utility will provide water to the service connection at the main. All such hydrants will be installed at the owner’s expense, but the Water Utility shall specify the size and type of hydrant used and the location and method of installation.
- 113.2.3 Fire protection service charges will be determined as follows:
 - 1) For one tenant, one building, and one connection to the Water Utility's distributions system, there shall be one charge according to size.
 - 2) For one tenant, one building and more than one connection to the Water Utility's distribution system, each connection shall be charged by size.
 - 3) Shopping centers, industrial and apartment complexes shall be charged for each fire service connection to the Water Utility's distribution system.

113.3 UNIFORM TAP CHARGES

Tapping fees are published on the tapping (see Appendix A - Fee Schedule). Taps are charged according to size and do not include the tapping sleeve and valve or the corporation. These items are to be furnished by the contractor or persons requesting the tap. If the site is not ready upon arrival by the Water Utility, a waiting charge based on the standard labor and equipment charges will apply (see Appendix A - Fee Schedule).

113.4 FILLING OF POOLS

The Water Utility will, for a fee, provide the service of filling pools (see Appendix A - Fee Schedule). The customer shall sign a "Hold Harmless" agreement and will conform to the following conditions:

- 112.4.1 The customer will be responsible for paying for the water used in addition to the hourly rate.
- 112.4.2 The Water Utility will supply the labor and equipment.
- 112.4.3 The Water Utility will not be responsible for any damages caused by using this method of filling pools.

113.4 ADJUSTMENT TO CHARGES

The Water Board, from time to time, may establish, abolish or change charges for services and/or equipment provided to its customers. These charges shall be reviewed periodically and based as much as possible on the cost of service.

APPENDIX A

FEE SCHEDULE – Addendum #7

I WATER RATES

Monthly water service availability rates, based on meter size, are shown below. This charge covers fixed costs that are not dependent on the amount of water consumed, and includes costs for customer service, metering and meter reading, and costs for the pipeline to serve your property.

| Meter Size (in.) | Monthly Service Availability Charge |
|---------------------|--|
| 5/8 | \$ 5.44 |
| 1.0 | \$ 9.05 |
| 1.5 | \$ 18.12 |
| 2.0 | \$ 28.98 |
| 3.0 | \$ 72.46 |
| 4.0 | \$144.90 |
| 6.0 | \$144.90 |

The current water rate is \$7.18 per 1,000 Gallons.

The current irrigation water rate is \$8.48 per 1,000 Gallons.

Bulk water rate is \$10.69 per 1,000 Gallons.

II SEWER RATES

All sewer rates are established by the Sanitary Sewer Districts for the City of Urbandale.

All non-sewer meters will be charged a one-time sewer exemption fee of \$15.00 as established by the Sanitary Sewer Districts for the City of Urbandale.

III SOLID WASTE

Solid waste collection fee is set by the Urbandale City Council.

IV STORM WATER

Storm water fee is set by the Urbandale City Council.

V CUSTOMER ACCOUNTS

Deposits:

Deposits for water service shall be **\$50.00** per residential account and **\$100.00** per residential rental account and shall include an additional \$5.00 non-refundable processing fee. For commercial accounts, see Application Fee Schedule in Section VI below.

Deposits shall be returned to account holders **who have not received a “Reminder” notice with an administrative fee assessed for 24 consecutive months**. Otherwise, the deposit will be applied to the account holder’s final bill and any remainder will be returned to the account holder.

Administrative Fee:

The administrative fee will be 1.5% of the past due balance, subject to a minimum charge of \$1.50, for payments received after the 20th of the month in which they are due.

Termination Fee for Collections:

Customers who are delivered a blue shut-off notice for non-payment of their bill will be charged a fee of **\$20.00**.

A termination fee of **\$50.00** will be applied to all accounts when water service is terminated **or attempted to be terminated** due to non-payment of charges. This fee includes the restoration of water service during normal business hours (8:00 AM – 4:30 PM) once the past due amount is paid.

The fee to have water service restored will be an additional **\$75.00** after hours (between 4:30 p.m. and 9:00 p.m.) and **\$125.00** on Sundays, Holidays, and emergencies only (after 9:00 p.m.).

Water Service turn on/off or locate/adjust stop box by request:

| Hours | Definition | Hourly Rate |
|-----------------------------------|--------------------------------------|-----------------|
| During normal field service hours | Monday – Friday 8:00 AM – 4:30 PM | \$ 30.00 |
| Sundays and Holidays | 12:00 AM - 11:59 PM | \$175.00 |
| Other Hours | Any time not listed above | \$125.00 |

Payments/Collection:

All payments shall be considered to have been made at the time they are received in the Utility office.

The non-sufficient funds fee for any accepted payment method is \$25.00. The Utility reserves the right to demand payment in cash from any customer.

In the event an unpaid account is forwarded for collection to the county treasurer or to a collection agency, a fee of \$15.00 will be charged to the account.

Appointments:

A \$25.00 “no-show” fee shall be charged to customers who fail to honor a scheduled service appointment without reasonable advanced notice. After hours “no-shows” will be assessed additional charges.

VI APPLICATION FEE

| Application Fee Schedule | | | | |
|--------------------------|-----------|----------------|------------|----------------------|
| Meter Size (in.) | Deposit | Service Charge | Meter | Meter and AMR Equip. |
| 5/8 | \$ 50.00* | \$5.00 | \$ 235.00 | \$ 471.00 |
| 1.0 | \$ 50.00* | \$5.00 | \$ 375.00 | \$ 611.00 |
| 1.5 | \$100.00 | \$5.00 | \$1,040.00 | \$1,296.00 |
| 2.0 | \$150.00 | \$5.00 | \$1,365.00 | \$1,621.00 |
| 3.0 | \$250.00 | \$5.00 | \$2,583.00 | \$2,839.00 |

**Please note that deposits for water service shall be \$50.00 per residential account and \$100.00 per residential rental account.*

Meter/AMR upgrades will be billed at the difference in price only.

Example: 5/8” meter replaced with a 1” meter:

1” meter **\$375.00**
5/8” meter - **\$235.00**
 \$140.00

Example: Single port AMR replaced with
a dual port AMR, \$60.00

Residents changing the plumbing system from a deduct to a non-deduct will not be billed for a replacement meter of the same size.

VII TEMPORARY METER DEPOSIT AND RENTAL FEE

| Temporary Meter Fee Schedule | | |
|------------------------------|----------------------------|-------------|
| Meter Size (in.) | Deposit and Service Charge | Rental Fee* |
| 5/8 | \$100.00 | \$50.00 |
| 1.0 | \$150.00 | \$50.00 |

**Temporary meter rental fee schedule is based on a monthly fee. Minimum 30-day fee.*

VIII CURB BOX (STOP BOX) REPLACEMENT ITEM FEES

The curb box (stop box) cap replacement fee is **\$20.00**.

The erie adapter replacement fee is **\$20.00**.

The nipple replacement fee is **\$5.00**.

IX TAPPING FEES

Contractor shall provide the service clamp and corporation for taps 2-inch and smaller, or the tapping sleeve and valve for taps 3-inch or larger. For taps larger than 12-inch, please contact the Water Utility. If the site is not ready upon arrival by the Water Utility, a waiting charge based on the standard labor and equipment charges will apply.

| Tapping Fee Schedule | |
|----------------------|------------|
| Tap Size (in.) | Tap Fee |
| 1.0 | \$ 150.00 |
| 1.5 | \$ 200.00 |
| 2.0 | \$ 250.00 |
| 4.0 | \$ 500.00 |
| 6.0 | \$ 550.00 |
| 8.0 | \$ 600.00 |
| 10.0 | \$ 800.00 |
| 12.0 | \$1,000.00 |

X SERVICE CALL FEE

When a flat rate fee is not applicable, a service call fee based on the standard labor and equipment charges shall apply.

XI CONNECTION FEE

Connection fees are required for all new water services. These fees aid in covering the costs associated with purchasing additional capacity, distribution, pumping, and storage facilities that have been or will be constructed to support new and additional demands on that water system that arise with new customers and connections. The connections fees are as follows:

| Residential Connection Fees | |
|-----------------------------|----------|
| Hook-On Fee | \$573.00 |
| Construction water | \$100.00 |

Note: Price does not include deposit, service charge, or meter costs.

Residential Example with a 5/8" Water Meter:

| | |
|---------------------------------|------------|
| Hook-On Fee | \$573.00 |
| 5/8" Water Meter and AMR Equip. | \$471.00 |
| Deposit and Service Charge | \$55.00 |
| Construction Water | \$100.00 |
| Total Hook-On Fee | \$1,199.00 |

| Commercial Connection Fees | |
|----------------------------|-------------------------------------|
| Hook-On Fee | \$1,600.00 per acre (one-acre min.) |
| Construction water | \$250.00 |

Note: Price does not include deposit, service charge, or meter costs.

Commercial Example for a 5.0-Acre Lot with a 2.0" Water Meter:

| | |
|---------------------------------|--------------------|
| Hook-On Fee | \$8,000.00 |
| 2.0" Water Meter and AMR Equip. | \$1,621.00 |
| Deposit and Service Charge | \$155.00 |
| Construction Water | \$250.00 |
| Total Hook-On Fee | \$10,026.00 |

The Water Utility reserves the right to assess Hook-On Fees for commercial metered connections 4-inch or larger at a different rate.

XII HYDRANT METER ASSEMBLY

Consumption and damage charges, if any, are in addition to rental fees listed in the table below. The deposit may not reflect the actual replacement cost of the meter and backflow device if they are stolen or damaged beyond repair. (See Urbandale Water Utility's Hydrant Meter Rental Agreement in Figures B-22.)

| Deposit Fee Schedule | | | | |
|----------------------|----------|----------|------------|------------|
| Meter size (in.) | 5/8 | 1.0 | 2.0 | 3.0 |
| Deposit Fee | \$300.00 | \$600.00 | \$2,500.00 | \$3,000.00 |

| Rental Fee Schedule (Monthly Fee – Min. 30-Day Fee) | | | | |
|---|---------|---------|----------|----------|
| Meter Size (in.) | 5/8 | 1.0 | 2.0 | 3.0 |
| Rental Fee | \$50.00 | \$75.00 | \$125.00 | \$150.00 |

XIII POOL FILL FEES

A fee of \$180.00 for the first two hours (minimum charge), plus the water used at the bulk rate. For each additional hour, the charges will be based on standard labor and equipment charges. The customer must sign a hold-harmless agreement. The Water Utility is not responsible for any damage caused by using this method of filling pools.

XIV METER TESTING

The fee below shall be assessed if the test was requested by the customer and if the meter is found to meet applicable accuracy specification in accordance with the American Water Works Association. The fee includes removing and replacing the water meter. This fee doesn't include replacement parts, if necessary.

| Meter Testing Fee Schedule | | | | |
|----------------------------|---------|----------|----------|----------|
| Meter size (in.) | 5/8 | 1.0 | 1.5 | 2.0 |
| Testing Fee | \$75.00 | \$100.00 | \$150.00 | \$200.00 |

Note: For meters larger than 2-inch, please contact the Water Utility.

XV FROZEN/DAMAGED METER

The damaged meter will be replaced for the replacement cost outlined in the Frozen/Damaged Meter fee schedule plus standard labor and equipment charges.

| Frozen/Damaged Fee Schedule | | | | | |
|-----------------------------|----------|----------|----------|------------|------------|
| Meter size (in.) | 5/8 | 1.0 | 1.5 | 2.0 | 3.0 |
| Replacement Fee | \$176.00 | \$297.00 | \$853.00 | \$1,134.00 | \$2,583.00 |

XVI BACTERIOLOGICAL SAMPLE FEES

For each water sample on which bacterial analyses are performed, the fee is \$50.00.

Samples collected outside of normal business hours shall be subject to the standard labor rates in addition to the sampling fee. There will be a minimum of a two (2) hour labor rate charge for any scheduled samples on a Saturday, Sunday, or Holiday.

XVII FLUSHING WATER MAINS FEES

Water used in the repeat flushing of new mains will be charged at the **bulk water rate**. If a test fails, the contractor shall pay for water used for additional testing and flushing.

XVIII PRIVATE FIRE PROTECTION

\$150.00 for annual standby charge on fire services outside of the city limits.

XIX STANDARD LABOR AND EQUIPMENT CHARGES

When a flat rate fee is not applicable, the standard labor rate per employee with a minimum charge of one hour shall be noted below. Examples of when the standard labor rates would apply include flow, pressure, and tracer wire tests; assistance with private main breaks, etc.

| Hours | Definition | Hourly Rate |
|-----------------------------------|--------------------------------------|-------------|
| During normal field service hours | Monday – Friday 8:00 AM – 4:30 PM | \$ 80.00 |
| Sundays and Holidays | 12:00 AM - 11:59 PM | \$140.00 |
| Other Hours | Any time not listed above | \$110.00 |

The standard rental rates for construction equipment listed below are imposed whenever the equipment is used to make repairs occasioned by negligence, when a flat rate fee is not applicable or for repair work on customer owned property.

| Standard Fee Schedule | |
|------------------------------|----------------|
| Equipment | Price per Hour |
| Dump Truck | \$70.00 |
| Backhoe | \$80.00 |
| Vac Machine | \$70.00 |
| Tap Machine | \$40.00 |
| Maintenance Trailer | \$40.00 |
| Service Vehicle | \$10.00 |

XX UNAUTHORIZED USE OF UNMETERED WATER PENALTY

The penalty for unauthorized use of unmetered water has the following penalties:

| Definition | Charge |
|-------------------|-------------------|
| First Offense | \$ 250.00 |
| Second Offense | \$ 500.00 |
| Third Offense | \$1,000.00 |

Penalty does not include service inspection cost and cost of repairs, if applicable. In addition, each offense will carry an additional expense for an estimated usage of water based on gallons per minute times the amount of time the water was used.

XXI TAMPERING OF A METER OR UNAUTHORIZED OPERATION OF VALVES OR STOP BOXES

The penalty for tampering of a meter or unauthorized operation of a valve or stop box has the following penalties:

| Definition | Charge |
|-------------------|-------------------|
| First Offense | \$ 250.00 |
| Second Offense | \$ 500.00 |
| Third Offense | \$1,000.00 |

Penalty does not include inspection cost and cost of repairs, if applicable. The Water Utility reserves the right to terminate water service up to and including cutting the water service at the main at the owner's expense.

XXII TAMPERING OR UNAUTHORIZED OPERATION OF HYDRANTS

The penalty for tampering of or unauthorized operation of a hydrant has the following penalties:

| Definition | Charge |
|-------------------|---------------|
| First Offense | \$1,000.00 |
| Second Offense | \$2,000.00 |
| Third Offense | \$4,000.00 |

Penalty does not include inspection cost and cost of repairs, if applicable.

XXIII AMR OPT OUT SERVICE FEE

The AMR Opt Out Service Fee is \$15.00 per month.

XXIV PRIVATE FIRE HYDRANT MAINTENANCE AGREEMENT

Fee based on standard labor and equipment charges (1-Hour minimum).

The customer must sign a private fire hydrant maintenance agreement. The Water Utility may provide estimates upon request. (See Urbandale Water Utility's Hydrant Meter Rental Agreement. Figure B-23)

XXV RECORD REQUEST FEES

An email copy of a municipal service bill with the current balance is free for the account holder. Mailed copies cost \$0.25 per copy plus postage.

For copies of Water Utility records: \$0.25 per copy. Copies of Water Utility records requiring more than one hour of staff time to compile will include standard labor rates.

Urbandale Water Utility
Late Notice/Disconnect Policy
Updated May 1, 2025

Bills are due when issued and are considered late after 20 days.

Reminder Notice issued 21st day or first working day after the due date. A late fee of 1.5% (with a minimum of \$1.50) will be applied to the customer's account when the notice is generated. If account balance is less than \$5.00 the late fee will not be applied and notice will not be sent.

Hand Delivered Shut Off Notice delivered 42nd day* If the past due balance is less than \$40.00 disconnection will not be pursued.

Water Disconnected 44th day*

*Hand delivered notices and the actual disconnect date will be coordinated so that water is not disconnected on a Friday or the day prior to an observed holiday by the Utility. The Hand Delivered Shut Off Notice will not be delivered prior to the 42nd day and water will not be disconnected prior to the 44th day.

Customers who contact the Utility to make a payment arrangement prior to the Hand Delivered Shut Off Notice may be given an extension. If payment is not received by the date of the arrangement, a Hand Delivered Shut Off Notice will be delivered the following work day.

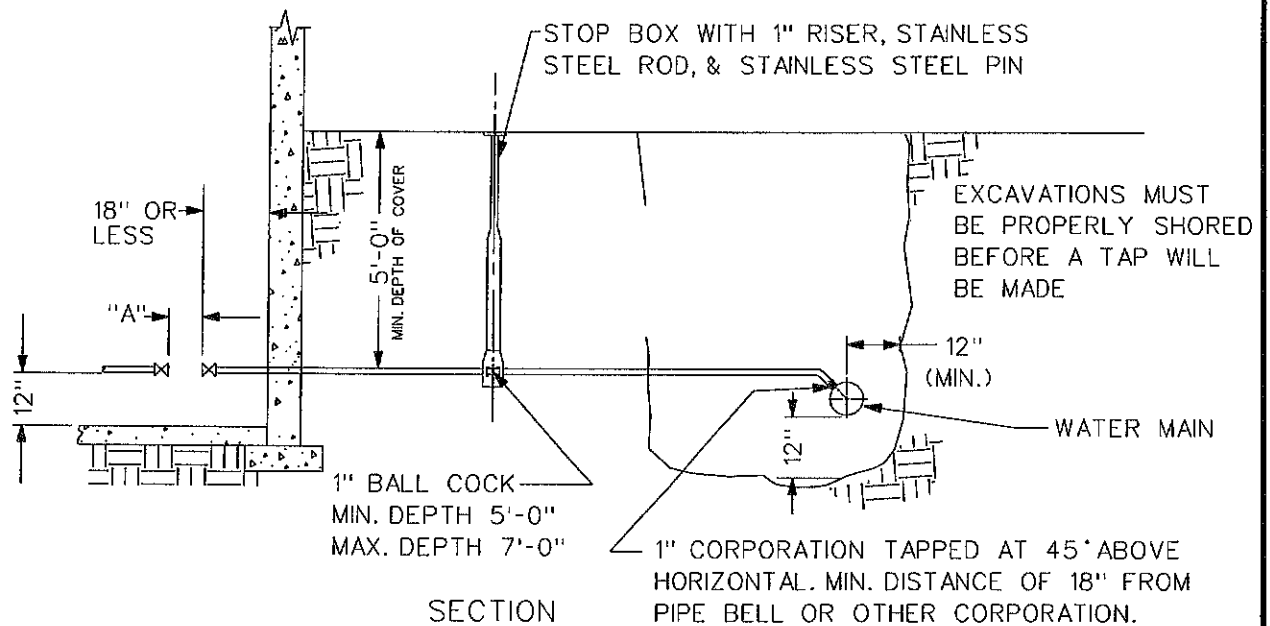
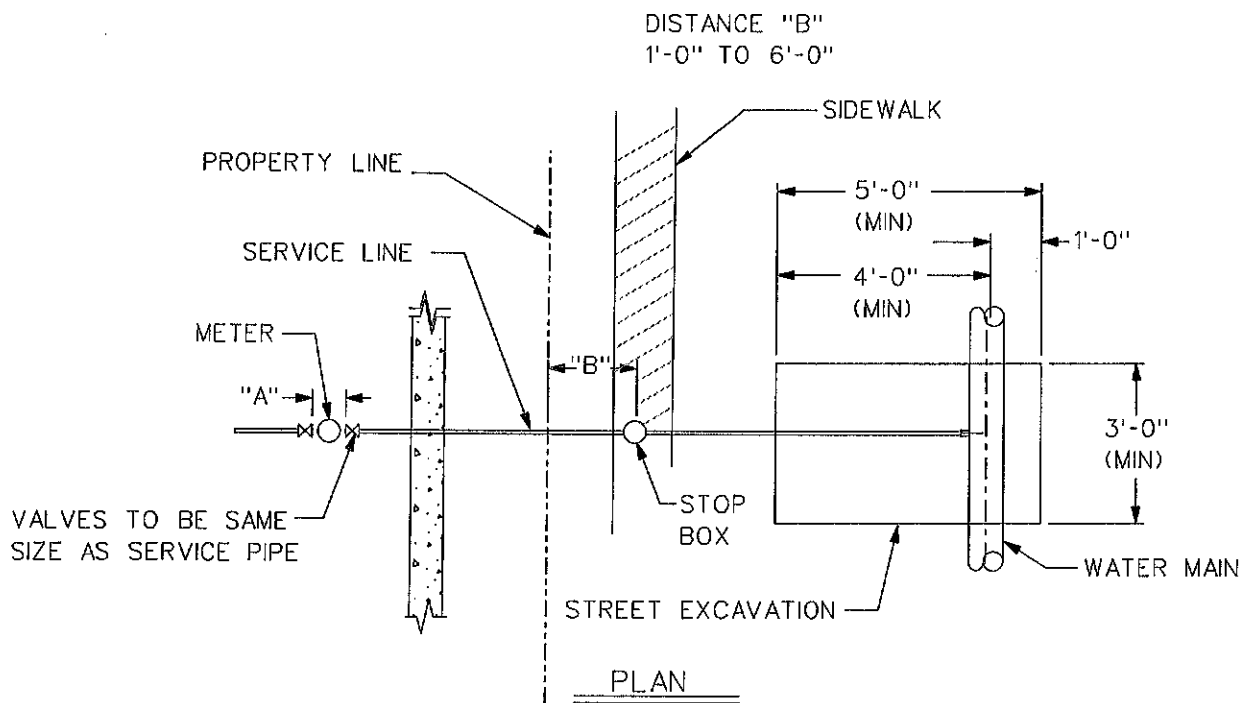
Customers who contact the Utility to make a payment arrangement prior to Water Disconnect may be given an extension. If the payment is not received by the date of the arrangement, water will be disconnected the following work day.

The Appendix A - Fee Schedule lists the delivery fee that will be applied to the customer's account with delivery of the Hand Delivered Shut Off Notice.

Upon disconnection/or an attempt to disconnect water for non-payment, the customer's account will be assessed a fee listed in the Appendix A - Fee Schedule. This fee will cover the restoration of water during business hours once payment-in-full is made. The fee for restoration of water service during non-business hours is listed in the Appendix A - Fee Schedule.

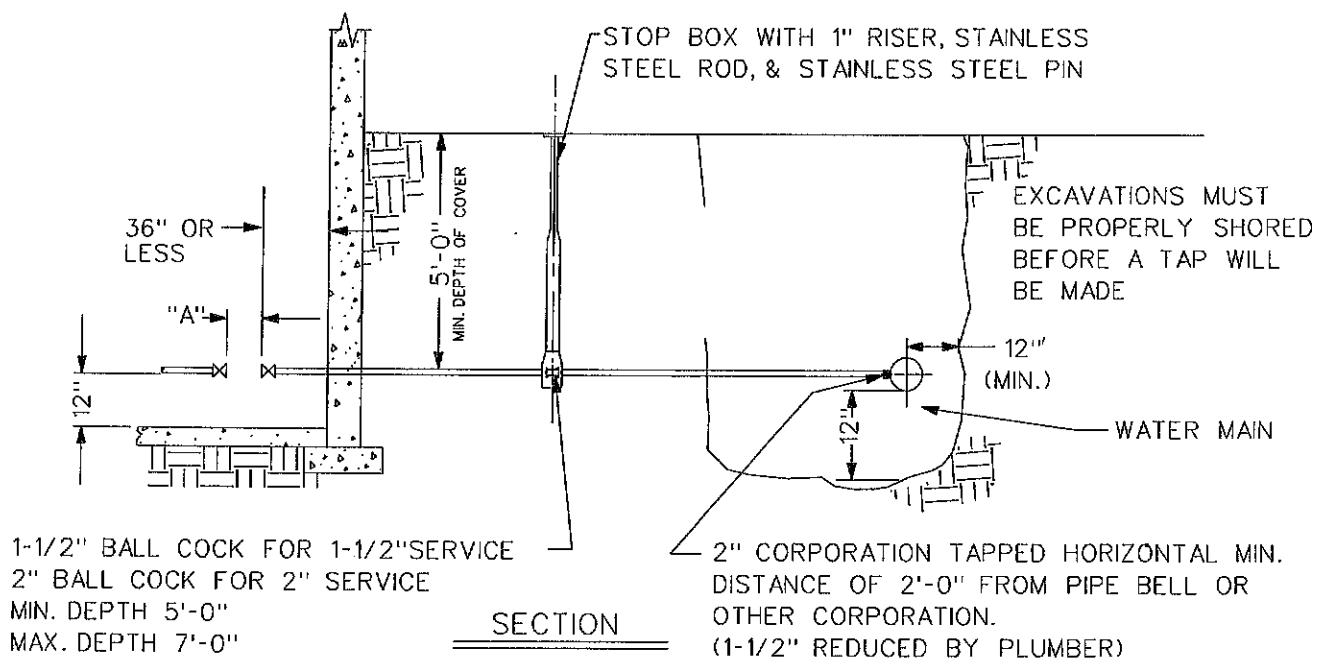
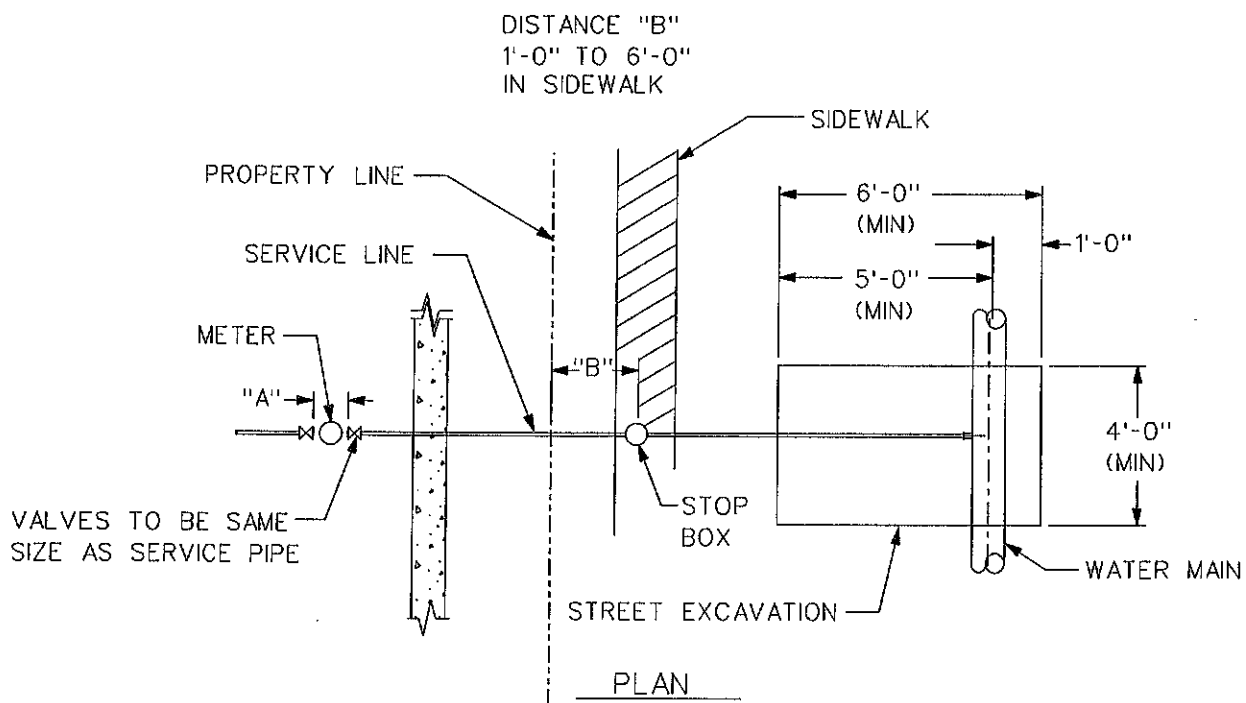
Payment of the overdue balance (including the disconnect/reconnect fee) shall be required prior to water restoration.

At the discretion of the Utility, a customer may be given an allowance on the late fee, tag fee, and disconnect/reconnect fee one time during a twelve-month period.



METER SPACING

| SIZE OF METER | "A" - FACE TO FACE OF VALVES | |
|------------------|------------------------------|---|
| 5/8" | 12" | |
| 3/4" | 13-1/2" | |
| 1" | 15" | |
| SCALE: NONE | URBANDALE WATER UTILITY | DETAIL OF 1" COPPER SERVICE INSTALLATION |
| | | |
| | | |
| | | |
| DATE: 07-01-2018 | | |



| METER SPACING | | |
|------------------|------------------------------|--|
| SIZE OF METER | "A" - FACE TO FACE OF VALVES | |
| 1-1/2" | 13" PLUS FLANGES | |
| 2" | 17" PLUS FLANGES | |
| SCALE: NONE | URBANDALE WATER UTILITY | DETAIL OF 1-1/2" OR 2" SERVICE INSTALLATION |
| | | |
| ADDENDUM #4 | | |
| DATE: 06-01-2022 | | |

CENTER LINE OF SERVICE
MUST BE A MIN. OF 3 FT.
FROM BELL ON PIPE TO BE
TAPPED

MJ
VALVE

TAPPING
SLEEVE

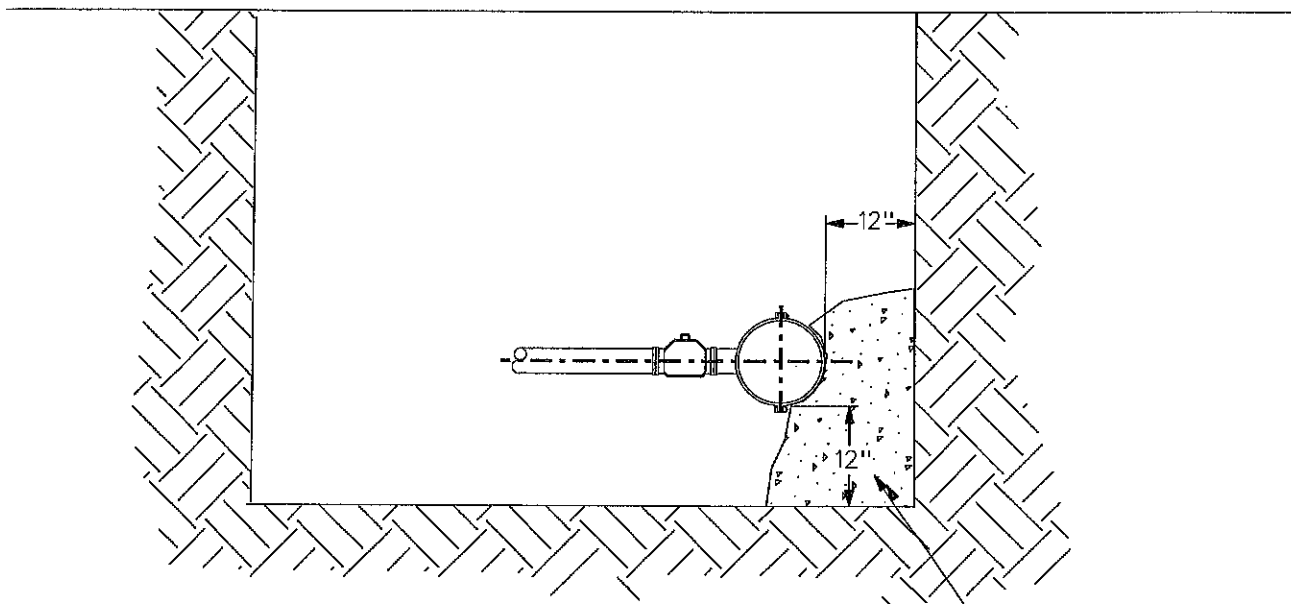
5'-0"

6'-0"

WATER MAIN

STREET EXCAVATION

PLAN



SECTION

THRUST BLOCK
SEE FIGURE 23
FOR DIMENSIONS

NOTES:

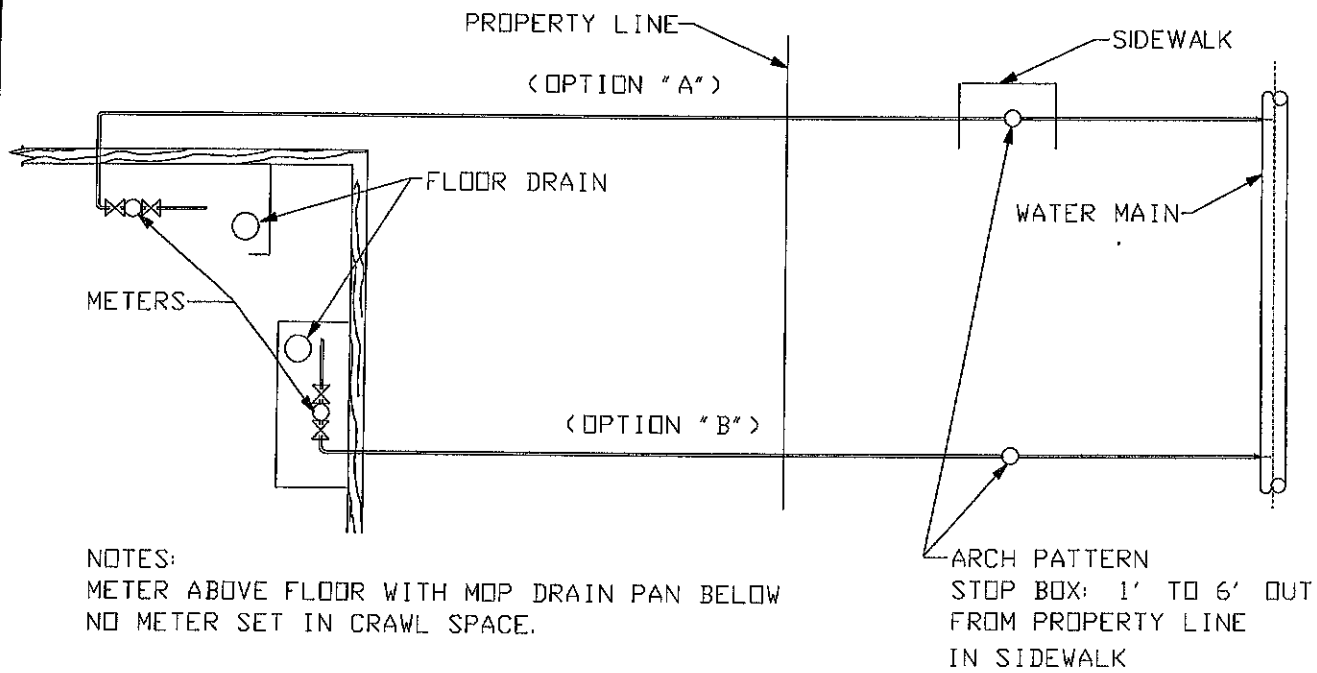
1. IF TWO TAPS ARE MADE, A MIN. OF 24" SHALL
BE MAINTAINED BETWEEN TAPPING SLEEVES EDGES.
2. IF TWO TAPS ARE MADE IN THE SAME HOLE
THE WIDTH OF THE HOLE SHALL INCREASE TO 8 FT..
3. EXCAVATIONS OVER 4'-11" DEEP MUST BE
SHORED BEFORE A TAP WILL BE MADE. EXCAVATION
DIMENSIONS ARE FROM INSIDE FACE OF SHORING.

SCALE: NONE

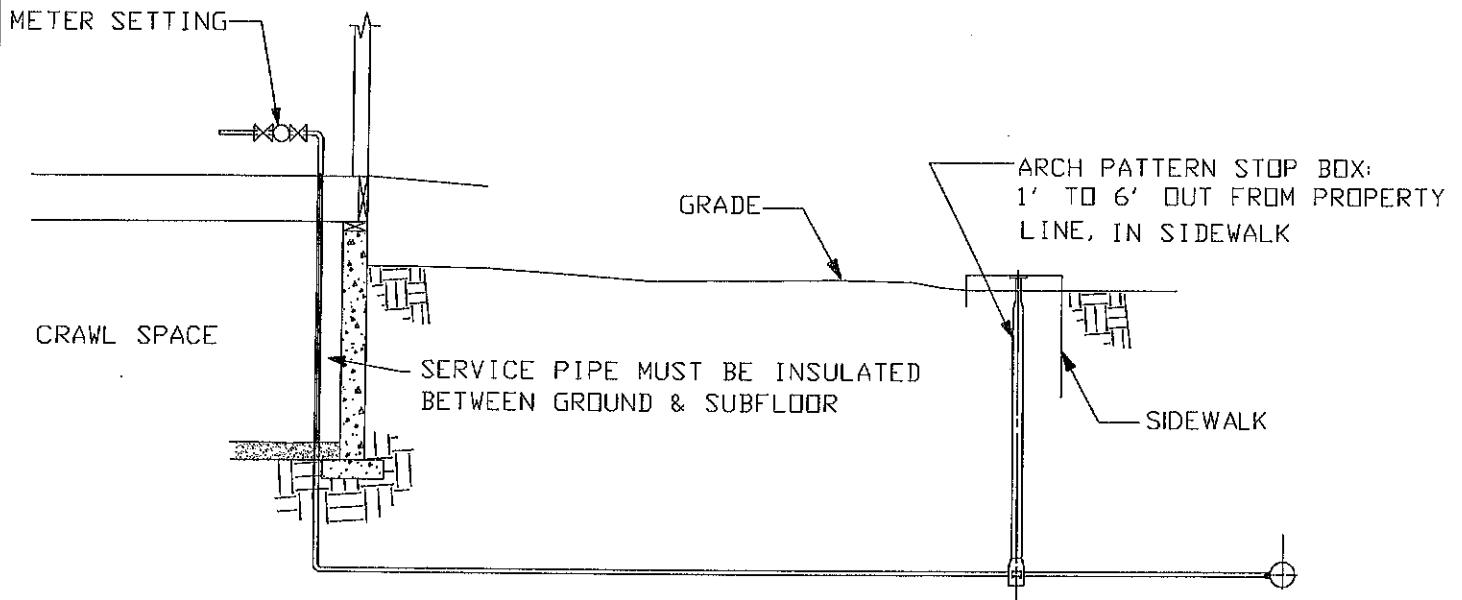
URBANDALE WATER
UTILITY

EXCAVATION DETAIL FOR
TAPPING SLEEVE

DATE: 07-01-2018



PLAN



SECTION

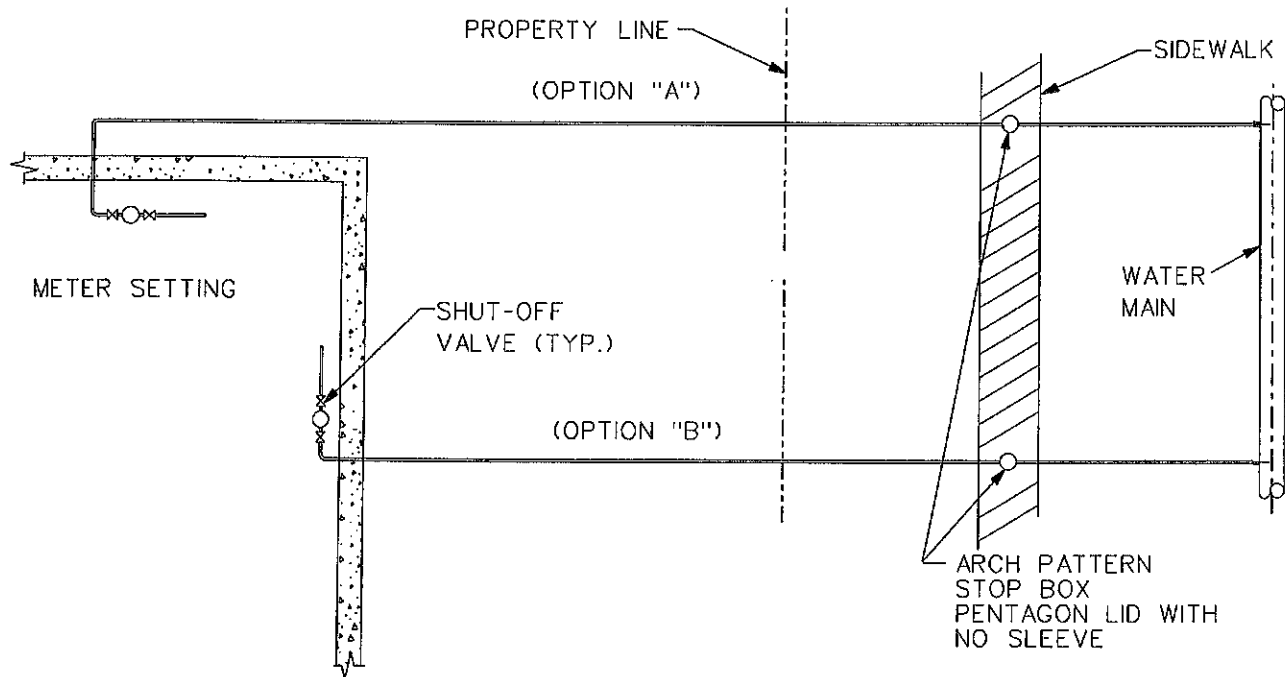
SCALE: NONE

ADDENDUM #4

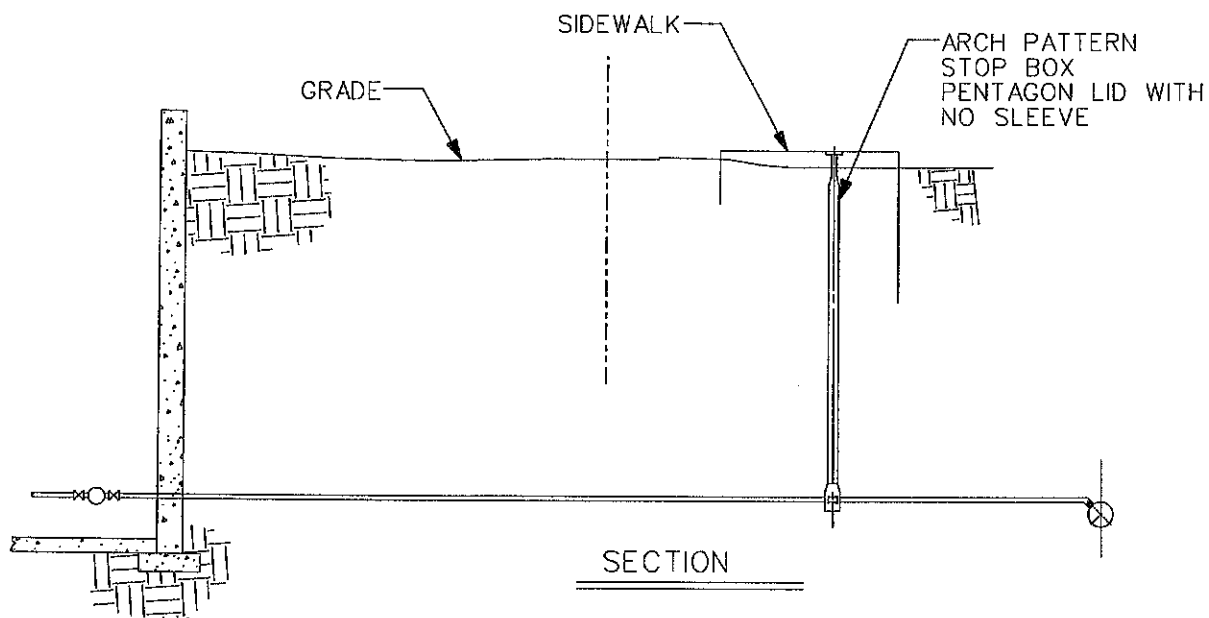
DATE: 06-01-2022

URBANDALE WATER
UTILITY

1ST FLOOR SETTING
WITH CRAWL
SPACE BELOW



PLAN



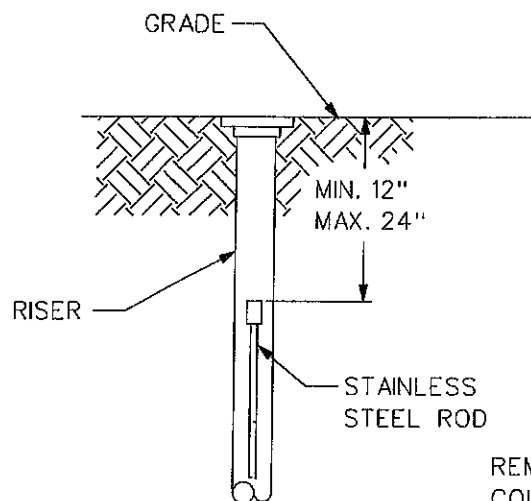
SCALE: NONE

ADDENDUM #4

DATE: 06-01-2022

URBANDALE WATER
UTILITY

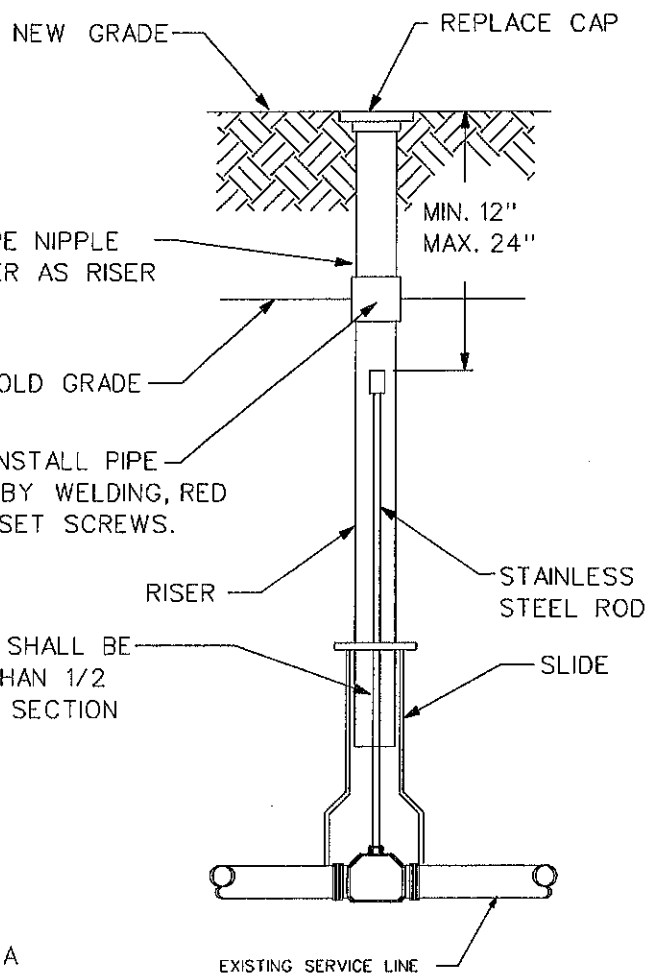
BUILDING WITH
STANDARD BASEMENT



NORMAL
INSTALLATION

REMOVE CAP AND INSTALL PIPE
COUPLING. SECURE BY WELDING, RED
LOCTITE OR RISER SET SCREWS.

TOP SECTION OF BOX SHALL BE
EXTENDED NO MORE THAN 1/2
WAY OUT OF BOTTOM SECTION
OF BOX



STOP BOX RAISED
TO NEW GRADE

WHEN THE GRADE IS CHANGED IN THE VICINITY OF A
STOP BOX, THE STOP BOX MUST BE RAISED OR LOWERED
TO THE NEW GRADE. RAISING THE STOP BOX IS
ACCOMPLISHED BY REMOVING THE CAP, INSTALLING
A PIPE COUPLING AND A THREADED NIPPLE OF THE
APPROPRIATE LENGTH AND DIAMETER AND REPLACING
THE CAP. THE RISER MUST BE INTEGRAL AND CONTINUOUS.
TO LOWER THE STOP BOX, IT WILL BE NECESSARY TO
CUT AND RETHREAD THE RISER PIPE AT THE NEW
GRADE AND REPLACE THE CAP. THE ROD MUST BE
LOWERED IN PROPER PROPORTION TO RISER PIPE.

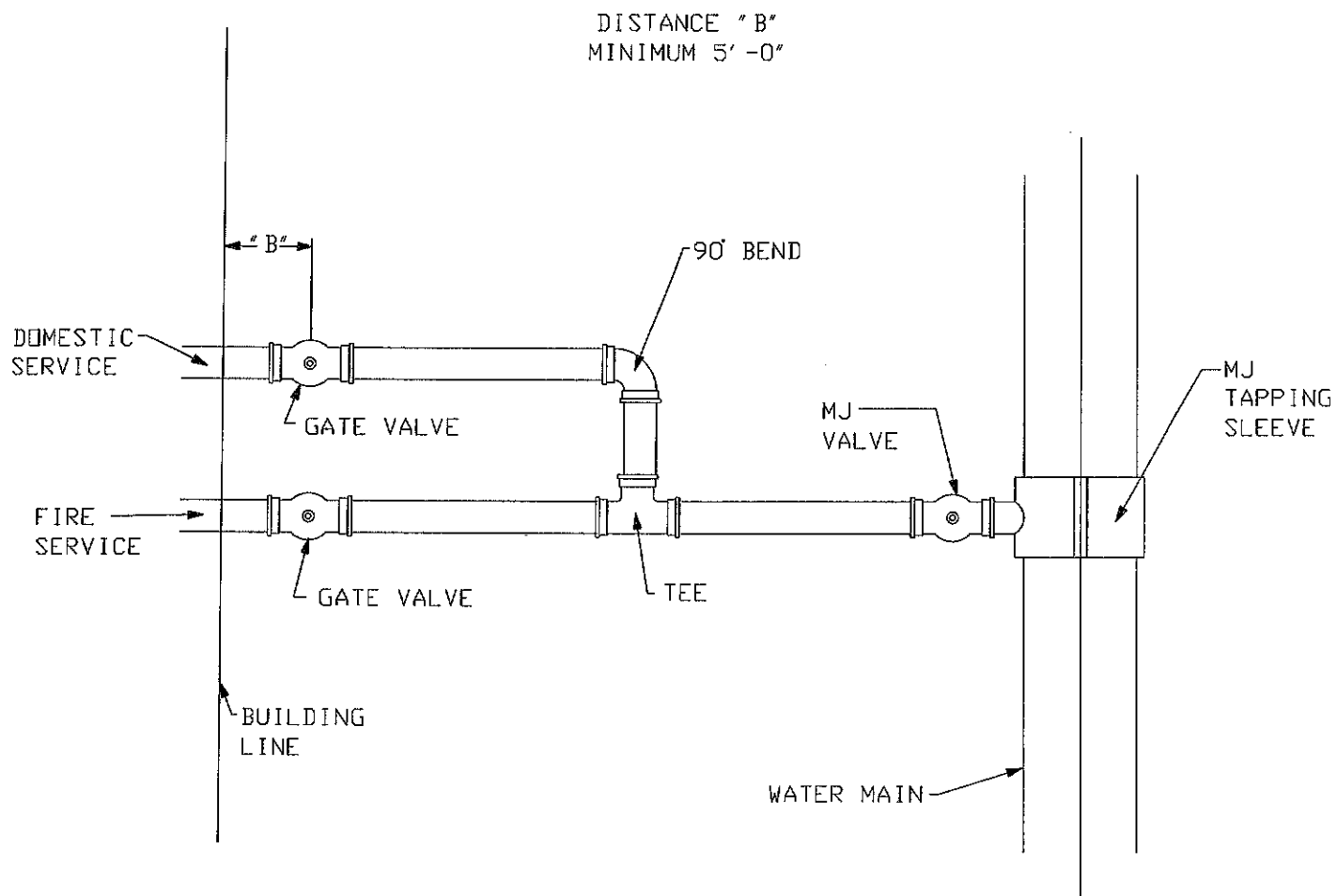
ALL STOP BOX EXTENSIONS SHALL BE SECURED IN SUCH A
WAY SO THAT IT BECOMES ONE PERMANENT PIPE, SUCH AS
WELDING, RED LOCTITE OR SET SCREWS.

SCALE: NONE

URBANDALE WATER
UTILITY

ADJUSTING STOP BOX
TO NEW GRADE
(ARCH PATTERN BOX)

DATE: 07-01-2018



NOTE: DO NOT LOCATE VALVES IN
AREAS WHERE CARS CAN BE PARKED.

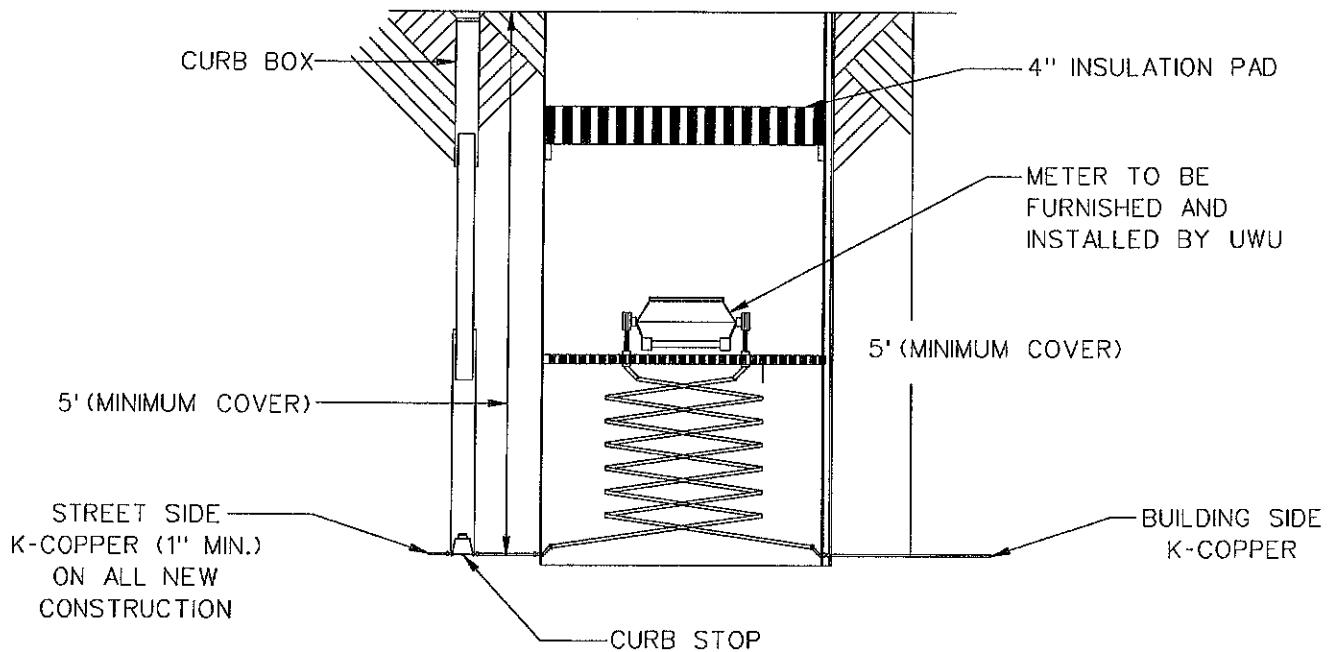
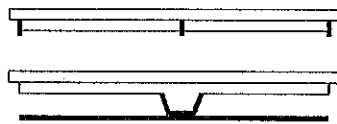
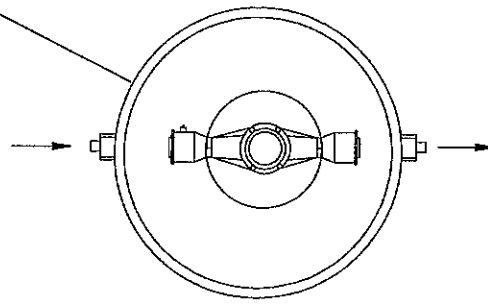
SCALE: NONE

URBANDALE WATER
UTILITY

TYPICAL COMMERCIAL
FIRE SERVICE LINE
WITH DOMESTIC TEE
IN LINE

DATE: 07-01-2018

TOP VIEW
RIGID PVC
METER PIT



NOTE: METER BOX LOCATED AT PROPERTY LINE ON PRIVATE PROPERTY

SCALE: NONE

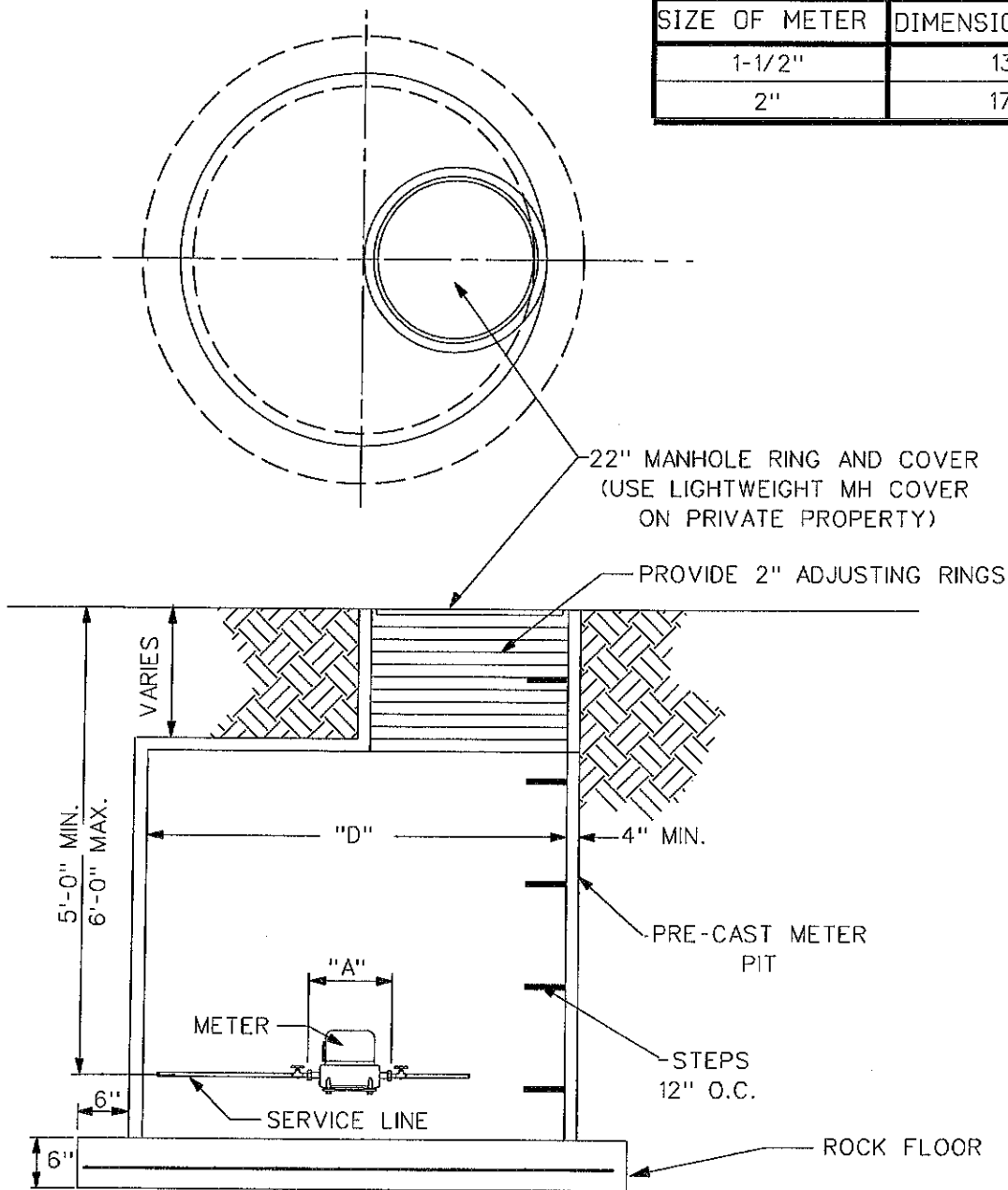
URBANDALE WATER
UTILITY

DETAIL OF THE STANDARD
METER PIT
5/8", 3/4" & 1" METERS
(FOR OFF ROAD USE ONLY)

DATE: 07-01-2018

METER SPACING

| SIZE OF METER | DIMENSION "A" | DIMENSION "D" |
|---------------|---------------|---------------|
| 1-1/2" | 13" | 60" |
| 2" | 17" | 60" |



NOTE:

1. INCREASE DIAMETER OF PIT 12" FOR EACH ADDITIONAL METER TO BE INSTALLED.
2. DIMENSION "A" IS FACE TO FACE OF THE METER

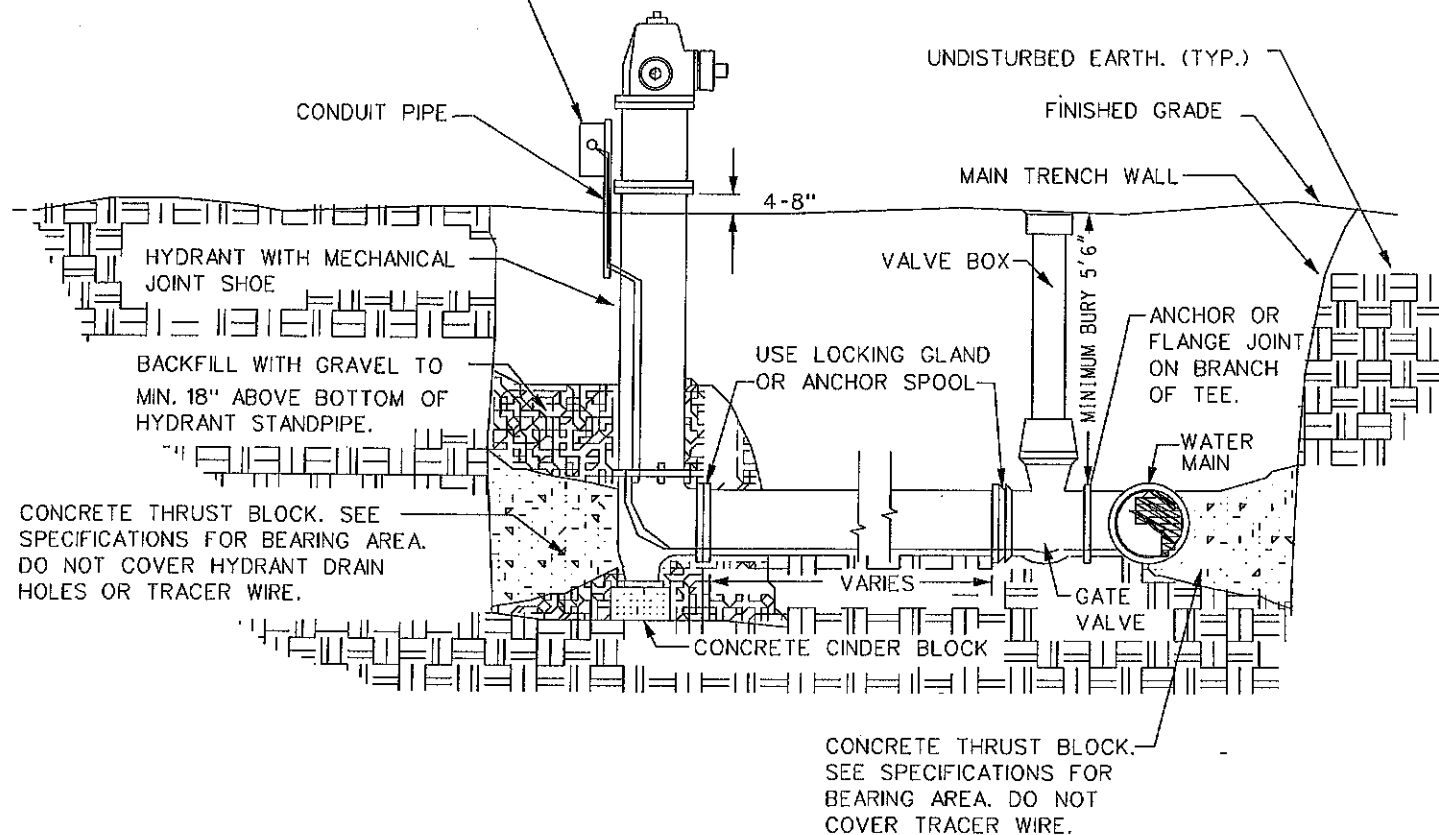
SCALE: NONE

URBANDALE WATER
UTILITY

DETAIL OF STANDARD METER
PIT - 1-1/2" & 2" METERS

DATE: 07-01-2018

TRACING WIRE RECEPTACLE.
INSTALL TO BREAK FLANGE BOLT ON
HYDRANT. CONNECT WIRE AS SHOWN
IN TRACER WIRE DETAIL.



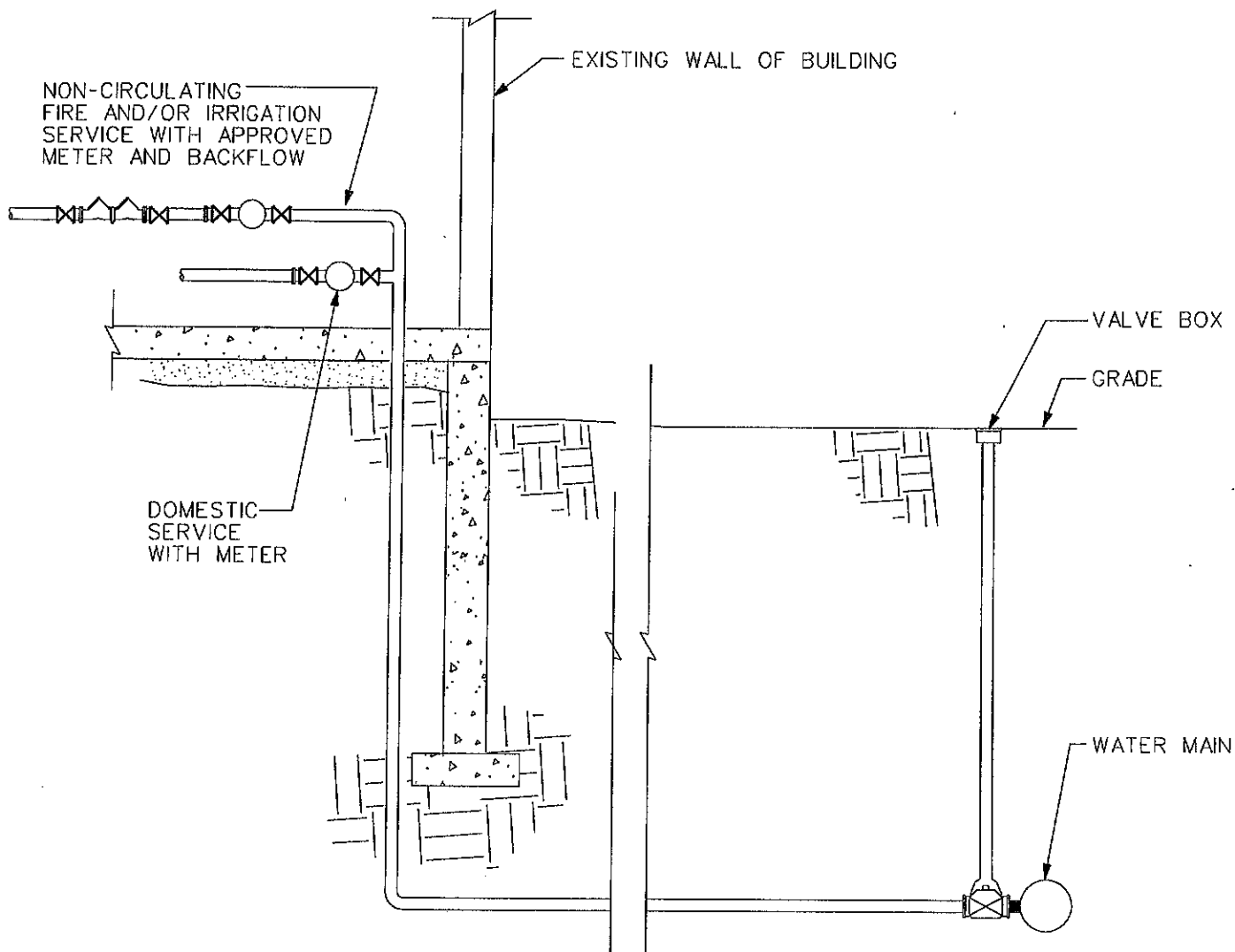
Note:
IRON PIPE, VALVE, FITTINGS AND HYDRANT
(BURIED PORTION) TO BE WRAPPED WITH
POLYETHYLENE ENCASEMENT MATERIAL PER
URBANDALE WATER UTILITY.

SCALE: NONE

URBANDALE WATER
UTILITY

FIRE HYDRANT
DETAIL

DATE: 07-01-2018



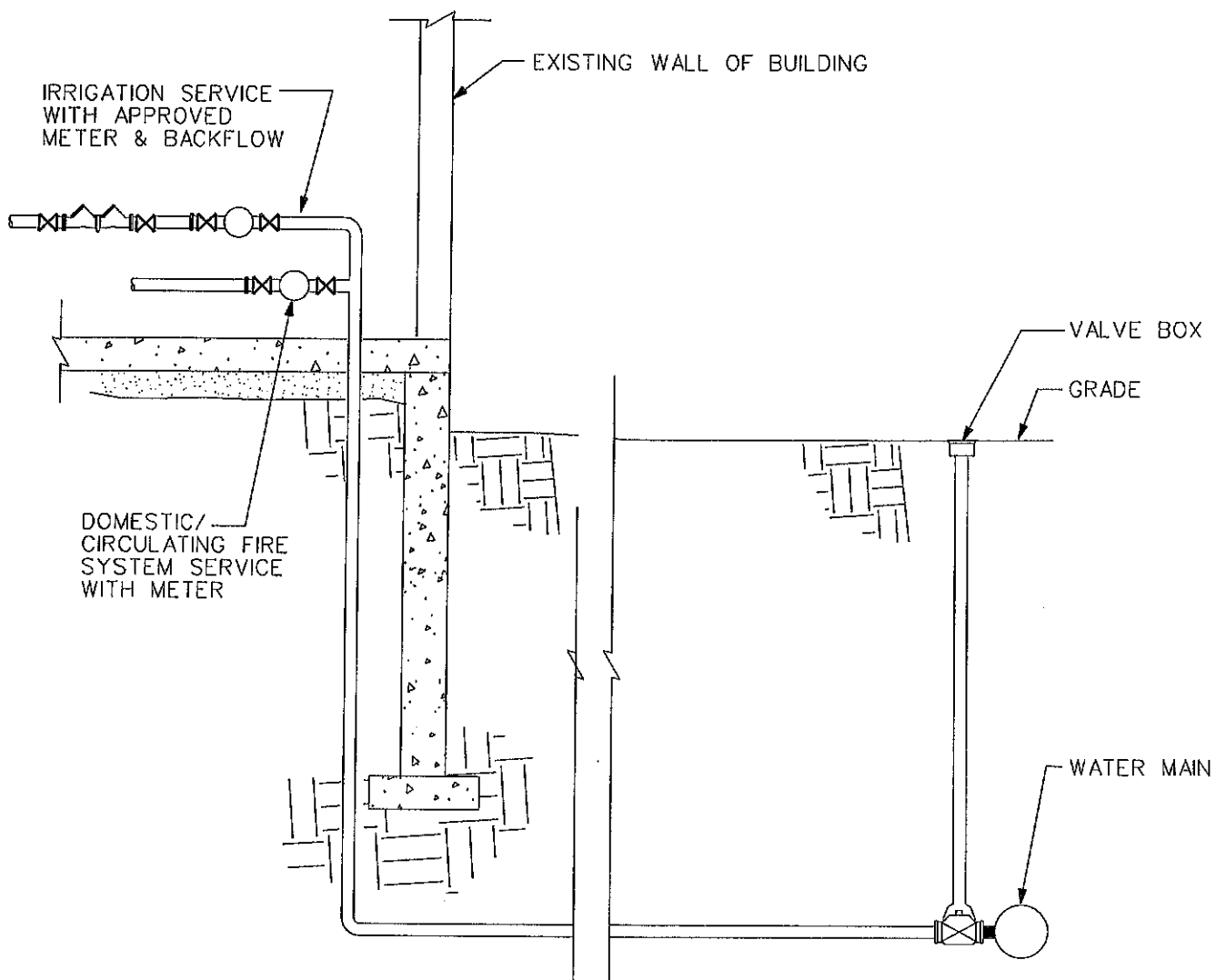
SECTION

SCALE: NONE

URBANDALE WATER
UTILITY

TYPICAL COMBINATION
NON-CIRCULATING FIRE/
IRRIGATION & DOMESTIC
SERVICE

DATE: 07-01-2018



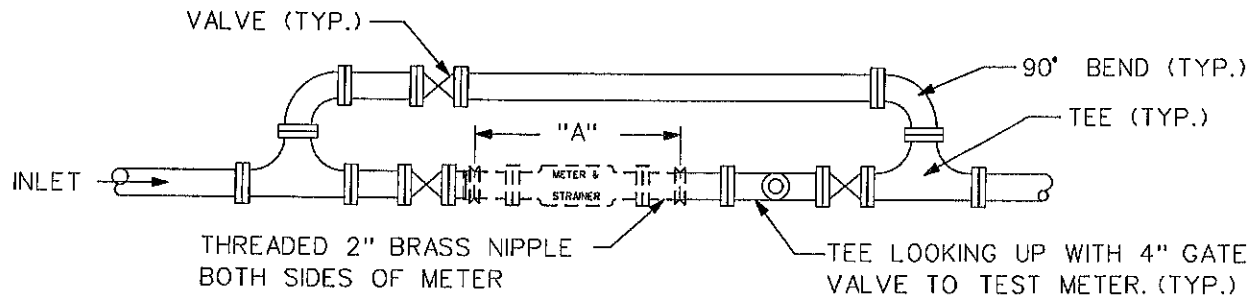
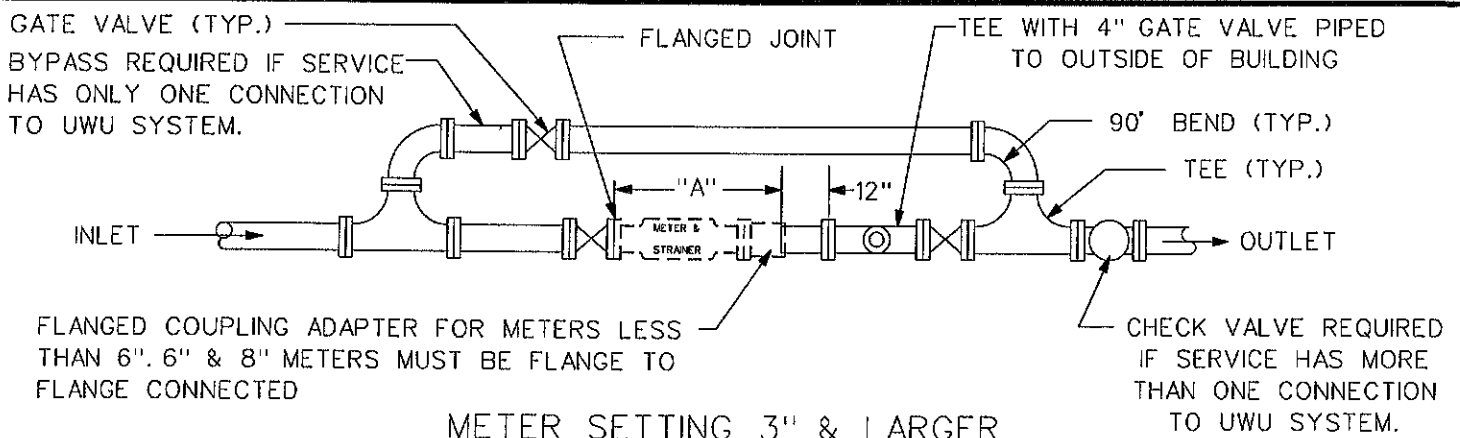
SECTION

SCALE: NONE

URBANDALE WATER
UTILITY

TYPICAL DOMESTIC
CIRCULATING FIRE
SYSTEM & IRRIGATION
SERVICE

DATE: 07-01-2018



| SIZE OF METER | DIMENSION "A" | | | | | | | |
|---------------|-------------------------|------------------|-------------------------|------------------|-------------------------|------------------|-------------------------|------------------|
| | TURBINE METER | | TRU FLOW COMPOUND METER | | FIRE TURBINE | | PROTECTUS III | |
| | FLANGE COUPLING ADAPTOR | FLANGE TO FLANGE | FLANGE COUPLING ADAPTOR | FLANGE TO FLANGE | FLANGE COUPLING ADAPTOR | FLANGE TO FLANGE | FLANGE COUPLING ADAPTOR | FLANGE TO FLANGE |
| 2" | 29" | N/A | 36" | N/A | N/A | N/A | N/A | N/A |
| 3" | 19" | 18-3/8" | 24" | 23-3/8" | 26-3/4" | 26-3/8" | N/A | N/A |
| 4" | 22" | 21-7/8" | 28-1/2" | 27-7/8" | 35-3/8" | 35-1/4" | 33-1/2" | 33-1/4" |
| 6" | 28" | 27-7/8" | 34" | 33-7/8" | 45-1/2" | 45-1/8" | 45-1/2" | 45-1/4" |
| 8" | 31" | 30-3/8" | N/A | N/A | 51-15/16" | 51-9/16" | 53-1/2" | 53-1/4" |

NOTES:

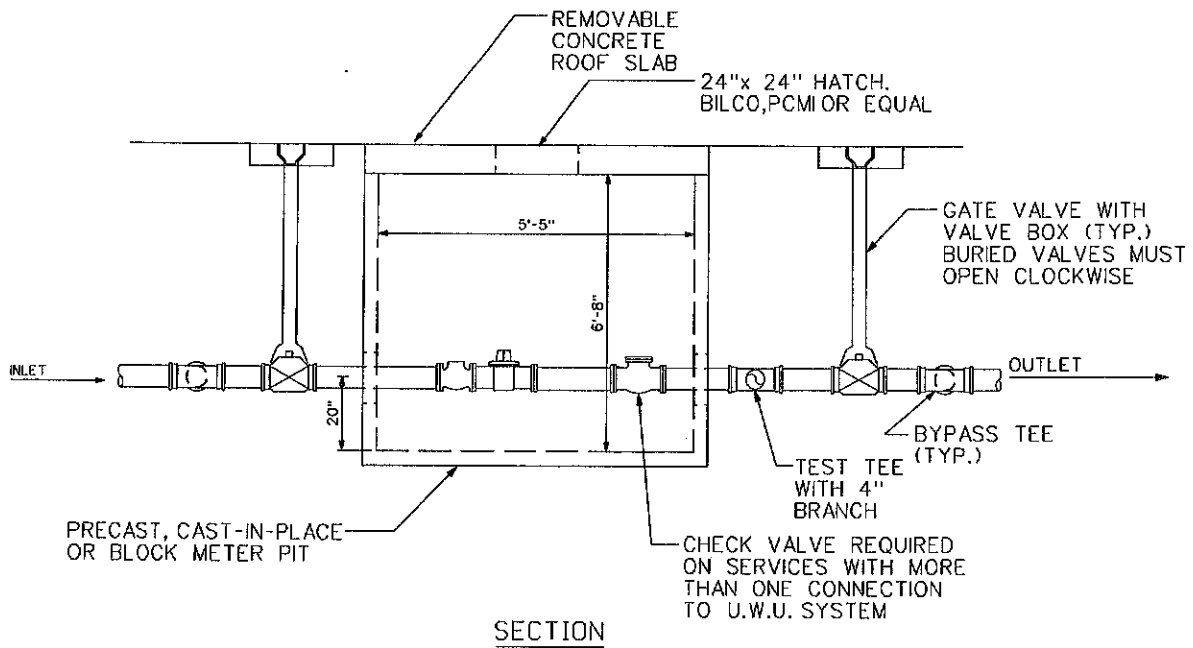
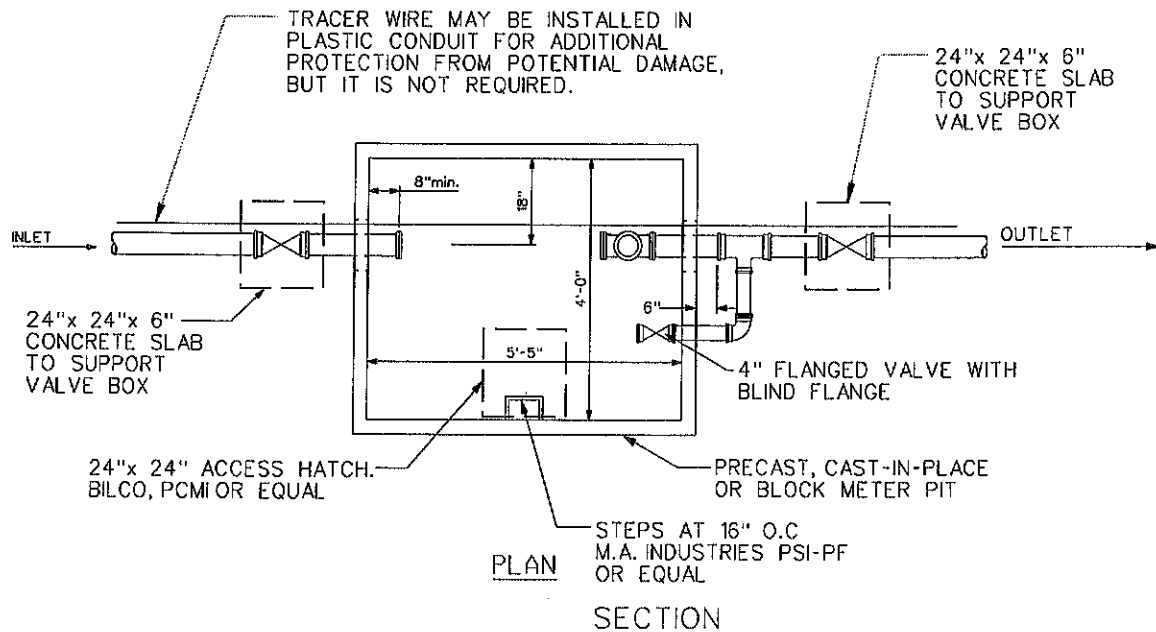
1. INSTALL 1/2" CONDUIT FROM METER TO AN ACCEPTABLE LOCATION FOR MOUNTING METER READING EQUIPMENT.
2. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF URBANDALE PLUMBING CODE.
3. IF THE METER SETTING IS INSIDE A BLDG. 4" PIPE MUST BE INSTALLED FROM THE TEST TEE VALVE TO AN APPROVED LOCATION ON THE OUTSIDE WALL OF THE BUILDING.
4. THRUST RESTRAINTS MUST BE PROVIDED AT FLEXIBLE COUPLINGS AND FLANGED COUPLING ADAPTERS WHEN NECESSARY TO PREVENT LEAKAGE AND OVERSTRESSING OF THE PIPE.
5. METER SHALL BE NO MORE THAN 3' OFF THE FLOOR. PROVIDE PIPE SUPPORTS AT TEES OR AS REQUIRED IN METER PITS.
6. MINIMUM HORIZONTAL CLEARANCE FROM CENTER LINE OF METER TO WALL OR OTHER OBSTRUCTION SHALL BE 30" UNLESS OTHERWISE APPROVED BY URBANDALE WATER UTILITY.

SCALE: NONE

URBANDALE WATER
UTILITY

STANDARD PLAN FOR
METER & BYPASS
INSTALLATION

DATE: 07-01-2018

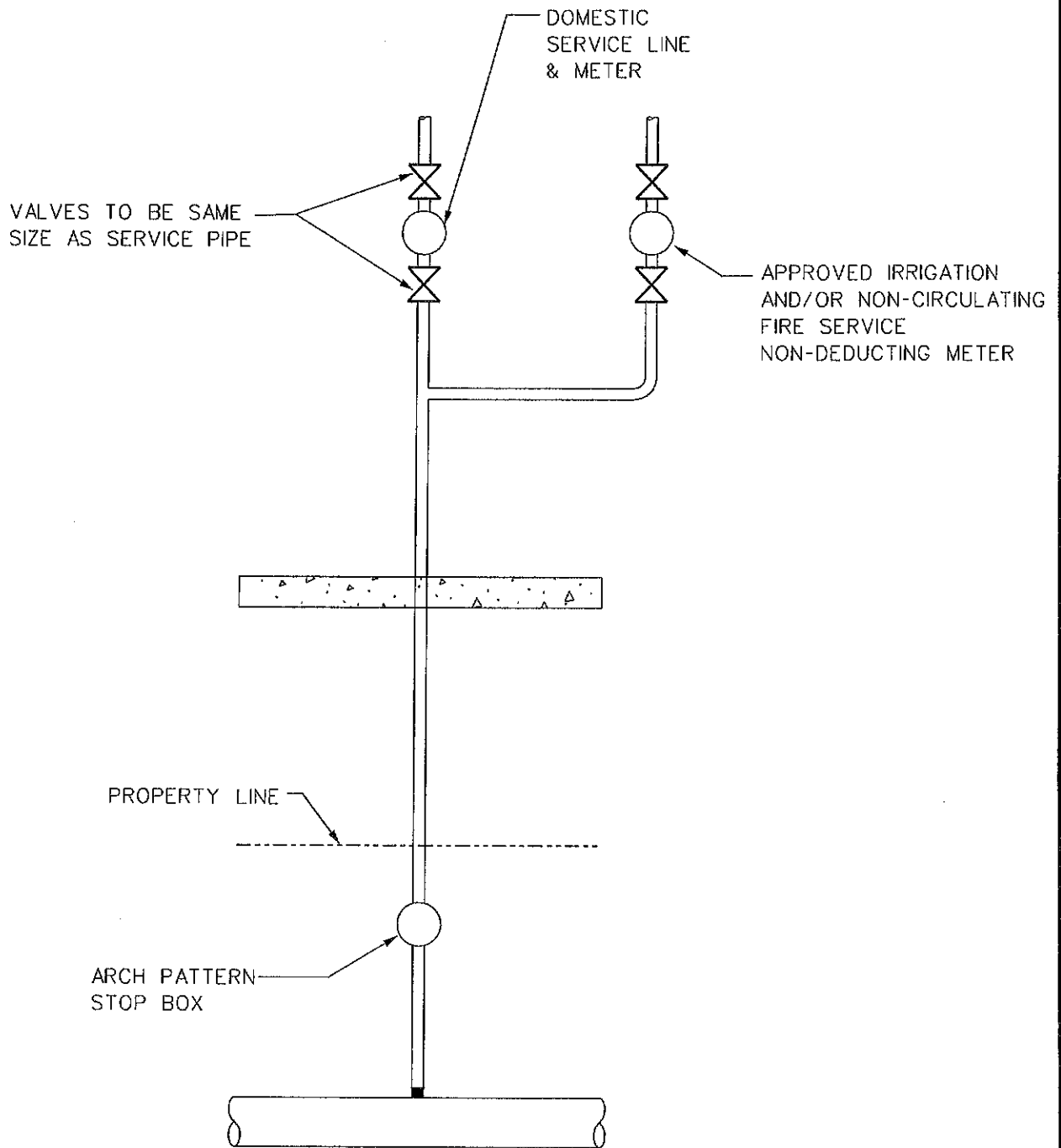


SCALE: NONE

URBANDALE WATER
UTILITY

TURBINE OR COMPOUND
METER PIT DETAIL
WITH TRACER WIRE

DATE: 07-01-2018

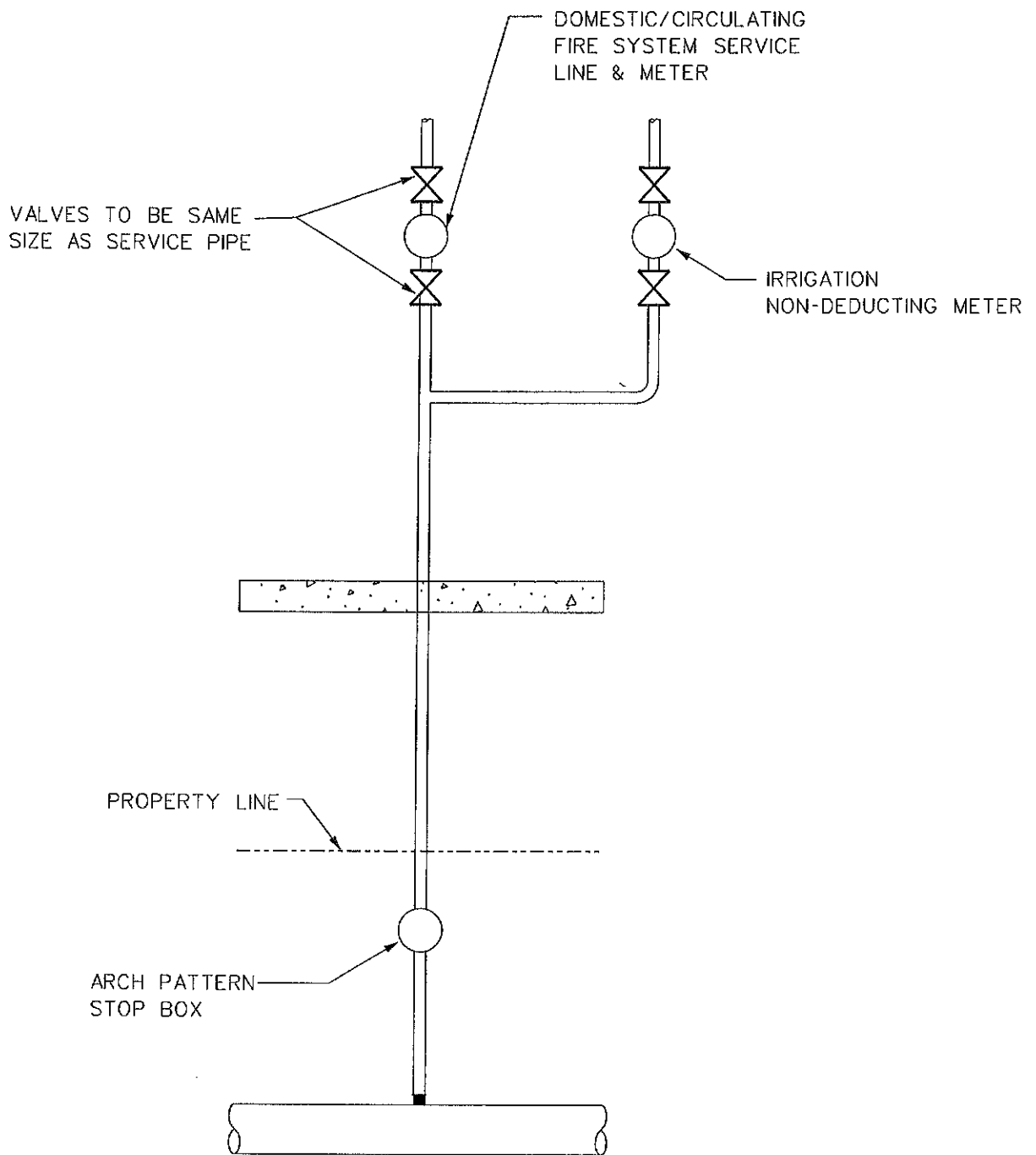


SCALE: NONE

URBANDALE WATER
UTILITY

RESIDENTIAL IRRIGATION
AND/OR NON-CIRCULATING
FIRE SERVICE INSTALLATION

DATE: 07-01-2018

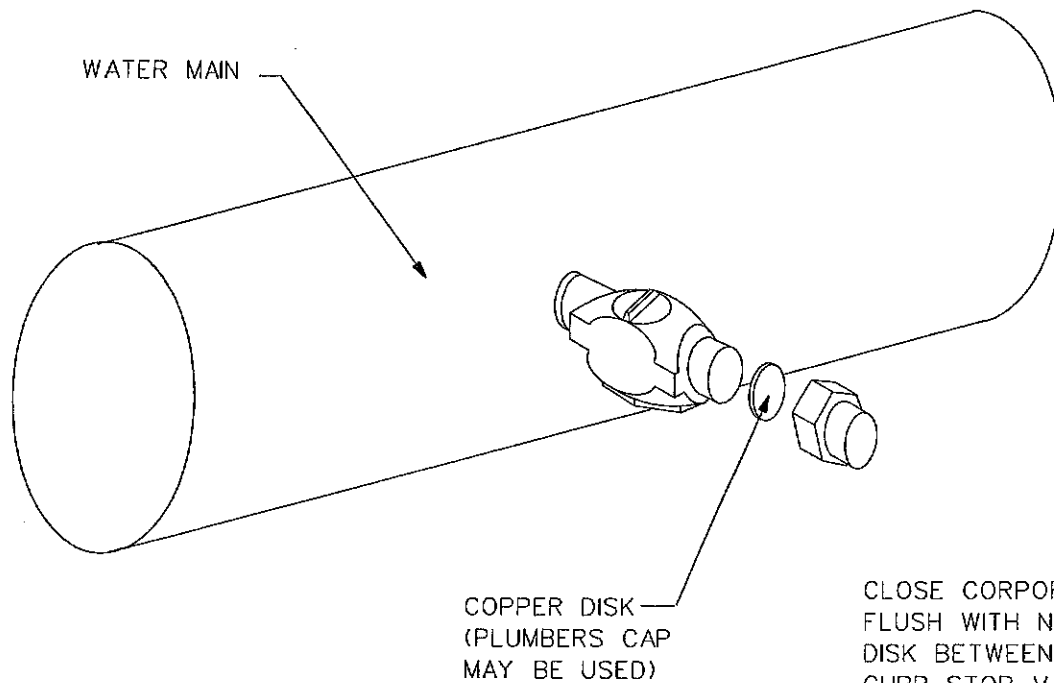


SCALE: NONE

URBANDALE WATER
UTILITY

RESIDENTIAL IRRIGATION
AND/OR CIRCULATING FIRE
SERVICE INSTALLATION

DATE: 07-01-2018



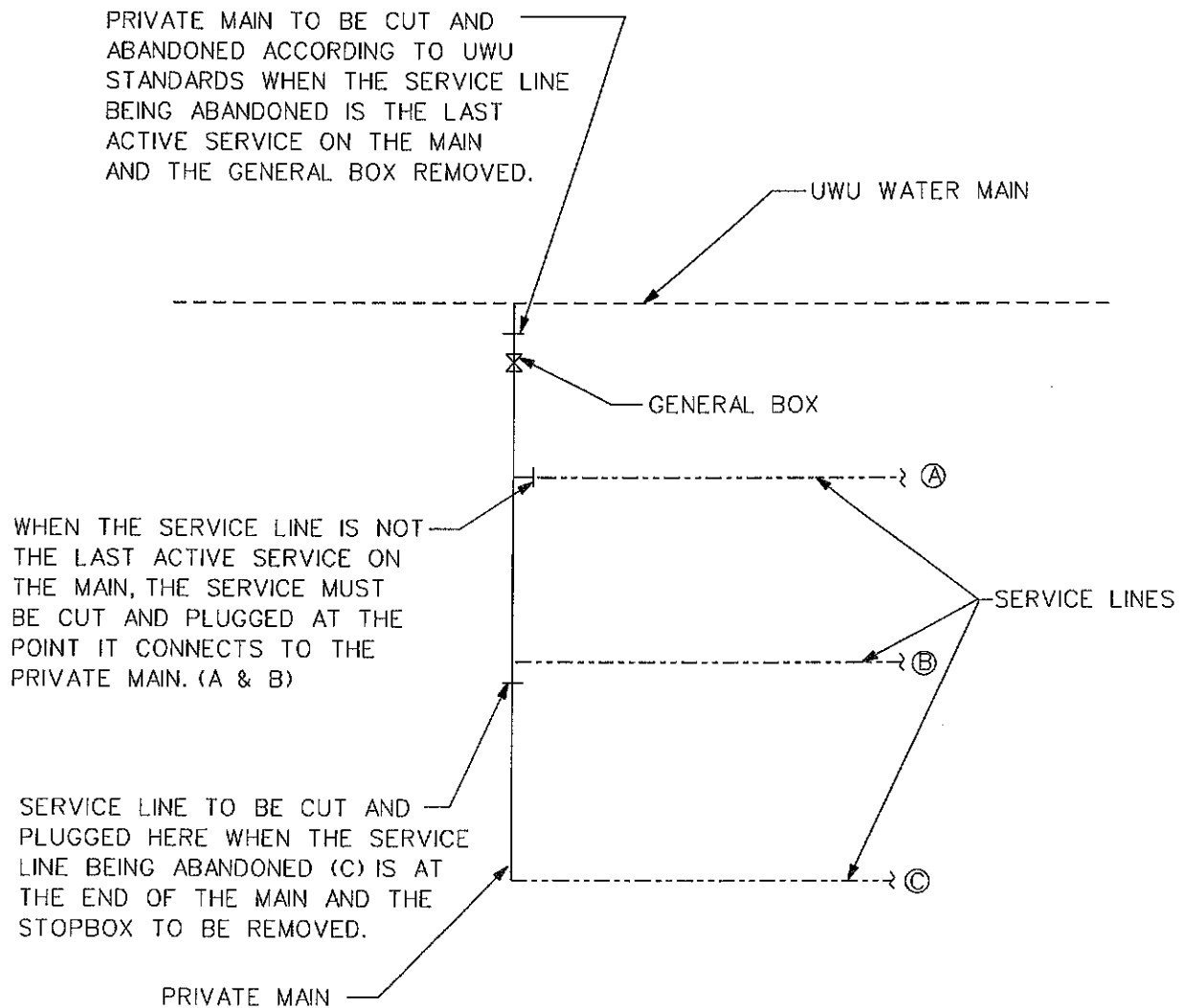
CLOSE CORPORATION. CUT LINE
FLUSH WITH NUT. PLACE COPPER
DISK BETWEEN NUT & CORPORATION.
CURB STOP VALVE TO BE REMOVED
WHEN APPLICABLE.

SCALE: NONE

URBANDALE WATER
UTILITY

TAP CUT AT MAIN
PROCEDURES 3/4" TO 2"
DIRECT TAPS ONLY

DATE: 07-01-2018

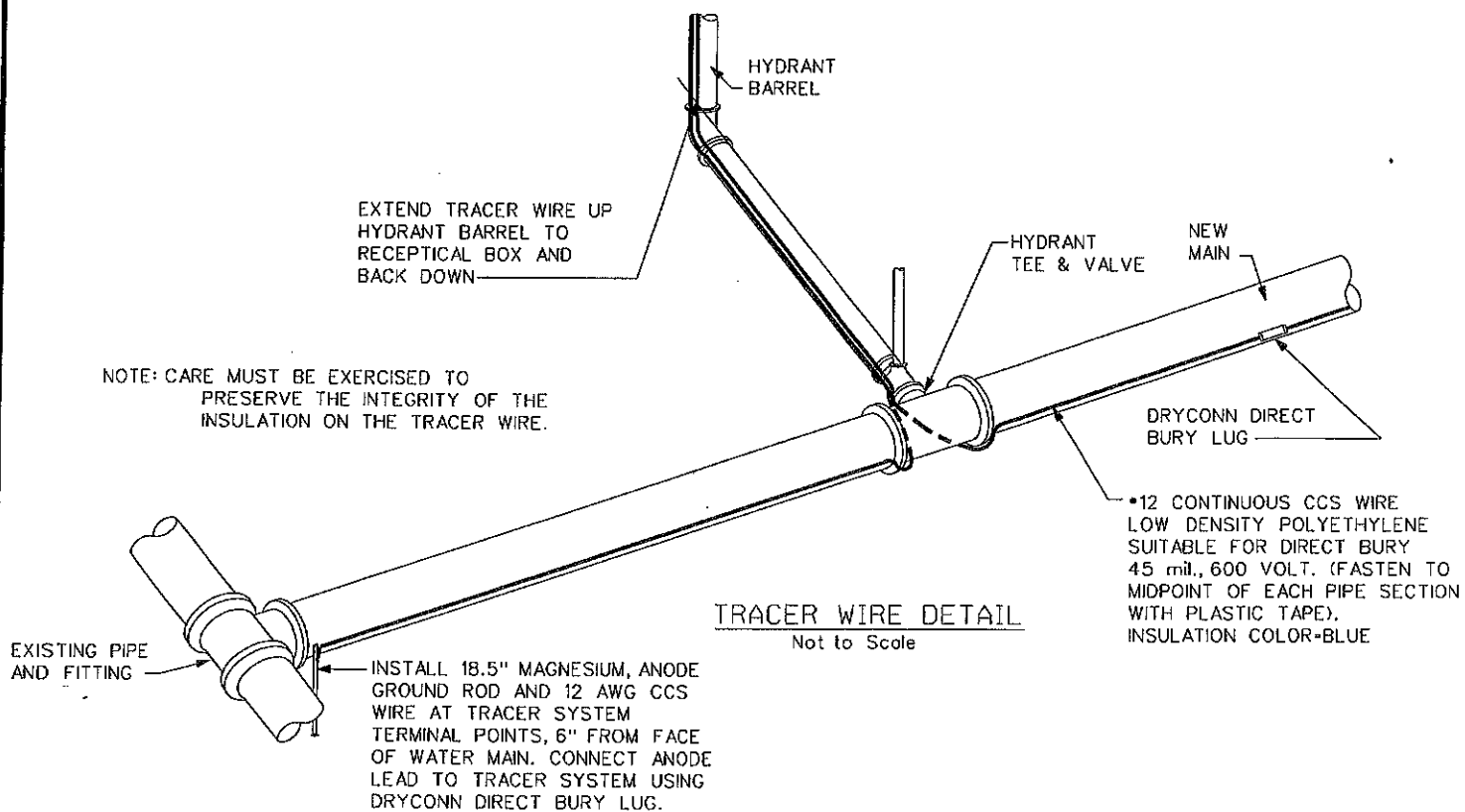


SCALE: NONE

URBANDALE WATER
UTILITY

PRIVATE MAIN
ABANDONMENT DETAILS

DATE: 07-01-2018

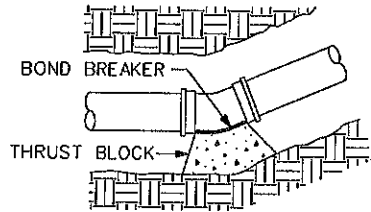
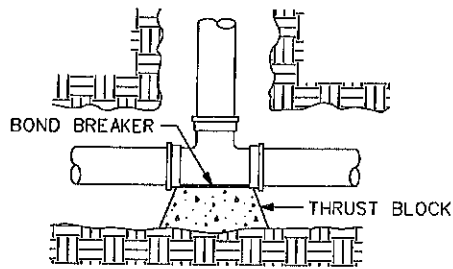


SCALE: NONE

URBANDALE WATER
UTILITY

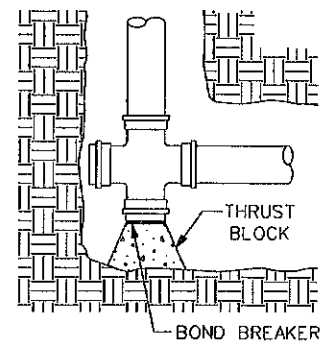
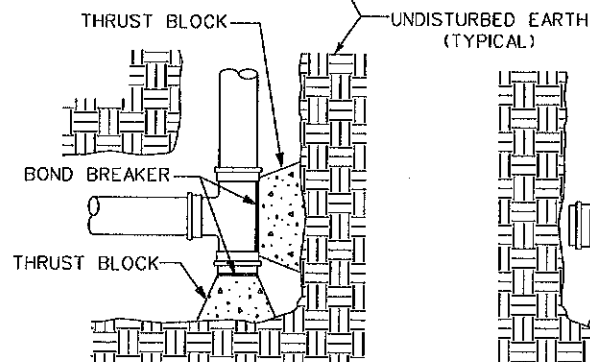
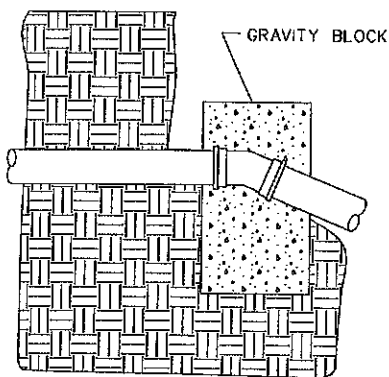
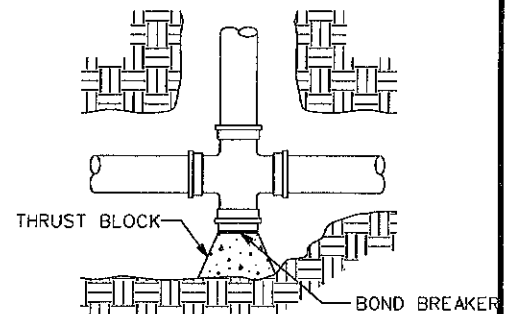
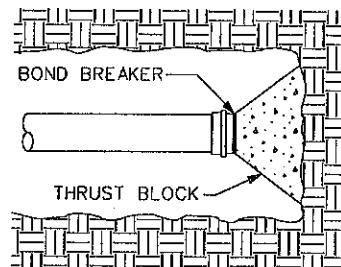
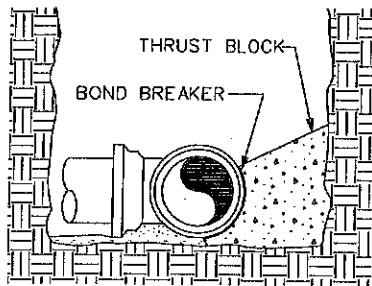
TRACER WIRE DETAIL

DATE: 07-01-2018



| SIZE OF PIPE | B E N D S | | | | TEE OR DEAD END |
|--------------|-----------|---------|-------|-------|-----------------|
| | 11-1/4° | 22-1/2° | 45° | 90° | |
| 6" | 1.00 | 1.25 | 2.25 | 4.50 | 3.00 |
| 8" | 1.00 | 2.00 | 4.00 | 7.90 | 5.25 |
| 12" | 2.00 | 4.25 | 8.25 | 18.00 | 11.00 |
| 16" | 8.00 | 15.25 | 28.00 | 48.00 | 35.00 |
| 20" | 8.50 | 16.50 | 32.00 | 57.00 | 40.00 |
| 24" | 9.00 | 18.00 | 35.00 | 65.00 | 45.00 |

Note: Restrained joints may be used in lieu of blocking with prior approval from Urbandale Water Utility.



SCALE: NONE

URBANDALE WATER
UTILITY

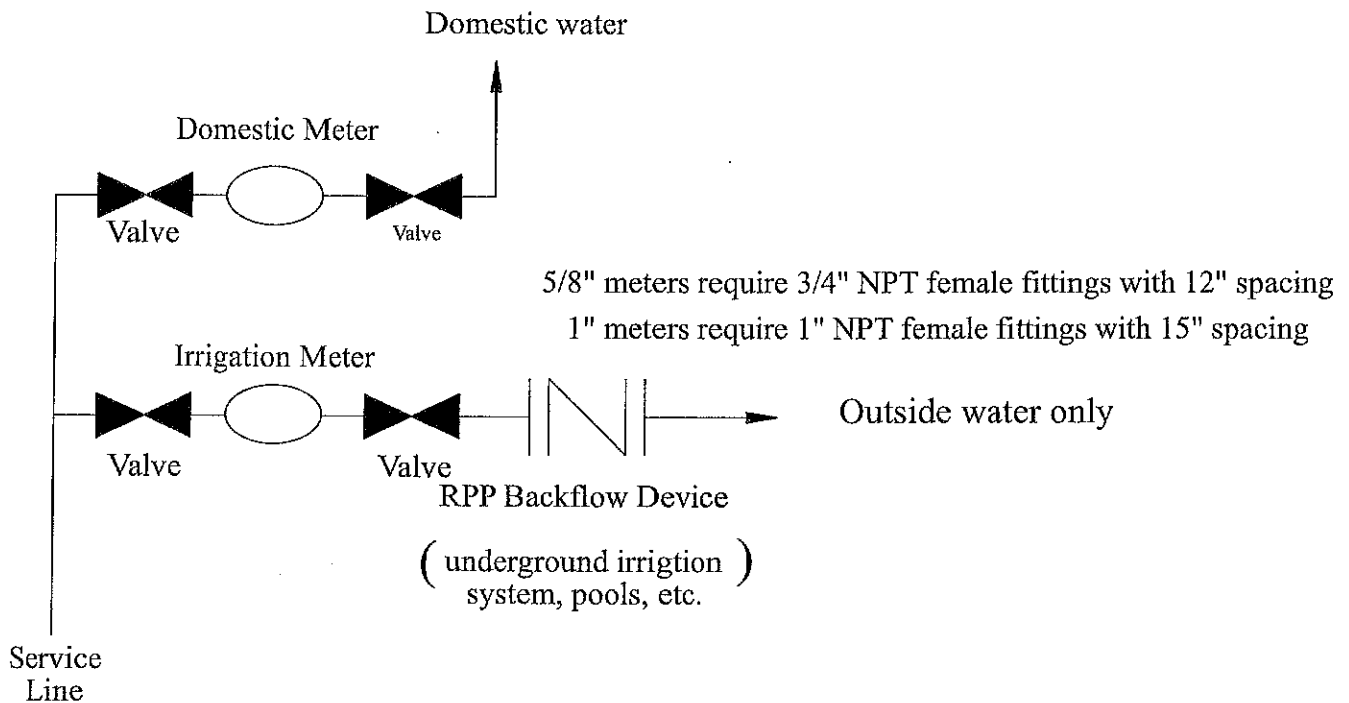
CONCRETE THRUST
BLOCK STANDARD

DATE: 07-01-2018

IRRIGATION METERS AND SYSTEM REQUIREMENTS

Date: 05-01-2024 Addendum #6

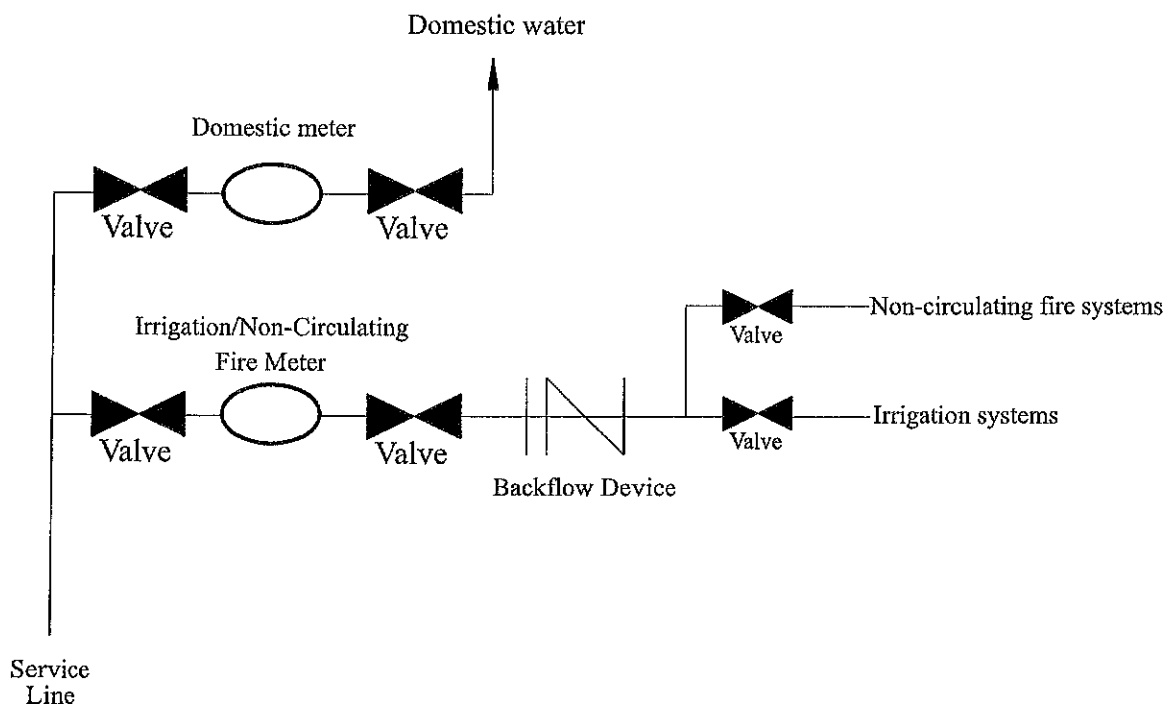
1. Fill out sewer exemption form and pay sewer exemption fee of \$15.00.
2. All meters must be purchased from the Urbandale Water Utility.
All fees to Urbandale Water Utility must be paid before the meter is installed.
See Fee Schedule, Section V - Application Fee for Meter Charges
3. Customer will be responsible for all plumbing changes.
4. The irrigation meter must be installed 4 feet or less from the house meter with a valve on each side of the meter.
5. The irrigation meter must be teed from the service line ensuring both systems run independently of each other.
6. All underground irrigation systems shall have an approved R.P.P. (Reduced Pressure Principal) backflow assembly (Comparable to Watts 009 or a Febco 825Y. The RPP must be installed inside the building directly after the irrigation meter or immediately outside the building where the plumbing exits.
7. An initial test of the RPP must be performed by a certified tester and the results recorded with www.BSionlinetracking.com before the system can be activated.
8. All RPP's are to be tested annually by a certified tester and the results recorded with www.BSionlinetracking.com.



Residential Non-Circulating Fire Service Meters and System Requirements

Date: 07-1-2018

1. All meters must be purchased from the Urbandale Water Utility (UWU).
2. All fees shall be paid before the meter is set.
3. The service line shall be sized according to the combined total of the domestic, irrigation and fire system demands.
4. Provide the total of the irrigation and fire system demand to the UWU.
5. Irrigation/non-circulating fire meters shall be installed not more than 4 feet from the domestic meter. There shall be a valve on each side of the meter.
6. The irrigation/fire demand shall be combined to utilize one meter. The irrigation/non-circulating fire meter shall be teed off the service line so that the domestic and irrigation/fire systems are independently metered.
7. All fire systems shall have an approved backflow device as described in Chapter 106. The backflow device shall be installed inside the house directly after the fire meter.
8. An initial test of the backflow device must be performed by a certified tester before the system is activated. The test results shall be recorded online at www.BSInlinetracking.com.
9. For more information on the requirements for cross connection and backflow prevention, refer to Chapter 106 of this manual.





URBANDALE WATER UTILITY

3720 86th Street, Urbandale, IA 50322
Phone: 515-278-3940 Fax: 515-278-3944
Email: customerservice@urbandalewater.org

HYDRANT METER RENTAL AGREEMENT

Update May 1, 2025

Address _____

Meter Number _____ Total Days _____

Beginning Read _____ Set Date _____

Final Read _____ Return Date _____

Consumption _____ Receipt Number _____

Comments _____

- ☐ Hydrant Wrench (\$50 Replacement Cost)
- ☐ Hydrant Stand (\$50 Replace Cost)
- ☐ 2-1/2" Fire Hose Coupling (\$50 Replacement Cost)

1. Hydrant Meter Deposit Schedule:

| Deposit Fee Schedule | | | | |
|----------------------|----------|----------|------------|------------|
| Meter size (in.) | 5/8 | 1.0 | 2.0 | 3.0 |
| Deposit Fee | \$300.00 | \$600.00 | \$2,500.00 | \$3,000.00 |

2. Hydrant Meter Rental Fee Schedule:

| Rental Fee Schedule (Monthly Fee – Min. 30-Day Fee) | | | | |
|---|---------|---------|----------|----------|
| Meter Size (in.) | 5/8 | 1.0 | 2.0 | 3.0 |
| Rental Fee | \$50.00 | \$75.00 | \$125.00 | \$150.00 |

3. Bulk Water Rate will apply. See Fee Schedule.

4. Terms and conditions of Hydrant Meter rentals:

- A. The Urbandale Water Utility must approve the proper use, location, size and other pertinent issues regarding the hydrant meter rental.
- B. A deposit for the amount stipulated in the above "Hydrant Meter Deposit Schedule" must be made prior to the setting of the meter. The deposit amount required is directly related to the size of the hydrant meter requested.

- C. The amount charged to the undersigned for the hydrant meter rental is dependent upon the following factors.
 - 1. The number of days the undersigned has possession of the meter
 - 2. The water usage figured at bulk water rates.
 - 3. Damage, if any, to the hydrant meter assembly or fire hydrant.
- D. The undersigned assumes all responsibility for theft or damage to the fire hydrant and hydrant meter assembly.
- E. It is the responsibility of the undersigned to notify the Urbandale Water Utility when he/she is finished with the hydrant meter so it can be removed and returned to the Urbandale Water Utility.
- F. It is the responsibility of the undersigned to protect the hydrant and hydrant meter assembly from freezing. In the event freezing does occur, the undersigned assumes all monetary responsibility for damages.
- G. Water from a fire hydrant is not intended for human consumption. The Urbandale Water utility cannot guarantee the quality of water from a fire hydrant or a hydrant meter assembly.
- H. Each hydrant meter is equipped with a gate valve; which shall be operated by the undersigned to control the flow of water. The fire hydrant shall be opened completely when in use and never be used to control the flow of water.
- I. Do not modify or disassemble the hydrant meter assembly in any way. The Urbandale Water utility shall be notified immediately of any failed meter assembly.
- J. The Urbandale Water Utility may revoke any hydrant meter privileges granted to any individual or corporation because of violations of the terms and conditions of this agreement.
- K. The Urbandale Water Utility may make allowances or amendments in the terms or conditions of the hydrant meter rental agreement to provide flexibility to handle unique situations.
- L. All rentals, consumptions and damages shall be deducted from the deposit before the remaining deposit balance is returned to the undersigned. In cases where the deposit is insufficient to cover all the fees due, the undersigned will receive an additional billing payable to the Urbandale Water utility.

5. I, the undersigned, have completely read, understand and accept the previously stated terms and conditions of the Hydrant Meter Agreement.

Signed _____ Date _____

Please print the following:

Company Name _____

Billing Address _____

Company Contact Name _____

Telephone # _____



URBANDALE WATER UTILITY

3720 86th Street, Urbandale, IA 50322

Phone: 515-278-3940 Fax: 515-278-3944

Email: customerservice@urbandalewater.org

PRIVATE FIRE HYDRANT MAINTENANCE AGREEMENT

Update May 1, 2025

The undersigned agrees to hire the Urbandale Water Utility to perform maintenance on their privately-owned hydrants. Maintenance will include painting, operating, checking drainage, lubricating, replacing cap gaskets as necessary and recording pressure readings. Any additional parts or repairs will be at the owner's expense.

The owner or an in-charge representative of the owner shall be present or available during the maintenance process. If a hydrant is found to be inoperable or needing minor repair, the Utility will provide an estimate of repairs for approval.

The Urbandale Water Utility shall not be held responsible for a hydrant or valve that at any time does not perform properly. The owner also realizes there is a possibility for damage to occur to the hydrant or valve during operation and will hold harmless the Urbandale Water Utility and its employees for any damages that may occur.

The said _____, hereby agrees to indemnify and hold harmless the Urbandale Water Utility, their agents, representatives and employees, from any and all claims, damages, losses and expenses.

Maintenance Fee: Fee based on standard labor and equipment charges (1-Hour minimum).

Contact Person:

Signature

Print Name

Date of Authorization

Company Name: _____

Company Address: _____

Contact Phone Number: _____

E-mail Address: _____