IRRIGATION SYSTEM

Automatic irrigation systems can provide turf and plant areas with consistent watering throughout the growing season. While TruNorth can provide irrigation maintenance to suit our needs, you may find the following information helpful

Overwatering with an irrigation system can occur and will be harmful to turf and especially plants. This makes proper scheduling (run times & frequency) crucial to avoid damage to these plants.

Separate coverage (within reason) is recommended for turf and plant areas as the watering demand for turf is much higher than most plants (exception: many annual flowers species).

Scheduling your irrigation controller throughout the growing season is crucial to maximize the benefits while also conserving water. Scheduling involves programming three main items:

- Days of Operation (ex. Mon, Wed, Fri)
- Station Run Times (ex. Station #1 for 12 min)
- Start Time (ex. 3am)

At a minimum, two different programs schedules should be used:

- One for the Spring and Fall seasons with lower weekly precipitation rates when rainfall is typically higher and temperatures are typically lower
- One for summer where the opposite is true

It can take several seasons to optimize the programming for your particular site based on evaluation during the season.

System Start-Up, System Shut Down (Winterization) and Inspections are all important procedures for maintaining an irrigation system.

Start-Up

- Reconnecting the backflow valve
- Opening shut off valve(s)
- Backflow Inspection (needs to be installed by a licensed plumber)
- Bleeding air out of the lines
- Running all stations and checking heads for proper adjustment and flow
- Program the controller for the spring season

Mid-Season Inspections

- Check each station and all heads for proper adjustment and flow
- Adjusting the program on the controller to suit current weather conditions

Shut Down (Winterization)

- A large compressor (100 to 200 CFM) is used to force air into (and out of) the irrigation mainline, valves, lateral lines, and heads (preventing damage from the hazard of freezing water)
- Any shut off valve(s) should be closed
- The backflow valve (if located outside) should be removed at this time and stored in a dry, warm location for the winter

A backflow valve is to protect drinking water by not allowing irrigation water (with potential fertilizers, chemicals or other contaminants) to siphon back into the water supply lines.

Repairs for your irrigation system will be required from time to time to maintain its proper operation. Needed repairs may be noticed and corrected during normal start up, inspections and shut down procedures; however, you should monitor your irrigation system throughout the season.

Look for the following indicators that there might be a problem with your system:

- Excessive erosion of soil
- An actual leak (water bubbling or spraying up from the ground)
- Dry areas of turf or plants
- A station that is running beyond the run time and will not shut off

Should you notice any of these problems please contact TruNorth for assistance.

What to do if there is a leak

To prevent further water loss until the Irrigation Professional can arrive:

Turn the controller dial to the off position. If the does not stop the leak then turn off the valve at the backflow. This will shut off all water being supplied to the system.

Alterations to your irrigation system may be required should you ever add or change the size, shape or location of plant beds, turf areas, patios, pool, house, walks, etc. With proper coordination between the Contractor and the Irrigation Professional these alterations can be done to accommodate these changes while still providing an efficient, effective system.

GLOSSARY OF IRRIGATION TERMS

Controller: Also known as a clock or timer this electronic device is programmed to control the frequency, duration and time of watering.

Station: Also called zones these represent a specific area of heads that are grouped together. Typically one station runs at a time through the use of a controller. This is to maximize water pressure. The various stations will run one after another as dictated by the controller.

Mainline: Carries water from the buildings water line to the various automatic valves.

Lateral Line: Carries water from the automatic valves to the heads.

Automatic Valves: These electronic valves are opened and closed via the controller. Each station has one of these valves, when the valve turns on, water will flow to the heads and watering will begin. When the valve is turned off the flow of water to the heads will stop thus stopping the watering cycle for that station.

Rotor Head: Typically these heads are used for larger turf areas (25' and wider). They have a single stream of water that is diffused to allow for even watering from areas near the head itself to the furthest point of water projection. The head rotates as it sprays to cover the desired area (i.e. full circle, partial circle). Because it does not spray the entire area of coverage in a continuous spray pattern as spray heads do, rotor heads need longer watering times to achieve the same precipitation rate as a spray head. Watering times will typically range between 20 and 45 minutes.

Spray Head: Typically these heads are used for smaller turf areas and plant beds. They spray in a continuous pattern for the entire coverage area (either circle or part circle). Watering times will typically range between 4 and 15 minutes.

Quick Coupler: These are connected to the mainline and allow for connection of a garden hose to the system for supplemental watering in the area desired. Used to reduce the length of hose needed to have available water in a specific area.

Valve Box: Plastic boxes with lids where the top of the box is placed flush with the ground. They can house automatic and shut off valves as well as quick couplers.