IRRIGATION METER INSTALLATION

An irrigation meter is a separate meter that measures the amount of water used for items such as watering lawns, washing exterior surfaces, washing vehicles, filling pools, etc. By having an 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.

Plumbing Permit Fees & Requirements:

- A plumbing permit is required. Plumbing permits can be obtained on our online portal at www.citizenserve.com/altoona. Depending on the work being performed, the plumbing permit cost is approximately $35.50.
- If a contractor is performing the plumbing work, the contractor must be a licensed plumbing contractor with the State of Iowa.
- If a single-family residence is owner occupied, the homeowner may submit a plumbing permit application. The homeowner may be asked to show competency to do such work. (Section 155.09 Code of Ordinances)
- A plumbing contractor with a State of Iowa issued Plumbing License is required to install the backflow prevention device. ***There is no homeowner's exemption,*** unless such device is an anti-siphon hose bib.

Meter Fees & Information:

- Water meters can be purchased on our online portal at www.citizenserve.com/altoona. Click "Purchase Water Meter" on the home page. A meter used for outside anti-siphon faucets is $130.00, which covers the cost of a 3/4" water meter. A meter used for an underground irrigation system is $230.00, which covers the cost of a 1" meter. Type the number of meters you're purchasing next to the meter size.
- If installing pumps and other systems that require electrical connections, an electrical permit may be required.

Inspection Requirements and Process:

- Prior to installation of a meter, the Water Department will conduct an inspection of the plumbing system. Inspections are required to be scheduled at least 24-hours prior; office hours are between 8:00 AM to 4:30 PM, Monday through Friday. **To schedule an inspection and meter installation, call 515-957-5120**. The licensed plumber or homeowner is required to be present for the inspection.
- If the plumbing installation is not approved, the Water Department will indicate what corrections are necessary in order to pass inspection. Re-inspection of the plumbing system is required.
- After installation of a 1" inch meter or an underground lawn irrigation system, an annual test report for proper operation is required. This test and report must be completed by an individual certified by the State of Iowa. Documentation of the reporting and testing service is performed by BSI Online. For questions, please call BSI Online at 800-414-4990 or email bsionline@backflow.com. For more information, please visit BSI Online's website at https://www.bsionlinetracking.com/.

IRRIGATION METER INSTALLATION

Water Meter Requirements:

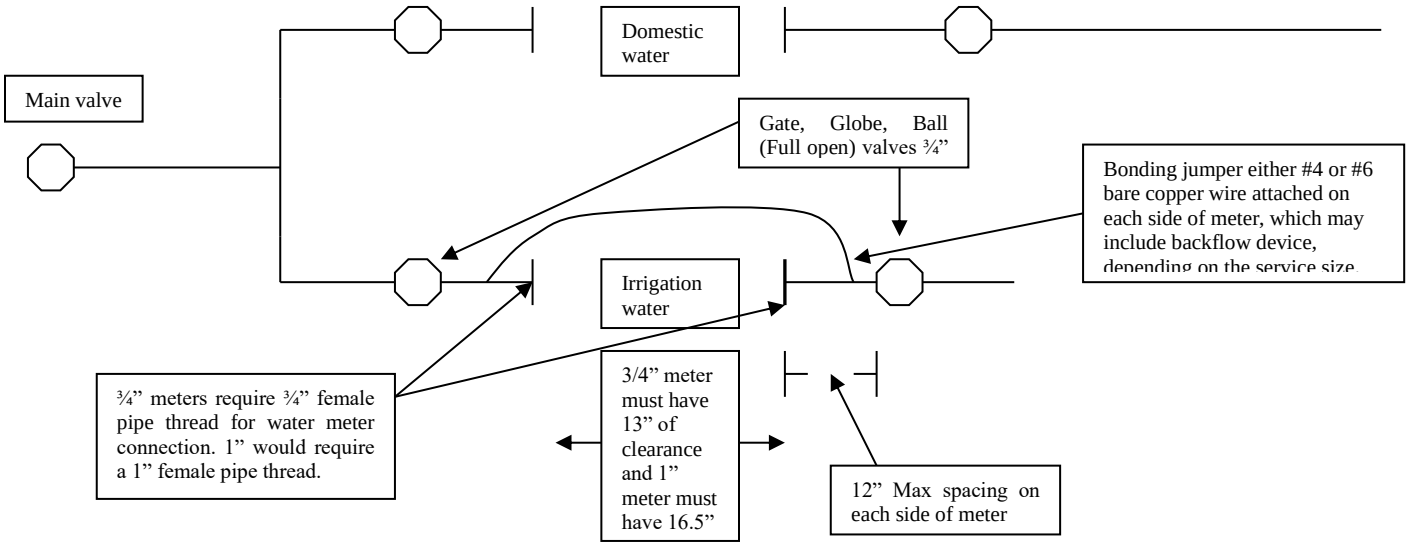
- Meter must be located in an accessible, heated area.
- Meter must be located adjacent to the water service pipe entering the facility.
- A floor drain should be located nearby.
- Shutoff valves shall be within one foot on each side of the new meter location. (See picture below)
- Meters must be installed in parallel. (See picture below)
- Depending on size of electrical service, a #4 or #6 bare copper wire shall be installed to jumper the water meters and the backflow preventer device, if installed. (See picture below)
- **A Watts #7 backflow device is not permitted to be installed.**
- Installation of commercial meters larger than 1" will require the installer to contact the Water Department at 515-967-4464 for special installation instructions.
- After initial installation of backflow preventer, an annual test report for proper operation is required. This test and report must be completed by an individual certified by the State of Iowa. Documentation of the reporting and testing service is performed by BSI Online. For questions, please call BSI Online at 800-414-4990 or email bsionline@backflow.com. For more information, please visit BSI Online's website at https://www.bsionlinetracking.com/.

Backflow Prevention Devices:

If the system contains a pump or is set up for a pump or auxiliary air tanks, then the backflow device shall be a reduced pressure backflow preventer.

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

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

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

EXAMPLE OF METER SETTING