

Department of Building and Zoning

Irrigation Meter Installation Handout

An irrigation meter is a separate meter that measures the amount of water used for items such as lawns, washing exterior surfaces, washing vehicles, filling pools, etc. By having the irrigation meter installed the sanitary sewer rate fee is not assessed for water usage in the “irrigation system”, which would include outside faucets. A separate meter is the only way to accurately measure the water used exclusively from outside faucets.

Permit Requirements:

1. A plumbing permit from the Building and Zoning Department is required. The Building and Zoning Department is located at 1504-8th Street SW.
2. A Licensed Contractor with the City of Altoona can only submit a plumbing permit application.
3. A homeowner of a single-family dwelling may submit a permit application only after proving to the department that said owner is competent to do such work. (Section 155.09 Code of Ordinances)
4. A Licensed plumber with the City of Altoona is required to install the backflow prevention device, *no homeowner's exemption*, unless such device is an anti-siphon hose bib.

Permit and Meter Fees:

1. A meter used for outside anti-siphon faucets is \$130.00 which covers the cost for a 5/8” water meter.
2. A meter used for an underground irrigation system is \$230.00 which covers the cost for a 1” meter.
3. Depending on the work being performed to the plumbing system the permit cost is \$25.00 to \$35.00.
4. If installing pumps and other systems that require electrical connections an electrical permit may be required.

Inspection Requirements and Process:

1. Prior to issuance of meter an inspection of the plumbing system must be conducted. Inspection hours are between 8:00 AM to 3:00 PM, Monday through Friday.
2. Inspections are required to be scheduled a day prior; office hours are between 8:00 AM to 4:30 PM, Monday through Friday. **The number to schedule an inspection is 515-967-5138.**
3. The licensed plumber (homeowner if approved) is required to be present for the inspection.
4. Once the Building Department Inspector approves the plumbing work, the Water department will be notified that the water meter may be installed. **Please contact the Water Department at 515-967-5136 to set up a time for the meter installation.**
5. If the plumbing installation is not approved a “correction notice” will be provided to the individual standing the inspection indicating what corrections are necessary in order to pass inspection. Re-inspection of the plumbing system is required.
6. If a one-inch meter or an underground lawn irrigation system, a backflow report/certificate prepared by a state certified individual must be submitted to the Altoona Water Department.

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Water Meter Requirements:

1. Meter must be located in an accessible, heated area.
2. Meter must be located adjacent to the water service pipe entering the facility.
3. A floor drain should be located nearby.
4. Shutoff valves shall be within one foot on each side of the new meter location. (See picture below)
5. Meters must be installed in parallel. (See picture below)
6. Depending on size of electrical service a #4 or #6 bare copper wire shall be installed to jumper the water meters and the backflow preventor device, if installed. (See picture below)
7. **A Watts #7 backflow device is not permitted to be installed**
8. Installation of meters larger than 1" will require the installer to contact the Water Department at 515-967-2454 for special installation instructions.
9. After initial installation of backflow preventor an annual test report shall be submitted to the Water Department no later than June 1st of each year. This test and report is required to be completed by an individual certified by the State of Iowa.

Backflow Prevention Devices:

If the system contains a pump or set up for a pump or auxiliary air tanks then the backflow device shall be a:

1. Reduced pressure backflow preventor.

If the system does not have installations as noted above then the following backflow prevention devices shall be installed:

1. Atmospheric vacuum breaker.
2. Pressure vacuum breaker.
3. Reduced pressure backflow preventor.

No valves shall be installed downstream of an atmospheric vacuum breaker.

EXAMPLE OF METER SETTING

