Irrigation system backflow testing. Why is this important?

Aaron and I have recently completed a backflow testing certification for the state of Kansas.

We believe we are now able to provide you an even higher level of service by offering this testing done during the spring start up of your irrigation system.

What is a backflow preventer? In recent years, many municipalities and rural water providers have adopted updated plumbing codes. In with these codes are minimum standards of rules and regulations as to how public water sources are protected at cross connection points. A few examples of cross connections would be where potable water connects to fire suppression systems, health care facilities, industrial processes, and irrigation systems. All these points where public water is used other than for consumption all require some level of protection against reentry into the potable water supply. (backflow prevention) In fact, every public toilet has some sort of backflow prevention device, you may not know what to look for.. For many years backflow devices have been required on irrigation systems but newer codes are and will require annual testing of this equipment to ensure that your safety device will work property should a backflow event occurs. Even if a specific municipality does not currently require this test, I would treat this as a matter of your own personal protection. There have been case studies where homeowners have been liable for the quality of water in their own plumbing system after it has reentered the public water system after a backflow event. Consider this a safety check like testing the batteries in your smoke detector. You need it to perform correctly when it is actually needed.

What causes a backflow event? A backflow event can be explained as any time that there is less pressure (or a vacuum) in a water supply line than there is at another point in the system. For instance: If a firetruck hooked up to a fire hydrant and was pulling more water out of the hydrant than it can supply it will create a vacuum in some other point in the system. Or, if a high pressure water main breaks, the water rushing backwards to the point of the break creates a vacuum from the water meter the water is flowing past. If this occurs we certainly do not want to reintroduce water that has been sitting in a sprinkler line or a dishwasher or industrial process to reenter the public water supply.

Why won't a backflow preventer always work? Good question, If it ain't broke don't fix it right? Well in the case of backflow devices, all the parts are internal and you can't tell if it's working properly unless you test it. Often times what causes a device to fail a test is that some sort of debris has accumulated around a check valve or a simple o-ring needs replaced. This is not an expensive or complicated process and rarely requires replacing internal components.

This sounds like more of a plumbers job, why is TLC concerned about this? As your trusted choice to maintain your sprinkler system, we feel responsible for ensuring the safety equipment on your sprinkler system is property operating as well. This certification is not something that all plumbers or irrigation contractors have. We already have most rebuild kits on our truck and can easily provide the test and make repairs while onsite to perform the spring start up which saves you time and money.

What does this cost? I wish I could say that this is a relatively easy and inexpensive task to provide this service but in reality it is not. The equipment needed for these tests can cost well over \$1,000 and the cost of the testing and certification is not cheap either. I would imagine that a plumber with this certification may charge \$150 or more for this test and even more for making repairs or maintenance. I would like to take advantage of us being onsite already for your spring start up and are aiming our cost to be under \$100 not including any parts if needed. Many codes require annual testing and rebuilds every 5 years. This being the first time many devices are being tested/serviced, a thorough cleaning and inspection will be great preventative maintenance.

What should you do with the certificate of completion? Larger municipalities such as Wichita, require your specific device and test results to be registered electronically. Our city offices do not require this yet so we will provide you with a copy, keep a copy for our records and turn a hard copy in to your local water department on your behalf.

Please note: As a steward of public safety we will be adding anti siphon valves to the faucet mounted drip systems that we have installed in the past. These are very small devices about the size of a quarter that thread onto your hose bib. These simple devices provide protection against back siphonage and should be considered to be installed on all outdoor faucets if your faucets do not already have one installed from the factory. If you would like to have all your faucets protected please let us know and we will be glad to add them while on site.

If you have any questions, please feel free to call. If not, we look forward to seeing your sprinkler system this spring!!! Staff of TLC Nursery and Outdoor Living/ TLC Groundskeeping, Inc.

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