

City of Iowa City

Water Division Policies and Procedures

Revised March 2025



CITY OF IOWA CITY

I. Purpose

- a. The purpose of this policy manual is to provide clarity and consistency in the interpretation of water-related Iowa City Code sections and the Iowa City Supplemental of the SUDAS design standards and specifications as they relate to Jurisdiction requirements.

II. Contact Information

- a. The postal service mailing address for the Iowa City Water Division is
 - i. 410 E. Washington St., Iowa City, IA 52240
- b. The shipping address for the Iowa City Water Treatment Plant is
 - i. 80 Stephen Atkins Dr., Iowa City, IA 52240
- c. The shipping address for the Iowa City Water Distribution System is
 - i. 3810 Napoleon Ln, Iowa City, IA 52240
- d. Relevant contact information
 - i. Phone
 1. Water Division: 319-356-5160
 2. Revenue Division: 319-356-5066
 3. 24/7 Emergency: 319-356-5166
 - ii. Email
 1. water@iowa-city.org

III. Definitions

- a. The following definitions are in addition to those provided in the Iowa City Code
 - i. Tap
 1. The connection to a fully and satisfactorily tested public or private pressurized drinking water main or service installed per Iowa City policies and specifications.
 2. A large diameter tap is 4-inches in diameter or greater.
 - ii. Tapping valve
 1. A valve connected to a tapping sleeve for taps 4-inches in diameter or larger. The tap machine pilot bit and shell cutter operates through these valves to cut a hole in the pressurized water main. The tapping valve is shut after the tap machine is backed out.
 - iii. Corporation valve
 1. A valve connected to a tapping saddle for taps 2-inches or smaller in diameter. Functions like a tapping valve.
 - iv. Curb stop
 1. A valve on a service line 2-inches in diameter or smaller located in the right-of-way and used to shut off water to the home.
 - v. Stop box
 1. A hollow tube with an internal stainless-steel rod connected to the curb stop with a cotter pin. The stop box has a threaded removable lid and allows for the at-grade

operation of the curb stop to shut off domestic water to a residence for nonpayment or in emergencies for plumbing repairs.

- vi. Tapping saddle
 1. A brass fitting with stainless steel strap connected to the outer diameter of a pipe with a threaded hole for a corporation valve.
- vii. Tapping sleeve
 1. A stainless steel fitting with nitrile gasket bolted to the outer diameter of a pipe with a flange to bolt a tapping valve.
- viii. Abandonment
 1. The disconnection of a water appurtenance at the distribution main. Abandonments can happen to service lines, hydrants, water main, etc...

IV. Responsibilities

- a. Public Water Main
 - i. The City delivers potable pressurized water to residents through a water distribution network installed within the right-of-way and some public water main easements on private property.
 - ii. The distribution network is comprised of pipes, pumps, valves, vaults, tanks, hydrants, and other appurtenances all owned by the City.
 - iii. The City also owns all water meters installed within homes, businesses, and other facilities
 - iv. The City does not own service lines
 - v. The City is responsible for the maintenance and operation of all public assets
 - vi. The City is responsible for collecting meter reads and collections enforcement
- b. Private Water Main and Services
 - i. The lot owner serviced by a service line owns and is responsible for all costs associated with the service line.
 - ii. All services connected to the public water system must meet Iowa City requirements and Fire Code.
 - iii. Building Code dictates interior plumbing
 - iv. Water policies and Building Code dictate water meter installation.
 - v. Water line work within the right-of-way requires a Right-of-Way Excavation Permit
 - vi. Water line work on private property requires a Plumbing Permit (Commercial or Residential) and requires an Iowa-licensed Master Plumber or City-licensed Sewer and Water Installer.
 - vii. Fire system work requires a Fire Sprinkler or Fire Alarm Permit.

V. Utility locates

- a. Tracer wire
 - i. Tracer wire is required to be installed per SUDAS as amended on all public drinking water main, on large private services, and on nonconductive small private services.
 - ii. If tracer wire is damaged during construction, then the party causing the damage must report the damage to the Iowa City Water Division and make the necessary repairs.
 1. Often repairs require a standard splice kit.

- iii. The City will test the repaired tracer wire.
- b. Iowa City locate process
 - i. Locates requests are made to the Iowa OneCall system
 - ii. The locate ticket is emailed to a Gmail account set up by Cartegraph
 - iii. Cartegraph automations check the Gmail account every 5 minutes for new locate tickets
 - iv. Cartegraph imports new locate tickets as a “Utility Locate” activity and divides it into four “811 Utility Locate” tasks. One each for water, fiber, traffic, and sewer.
 - v. Iowa City locate staff use Cartegraph to be informed of new locates and proceed to complete the locate.
 - vi. Completing the locate requires staff to select a positive response such as Clear, Marked, etc...
 - vii. Once all four 811 Utility Locate tasks are completed, Cartegraph automations select the most important response and provides a positive response back to the Iowa OneCall system.
 - viii. Cartegraph will send back available positive responses every 5 minutes
 - ix. The automations for the Cartegraph processes are in the Automation Manager and were developed by Cartegraph.
- c. Emergency locate process
 - i. In addition to the steps above the Water Office, during normal working hours, or the Water Operator, after normal working hours, will receive an automated phone call from OneCall notifying the City of an Emergency Locate.
 - ii. The Water Office or Water Operator will notify applicable staff of the emergency locate via phone or radio. After hours the Operator will inform on-call staff for each City utility. This includes water, traffic engineering, and wastewater staff.
- d. Public water and fiber locates
 - i. The Water Division locates public water main and City-owned communications fiber in the right-of-way or water utility easement.
 - ii. The Water Division does not locate service lines regardless of ownership.
 - iii. Upon request the Water Division will determine if staff can assist with publicly owned service lines or other utilities.
 - iv. The City is not liable for damages to private water service lines.
 - v. Private water service lines are not consider an “underground facility” that needs to be located and marked per Iowa Utilities Board Investigation File No. C-2023-0044 conducted when a stump removal contractor damaged an unlocated private service line on 2922 Sweet Briar Ave, quoting:
 - 1. See Iowa Code 480.1(10): Definition of Underground Facility does not include sanitary sewer laterals, storm sewer laterals, and water service lines providing service to abutting private properties.

- e. Private locates
 - i. Upon request the Water Division will provide information and assistance to attempt to locate pipes, valves, and stop boxes on privately owned assets.
 - ii. The Water Division makes no assurances and accepts no liability for the information or locate provided.
 - iii. This service will be provided as resources allow.
 - iv. An hourly fee may be charged for this service at the discretion of the Water Superintendent per the Water Fees Schedule
 - v. A “Private Service Location Waiver” may be requested from the Water Division and is required to be signed prior to conducting a locate on private assets.
- f. Standby required
 - i. When excavators are within 5-feet of a critical water main or transmission main the City will respond to the locate ticket with “Standby Required”.
 - ii. The excavator is required to expose the water main to verify depth and to adhere to the standby requirements provided by City locate staff.
 - iii. City staff will be on-site during the crossing to ensure the separation distances are maintained and no damages occur to critical public infrastructure.
- g. Design information requests (DIR’s)
 - i. DIR’s are fulfilled by the Engineering Division using available geographic information system (GIS) mapping.
 - ii. Private water infrastructure or service information is not provided without written consent from the owner.
 - iii. The City does not guarantee the accuracy or completeness of any private water infrastructure or service information.
- h. Design locate requests (DLR’s)
 - i. A DIR must be submitted for at least 10 working days prior to a DLR.
 - ii. DLR’s are accomplished by locate staff as time permits
 - iii. The DIR / DLR process is established by Iowa OneCall but not a requirement by State Code. The design requests are therefore relegated behind excavation locate requests.

VI. After hours work

- a. Normal working hours for Water Division staff are 7:00A to 3:30P.
- b. Work outside these hours may be scheduled to support construction activities.
 - i. The City reserves the right to invoice staff time to projects or companies for these scheduled after-hours activities.
- c. Emergency after-hours callouts for customer needs will incur an after-hours callout fee.

VII. Water Services

- a. Install water service pipe, corporations, stops, and stop boxes according to local Jurisdiction requirements and Accepted Products for Water Distribution Materials
 - i. All water service lines in Iowa City are privately owned. ([16-3C-3.B.1&C](#))
 - ii. There shall be separate water service lines from the main to each building on a lot unless approved by the Iowa City Water Division. ([16-3C-3.B.3](#))

1. On large private lots with multiple building without frontage to the public right-of-way, a looped private main may be allowed.
 2. Looped private main design shall include plan and profile views.
 3. Design profile views may be requested on a case-by-case basis for areas with known potential underground utility conflicts or concerns for air entrapment.
 4. Zero-lot line properties with a single structure divided by a lot line are required to have separate service lines extended for the main to each side of the building because they are on separate lots.
- b. Taps
- i. Contractor shall submit a "Right-of-Way Excavation Permit – Water" on the City's permit portal to apply for a water main tap and to pay applicable fees. (16-3C-3.A)
 1. Tap applications will expire 6 months from the date submitted.
 2. Tap application fees are nonrefundable.
 - ii. All approved tap applications will be scheduled by the Contractor with the Iowa City Water Division
 - iii. All taps will be performed by the City.
 - iv. Taps shall be made when all the following conditions are met:
 1. Any existing services not reused are properly abandoned.
 2. Water tap application is approved.
 3. Water main to be tapped is fully tested and in service.
 - a. Tapping untested water main and dry tapping are not allowed.
 4. Corresponding building foundation has been constructed.
 5. An excavation meeting OSHA safety requirements is ready.
 - a. Type C soils are assumed for all trenches.
 - b. 4-feet off the face of the pipe is required to be excavated for 2-inches in diameter or less taps with a trench width of at least 4-feet.
 - c. 8-feet off the face of the pipe is required to be excavated for 4-inches in diameter or larger taps with a trench width of at least 6-feet.
 - d. An ANSI certified ladder supplied by the excavator shall be used for entry and exit purposes and extend at least 3-feet above the excavation.
 - e. Shoring or sloping shall meet the OSHA standards.
 - f. Spoil piles and other equipment must remain 2-feet from the trench.
 - g. Under cutting or leaving material overhanging is not allowed.
 6. Pipe is cleaned, tapping material meet accepted products, and materials (i.e. saddle, sleeve, corp, etc) are appropriately installed.
 7. If conditions are not met, then Water staff are expected to deny the applicant a tap until the conditions are satisfactory.

- v. Taps are scheduled on normal business days between 7:30A and 2:30P.
 - vi. Taps 2-inches or less in diameter shall have the saddle installed with the corporation oriented about 45 degrees down from the top of the water main.
 - vii. Taps shall be located on the main within two lines drawn parallel from not more than three feet off the building foundation extended to the main.
 - viii. Reuse of a directly tapped corporation valve is not allowed. The old corporation shall be removed and replaced with a tapping saddle and new corporation valve.
 - ix. Taps shall not be made on fire hydrant laterals.
 - x. Taps shall not be made within five feet of a hydrant tee or inline valve, nor within two feet of a pipe bell end or another tap as measured from nearest edge of sleeve or saddle to nearest edge of bell or fitting.
 - xi. Taps on the backside or top of a water main shall only be main with the approval of the Iowa City Water Division.
 - xii. Taps equal to or greater than 4-inches in diameter require a tapping sleeve and valve.
 - xiii. Taps 2-inches or less in diameter require a tapping saddle, corporation valve, and curb stop.
 - xiv. Tee-fittings in lieu of a tap for a connection may be requested to the Jurisdiction for customers with critical importance to the community (i.e. hospitals and schools).
- c. Service Lines
- i. Available service line sizes are 1-inch, 1.5-inch, 2-inch, 4-inch, 6-inch, 8-inch, 10-inch, and 12-inch.
 - ii. Service lines are to be run perpendicular to the main and run straight into the building served and not more than 3-feet off the foundation.
 - 1. **Service lines shall not be constructed across adjoining lots, under or through other buildings or premises.**
 - 2. **Service lines are expected to enter a building through the foundation wall nearest to the main servicing the building.**
 - 3. **The purpose of maintaining taps within the building footprint is to allow for future operators of the City's water system to confidently identify service line locations and shutoffs.**
 - iii. Service lines 4-inches in diameter and greater are required to meet all public water main standards and specifications including full testing – bacteriological, pressure, trace, and operations.
 - iv. Service lines less than 4-inches in diameter shall be Type K copper in the right-of-way to the curb stop and adhere to applicable codes and policies for material after the curb stop. If the area is impacted by a LUST, then Type K copper will be required for the entire service line.
 - 1. **If material from the curb stop to the home is nonconductive then a tracer wire is required to be installed.**

- v. Service lines used for fire suppression systems and tapped for domestic service shall have separate shutoff valves exterior to the building for the fire service and domestic service per Fig. 5010.106.
- d. Splitting Service Lines
 - i. To split an existing service line one of the following conditions shall be met:
 1. Install an individual, permanently marked curb stop, stop box, and water service for each metered account with a master curb stop upstream of the individual curb stops.
 2. Use the existing curb stop and stop box, locate all meters in a common utility space externally accessible to the City and provide the City Water Division with a key to the utility space to allow for meter maintenance and account shutoffs.
- e. Service Line Abandonment
 - i. Abandon services lines equal to or greater than 4-inches in diameter by removal of the tapped section of water main and install new water main with sleeves.
 - ii. Abandon service lines less than 4-inches in diameter by removal of the corporation valve and/or saddle and the installation of a repair sleeve over the water main penetration.
 - iii. Service lines attached to abandoned water main will be done in accordance with the contract documents.
 - iv. All service line shall be appropriately abandoned within one year from the date of service discontinuance. ([16-3C-3.D](#))
 - v. Any existing service line to be reused must have a saddle and corporation valve. A direct tapped corporation shall be removed and replaced.
 - vi. The reuse of a lead or galvanized iron pipe is not allowed.
- f. Curb Stops
 - i. Curb stops are required for all service lines less than 2-inches in diameter.
 - ii. Services lines 4-inches in diameter or greater will use the tapping valve as the service shutoff and may also have a separate fire system isolation and domestic curb stop closer to the building.
 1. **The tapping valve shall be a minimum of 40-feet from the building served to meet NFPA 24 6.2.9 requirements for an accessible exterior shutoff during a fire.**
 - iii. Curb stops and service isolations shall not be placed within 5-feet of an above ground structure.
 - iv. Curb stops and service isolation shall be flush with the ground surface and use an appropriate curb box or valve box with lid.
 - v. Curb stops shall be placed between the back-of-sidewalk and right-of-way line.
 - vi. If unable to place the curb stop between back-of-sidewalk and right-of-way line then the following locations may be requested to the Jurisdiction for approval. These locations are listed in order of preference.
 1. **Between the back-of-curb and sidewalk (parking).**
 2. **In the sidewalk.**
 3. **In the street.**

- vii. Self-draining curb stops shall be requested and approved by the Jurisdiction for any service line with a winter removal of the water meter.
- g. Water Meters
 - i. All City water meters are furnished at cost to a Master Plumber or a City-licensed sewer and water installer.
 - ii. All City water meters are owned by the City.
 - iii. The property owner is responsible for the protection of the water meter.
 - iv. Damages as the result of negligence will be repaired by the Water Division and billed to the property owner.
 - 1. Frozen meters will result in the property owner paying the City the cost of the meter replacement per the price schedule in City Code Title 3 Chapter 4.
 - 2. Frozen meters in a Mobile Home Community will result in a charge to the resident for the cost of the City's time per City Code Title 3 Chapter 4 and the cost of a Neptune R900i water meter.
 - v. Tampering with a water meter is a municipal infraction and result in a penalty per 1-2-2B-2 of City Code.
 - vi. Water meters are required to be installed and maintained per code. ([16-3C-4](#))
 - 1. Damages to water meters will be billed to the property owner.
 - 2. Access to water meters shall be provided per code.
 - a. If access is not provided, then the property owner will be given notice of a pending shutoff for a failure to provide access.
 - b. If the stopbox is nonfunctional, then the stopbox will be repaired to complete the shutoff at the owner's expense.
 - vii. Available water meter sizes are listed per the utility service rates. ([3-4-3](#))
 - viii. Water meters shall be plumbed horizontal with the use of meter tails at least one foot above the floor, supported, with inlet and outlet isolation valves.
 - ix. Water meter access shall not be obstructed with at least 6-inches of clearance for any wall or other object such as water heaters, softeners, and furnaces.
 - x. Water meters registers shall be readable without the use of a ladder.
 - xi. Multiple residential meters plumbed within a meter closet or utility room shall be spaced a minimum of 8-inches apart in the horizontal and vertical direction.
 - 1. Meters shall be permanently marked with the dwelling unit served
 - 2. Multi-story buildings may have no more than one meter room per floor
 - 3. Spacing is measured from meter tail to meter tail

- xii. Multiple meters shall have a master valve in addition to individual meter inlet and outlet isolation valves.
 - xiii. Copper services shall have a grounding strap.
 - xiv. Deducting meters are not allowed.
 - xv. Meter pits or vaults are not allowed.
 - xvi. Meter enclosures shall be designed to allow for ease of access to read and maintain the meter via a hinged door with applicable weather protection.
 - xvii. Meters greater than 2-inches in diameter may require the use of a strainer.
 - xviii. Building or other structures with multiple meters will be required by Building Inspection to have all water meters installed prior to Certificate of Occupancy.
 1. This is to allow Building Inspectors to make a single visit for final inspection of all installed water meters.
- h. Lead Service Lines
- i. The City prohibits the repair of lead service lines with a defect ([16-3C-3.E](#)).
 1. This prohibition was put into City Code effective 1/1/2024.
 - ii. The [Lead Reduction Program](#) includes information about the prohibition, service line insurance, and a cost-share program.
 - iii. Public improvements (CIP's) disturbing lead service lines are required to provide a water filtration device. The City also follows a program of allowing customers an opportunity to have a qualifying service line completely replaced at a reduced cost to the homeowner.
 1. If an area to receive water work as part of a CIP is suspected to have lead service lines, then the Water Division will request affected customer schedule a time for staff to perform a service line investigation inside the home at the water meter.
 2. The service line material at the water meter will be identified and recorded in Cartegraph.
 3. If the service line material is lead or galvanized, then the homeowner will be provided with information to allow their service line to be replaced during the CIP as part of a cost-share.
 4. The steps for this cost-share are:
 - a. Homeowner agrees to participate with receiving a quote for the service line work by signing a document to allow for the service line photos taken inside the home to be used in the CIP bid package.
 - b. The City receives bids and selects a contractor to award. The bid price for the homeowner's service line is entered onto an agreement for the homeowner's review.
 - c. If the homeowner agrees to the price provided by signing the agreement, then the service line work will be completed with the project.
 - d. If the homeowner does not participate at any stage, then a pitcher filter will be provided.

- iv. City activities that damage a lead service line will complete a full-service line replacement in accordance with the lead service repair prohibition at no cost to the homeowner.
 - v. City activities such as utility shutoffs for nonpayment, meter exchanges, or other routine work that does not damage the lead service line are not eligible for service line replacement. This includes a stopbox repair to complete a collections or failure to provide access to a water meter shutoff.
 - vi. If a homeowner elects to make modifications to an unbroken lead service line, then this line is not damaged, and the work is not considered a repair; therefore the repair prohibition is not applicable. The Water Division will strongly recommend a homeowner not perform partial replacement work to a functional service line.
 - vii. Galvanized iron service lines exposed to lead are lead service lines.
- i. Fire Service Lines
- i. Fire service lines are used for building sprinkler systems.
 - ii. Fire sprinkler systems are not all installed similarly throughout the City due to changes in Fire and Building Codes over time allowing for existing systems to be “grandfathered”; allowing existing buildings to maintain older systems without upgrades to meet the current standard.
 - iii. Generally, a new fire sprinkler system will have a dry standpipe and an activation valve with a back flow preventor and an externally mounted fire department connection (FDC).
 - iv. Fire code requires a hydrant to be within 100 feet of an FDC.
 - v. Plumbing code requires backflow prevention and Fire code requires the backflow preventor to have a detector (water meter).
 - vi. Fire and domestic service lines have a few arrangements to achieve the ability to shut off without impacting the other service.
 - 1. **If a building has a fire and domestic service with one dual purpose water meter, then the fire and domestic service must be split outside the building with dedicated shutoff valves for both.**
 - 2. **If a building has a fire and domestic service with multiple dual purpose water meters, then the fire and domestic may be split inside the building with the water meters installed in a utility room externally accessible by the City and a key provided to the City.**
 - vii. A valve to isolate the fire service must be at least 40 feet from the building per NFPA 24 6.2.9. In practice the valve meeting this requirement is the tapping valve, with the specific fire line isolation at least 3 feet away from the building and downstream of the domestic tap on a combined fire and domestic service.
 - 1. **The specific fire service isolation serves to allow for nonpayment shutoff of the domestic service without impacting the fire protection to the facility and to allow the fire service to be shutoff for maintenance without impacting the domestic service.**
 - 2. **The tapping valve being 40 or more feet from the building allows for water shutoff in an emergency when the fire department is charging the sprinkler system through the FDC to prevent backflow into the public drinking water system.**

- viii. A fire service shall not extend more than 10 feet horizontally beneath a building per NFPA 24 10.4.3 and joints or fittings shall not be placed directly below the building footings.
- ix. If a fire pump is installed with a 100% or 150% capacity more than 700 gallons per minute flow, then a suction pressure sustaining device is required to prevent pressure transients within the public water system.
 - 1. The available devices to maintain suction pressure are presented in NFPA 20 and including the following:
 - a. Supply tank.
 - b. Variable frequency drive to slow a pump down if suction pressure is wanning.
 - c. Suction pressure sustaining valve that reduces discharge flow based on suction pressure.
 - 2. The purpose of this provision is to prevent the public drinking water system from becoming depressurized when a large load is immediately applied.
 - 3. The devices provide the time necessary for the public drinking water system to react to the new demand and to prevent a private fire system with a main break from excessively flows and damage.

- x. Annual fire pump tests shall be scheduled with the Fire Marshall through the submission of a Fire Sprinkler permit. The Fire Marshall will inform the Water Division of the test dates and times.
- xi. Fire testing companies shall not test private hydrants during the annual inspection. If private hydrant inspection is required, then the company shall request a Water Division staff member to be present.

VIII. Dual purpose meters

- a. Dual purpose meters are used to bill for water and sanitary sewer usage.
- b. Meters require a small diameter tap to be completed or a large diameter tap and service line to satisfactorily pass all applicable testing prior to issuance.
- c. Meters are provided by the Iowa City Water Division.
- d. A City-licensed installer or master plumber shall request a meter by contacting the Water Division to arrange a time to pick-up the meter.
- e. Upon pick-up the “on construction” account created at the time of the tap will be changed to “no final” to indicate a final meter inspection has not been completed.
- f. The start reading for the meter will be recorded by the Water Division.
- g. The cost of the meter will be charged to the first utility bill.
 - i. Meter cost is dependent on meter size and accessories (i.e. tails, strainers, etc.)
 - ii. Meter cost is not refundable.
- h. Upon completion of installation the installer will schedule a final meter inspection with the Building Inspector.
 - i. The Building Inspector may opt to schedule the inspection during a Certificate of Occupancy inspection.
- i. Any deficiencies noted during inspection are the responsibility of the contractor to fix.
- j. Final meter inspection includes the following:
 - i. Meter is installed in the correct direction for flow.
 - ii. Meter isolation valves installed immediately before and after the meter.
 - iii. Meter isolation valves can be accessed and are functional.
 - iv. No unauthorized devices are installed upstream of the meter.
 - 1. **Unauthorized devices include but are not limited to:**
 - a. Third-party water meters
 - b. Automatic shutoff valves
 - c. Unmetered domestic meter bypasses
 - d. Reduced pressure zone (RPZ) devices
 - e. Backflow prevention devices
 - f. Strainers other than a flow conditioning strainer issued by the Water Division during meter pick-up.
 - 2. **Authorized devices include:**
 - a. Flow conditioning strainer provided by the Water Division and associated isolation valve for installed by the contractor for strainer maintenance.
 - i. There shall be a floor drain within proximity of the strainer to allow for the strainer to be drained.

- b. Metered domestic bypass line
 - i. If a customer would like a bypass line to ensure no disruption of domestic service during meter maintenance, then a second meter will need to be ordered from the Water Division and installed.
- v. Meter or meter(s) is/are installed in a manner to allow for future access and maintenance per the standards set forth in this document.
- vi. Multiple meters and/or multiple stopboxes are accurately and permanently marked for the residence they serve.
 - 1. This requires flowing water to each unit and observing meter function.
 - 2. Meter serial numbers and addresses will be recorded.
- vii. For multiple meters without separate stopboxes, the meters shall all reside in a common utility space and a key provided to the inspector for access to the utility space.
 - 1. The key will be provided to the Water Division.
- viii. Stop boxes for curb stop access are flush with the surrounding ground or surface and in good working order.
 - 1. If stop box is in pavement, then a cement-style lid shall be installed.

- ix. Inspector will record the reading on each meter.
- k. Satisfactory completion of final meter inspection will be provided to the Water Division with serial numbers, units served, and reading.
- l. If a tenant or owner has provided information to the City, the Revenue Division will move the account into the owner's or tenant's name upon successful final inspection.
- m. If there is no owner or tenant, then the account will remain in the contractor's name.
 - i. The contractor is responsible for contacting the Revenue Division when the property sells to request the account be moved to the new owner or tenant's name.
- n. If the contractor would like to stop utility billings, then contact the Water Division to schedule a remove order.

IX. Single purpose meters

- a. Single purpose meters are allowed for water uses not generating sewer use (i.e. swimming pools, irrigation, etc.)
- b. Single purpose meters must meet all the applicable issuance requirements of a dual-purpose meter.
- c. These meters do not incur a bill date December 1 to April 30 if there is no usage.
- d. These meters are billed normally from bill date May 1 to November 30.
- e. Single purpose meters shall not be installed at deducting meters.
- f. Single purpose meters shall be installed per the requirements for a dual-purpose meter.

X. Portable water meters

- a. Portable meter kits or "meters in a crate" are available for Iowa City residents who have a limited, short-term need for a watering or irrigation meter.
- b. Meters are rented out for up to 30 days between April 1 and October 1.
- c. To rent a meter, an [application](#) must be completed and a deposit paid at the time of meter issuance at the Water Treatment facility – 80 Stephen Atkins Dr.
- d. Units not returned by the rental deadline or damaged, will result in additional charges for the replacement or repair.
- e. The volume of water recorded by the portable meter will be used to refund the sewer charge on the customer's next utility bill.

XI. Water Service Line Leaks

- a. Defects or leaks on service lines will be reported to the property owner.
- b. Property owners are provided with a list of excavators, information about service line ownership including a diagram of a service line, and lead service line hazard information.
- c. Service leaks are expected to be resolved within 72 hours.
- d. Residents are encouraged to purchase service line insurance to mitigate the costs of service line repairs or replacements.

- e. The Water Division reserves the right to shutoff a service or make an emergent repair on a service and bill the property owner for the work if the service leak is excessive or has the potential to threaten the safety of the public or severely damage public or private assets.

XII. Shutdowns

- a. Water main shutdowns are the isolation of a section of water main which may or may not place water customers out-of-service.
- b. All water main shutdowns require the use of a Shutdown Application.
- c. Shutdown Applications are required to be submitted 7 business days in advance of the shutdown to allow for staff to determine the shutdown area, check valves are operable, generate notices for customers affected, and pass out the notices at least 48 hours prior to the scheduled shutdown.
- d. Water Division staff pass out shutdown notices to customers. Larger buildings or manufactured home communities typically have a central office where notices are delivered.
- e. The submission of a shutdown application does not guarantee a shutdown will occur or occur at the time requested.
- f. Critical customers (hospitals, schools, industry, etc...) within a shutdown area may dictate restrictions on when a shutdown may occur to allow for their operations to remain uninterrupted.
- g. Shutdown applications are reviewed on a first come, first service basis within 2 days of submission. A response will be provided as either approved, denied, or the requested shutdown must be modified. A denial or modification will have an accompanying rationale.
- h. The Water Division reserves the right to cancel a shutdown for any reason such as a water main break, insufficient staff to cover the shutdown and system recovery, or failure of the contractor to be ready with approved materials, equipment, personnel, plans, or understanding of the work to be performed.
- i. Shutdowns shall not last for more than 8 hours without the explicit approval of the Water Division.
- j. Ultimately the City Water Division is and is held responsible for the integrity and safety of the public drinking water system.

XIII. Fire Hydrants

- a. Fire hydrants are to be operated by designated City staff only.
- b. Fire hydrant use is limited to the Water Division and Fire Department.
- c. The Fire Department is expected to inform the Water Division before or after a hydrant is operated.
- d. Other City Divisions are expected to request the use of a hydrant prior to its operation.
- e. All hydrants, public and private, are inspected by the Water Division annually.
- f. Improper operation of a fire hydrant can cause system damage via water hammer or system contamination due to backflow.
- g. Any outside operator found to be operating a hydrant without City authorization will have their tools confiscated and penalty imposed.
- h. Use of fire hydrant without authorization will result in a penalty.

- i. Fire Hydrant Meters
 - i. Connection to a City fire hydrant without a hydrant water meter is illegal.
 - ii. Fire hydrant water meters may be requested via a “Hydrant Meter” permit via the City’s [CSS Portal](#).
 - iii. A hydrant meter will be charged a connection, disconnection, deposit, and volumetric fee for water usage exceeding the amount covered by the deposit.
 - iv. If the water use does not exceed the deposit, then the remainder is refunded.
 - v. Invoicing will occur after the meter has been removed.
 - vi. The City will install the hydrant meter and operate the hydrant.
 - vii. The contractor is only allowed to operate the isolation valve on the hydrant meter, not the hydrant.
 - viii. The contractor is responsible for providing a backflow device.
 - ix. The City will inspect the backflow device at the time of the installation of the hydrant meter.
 - x. There are limited hydrant meters available, and the City reserves the right to deny or remove a hydrant meter if it determines there is a need to do so.
 - xi. Applicants are encouraged to explore other water delivery options prior to requesting a hydrant meter, such as:
 - 1. Using an existing nearby water system connection like an outside spigot from a nearby building or house
 - 2. Use of the bulk water fill stations
 - 3. Complete the necessary steps for a permanent water system tap and set up a temporary construction water account.
 - xii. Any negligence on the behalf of the contractor will result in an immediate removal of the hydrant meter and an invoice for all damages to City infrastructure.
 - xiii. Hydrant meters will not be installed in the winter months.
- j. Fire Hydrant Flow Tests
 - i. Fire hydrant flow tests are to be completed by City staff only.
 - 1. This includes private hydrants.
 - 2. The rationale for this requirement is to record unmetered water loss and the potential for damage to public infrastructure.
 - ii. Fire hydrant flow tests may be requested by emailing water@iowa-city.org
 - iii. Flow tests will be charged a fee per test
 - iv. Flow test records are kept on file with the City and if an existing flow test exists less than one year old for the area of interest, this information will be provided without charge.
 - v. Flow test information on private lines will not be provided to any person other than the property owner or their designee.
 - vi. Fire hydrant flow tests are not conducted in the winter.

XIV. Billing Processes

- a. Account Creation
 - i. Initial account
 - 1. After the tap is completed, an account is created in the contractor’s name and the account is considered to be “On Construction”.

2. The name of the contractor listed on the building permit will be used for the account.
3. If a contractor does not want an “On Construction” account to be created upon completion of the tap, then they must contact the Water Division.
 - a. The Water Division will verify the water is off at the stopbox or tapping valve and assign an extension date.
 - b. Reactivation of the line by the contractor or any other entity will result in a fine against the building permit contractor.
- ii. All other account activities are handled by the Revenue Division.
- b. Meter Reads
 - i. The city is divided into four metering districts and each month all meters are read with one district read per week. A fifth district does exist for special use case meters.
 - ii. Meters are read remotely via radio transmissions. A staff member drives the district meter read route with a receiver that collects the meter reads.
 - iii. The meter read process is as follows:
 1. Revenue generates a read file and provides to Water on Monday.
 2. Staff import the read file into Neptune meter reading software.
 3. Staff drive the meter read route to collect meter reads.
 4. Staff evaluate the reads for invalid reads and no reads.
 5. Staff attempt to recollect any no read meters.
 6. The read file is then provided to Revenue.
 7. Revenue imports the reads into MUNIS for bill generation.
 8. The [Utility Bill Schedule](#) is available on the City’s website.
- c. Collections Process
 - i. Utility bills are due within 2 weeks of receipt and become delinquent at 3 weeks with a 10% delinquency charge.
 - ii. If an account is more than \$100 past due when delinquent, then the account is put on notice for a shutoff of the water service if the bill remains unpaid.
 - iii. The notice of shutoff and delinquency is accomplished by the use of a message on the initial bill, a delinquency letter, an automated phone call and email message should the city have a relevant email and phone number for the account, and a notice posted on the door of the residence known as a “carding”.
 - iv. If the bill remains unpaid after 45 days of the bill receipt, water service is shutoff.
 1. Shutoffs may occur at the curb stop, roadway valve, or water meter.
 - v. To restore water service, a customer must pay their utility and a reset fee.
 1. If the customer desires water service to be restored after 5:30P, then an after-hours reset fee will be charged.

d. Meter Exchanges

- i. Meters that fail to read are eligible for a meter exchange.
- ii. Residences are carded to notify them of a meter exchange and requesting them to call the Water Division to schedule an appointment.
- iii. Appointments are scheduled between 7:30A and 2:30P on business days.
- iv. Meter exchanges tend to take about 30 minutes to complete and are at no charge to the customer unless tampering or damage to the meter is found.
- v. Customers who fail to schedule an appointment within two months will be placed into a process that will result in a shutoff of the water service until a meter exchange is scheduled.
 1. First a mailed letter is sent to reiterate the need for a meter exchange.
 2. If no response in two weeks, a second letter is sent detailing the code sections allowing for access to the meter and the potential for a water service shutoff.
 3. If no response within two weeks of the second letter, then a third letter notifying them of a shutoff within one week is sent.
 4. A shutoff carding will be provided on a Friday.
 5. If no response by the following Monday afternoon, then the water will be shutoff.
- vi. Mobile home community (MHC) meters are Neptune R900i type and meter exchanges are performed at the direction of the City by MHC maintenance staff.

e. Meter Testing

- i. Residents may contest the consumption recorded by the water meter and request a water meter test.
- ii. The water meter test costs \$100 and is performed by Water Division staff.
- iii. If the meter fails the bench test, then the meter test fee is waived.
 1. Please note, a meter has yet to fail a bench test.

XV. Backflow Prevention

- a. Backflow prevention is a means to stop the contamination of the public drinking water supply by a service connection.
- b. Iowa Administrative Code [641.25.5](#) details the responsibility of the jurisdiction to ensure any new service is evaluated for the potential to introduce contamination and require backflow prevention as necessary.
- c. The jurisdiction is allowed via State Code to disconnect any water service not in compliance with the backflow prevention required (641.25.5(3)d).
- d. Backflow preventors or reduced pressure zone (RPZ's) are required to be installed after the water meter (641.25.5(4)a).
- e. The City's backflow prevention program is administered by the Building Inspection Services group (BIS). The BIS monitors compliance for the annual backflow preventor inspections performed by third-party contractors. ([LINK](#))
- f. The Wastewater Division inspects City facility backflow preventors.
- g. Full testing of mains connected to the City's water system via a backflow preventor is required. There have been arguments made that a line on the downstream side of a backflow preventor should not need to pass bacteriological, pressure, or trace testing.
 - i. These lines are required to pass bacteriological testing to ensure the lines were installed in a sanitary manner and will not cause the growth of bacteria which may foul the lines over time or have a potential to be consumed by humans misusing the system.
 - ii. These lines are required to pass pressure testing to ensure the lines were installed with integrity. A backflow preventor does not prevent water loss. The City does not allow for a private connection to waste water ahead of water meter.
 - iii. These lines are required to pass a final trace to ensure the lines can be located in the future when the property has changed ownership multiple times. Businesses tend to come and go, and the City remains. The City becomes a repository of information via construction records. This allows us to help new owners find and understand their systems. Proper locate wire installation makes this simpler for the City and the property owner.

XVI. Bulk Water

- a. Two token operated bulk fill stations are available for trucks.
 - i. 1200 S. Riverside Dr.
 - 1. **Open 24 hours daily during the warm season typically March to November**
 - ii. 2401 S. Scott Blvd.
 - 1. **Open Monday through Friday 8A to 5P**
 - 2. **Open Saturday and Sunday 9A to 5P**
 - 3. **Open year round**
 - iii. 3900 Hebl Ave SW
 - 1. **To open in late 2025**
 - 2. **Hours of operation will be dictated by Landfill hours**
 - 3. **Open year round**

- b. Tokens provide for 100 gallons of water and may be purchased at
 - i. 1200 S. Riverside Dr. – City Transit Division
 - ii. 410 E. Washington St. – City Hall – Revenue Division
 - iii. 3900 Hebl Ave SW – Landfill – exploring the sale of tokens
- c. For token pricing, call the Revenue Division at 319-356-5060

XVII. Construction

- a. Supply of Construction Materials
 - i. The Water Division may supply private parties with accepted products for water via on-hand inventory as supplier or last resort or necessary convenience for the completion of critical work.
 - ii. The private party is responsible for the repayment of the materials provided by in-kind replacement or elect to be invoiced for the cost of replacement.
 - iii. The Water Division on-hand inventory is not comprehensive or excessive.
- b. Inspection
 - i. This section shall be taken as a general understanding of the inspection methods and shall not be construed as applicable to all situations due to the variability of construction needs.
 - ii. Staff performing inspection on water system components work together to ensure City Design Standard and Specifications, Building Code, and Fire Code are being met.
 - 1. **These standards and codes are complex and require the expertise of multiple staff members to correctly assess and enforce.**
 - iii. There are three (3) potential inspection scenarios during construction:
 - 1. **A large diameter combined fire and domestic service line with a private hydrant**
 - a. **Water Division, Building Inspection, City Engineering, and Fire Marshall**
 - 2. **A large diameter combined fire and domestic service line – no hydrants**
 - a. **Water Division, Building Inspection, and Fire Marshall**
 - 3. **A small diameter domestic service line**
 - a. **Water Division and Building Inspection**
 - iv. The Water Division will support the City Engineering Inspector perform inspection and testing on the large diameter service line and hydrant. Or if no hydrant is installed, perform the inspection and testing.
 - v. Building inspection will inspect large diameter service lines after the point of satisfactory water system testing by the Water Division. Building inspection will also perform final meter installation inspections.
 - vi. The Fire Marshall will inspect the fire suppression system after the point of satisfactory water system testing by the Water Division.

XVIII. Figures and Standard Details

- a. Reference the Iowa City Supplemental to SUDAS for all figures and standard details