

# **Travis County Water Control and Improvement District No. 17**

## **Landscape Irrigation System Requirements**

### **Installer Requirements**

- Installer must obtain a Travis County Water Control and Improvement District No. 17 (WCID17) irrigation system plumbing permit before installing a landscape irrigation system. Permit applications must be accompanied by an approved irrigation system design plan.
- Upon completion, installer must provide customer with an as-built plan of the completed irrigation system from the original approved plan with any revisions prominently noted.
- The following documents are required to be sealed by the irrigator: two plan copies to WCID17, proposals, contracts, change orders, warranties and maintenance checklist. Seals must be signed and dated and must be legible on originals and copies.
- Included in the plan must be an efficient watering schedule for each season based on 60% of historical evapotranspiration including projected water use.
- Vehicles used in installation, maintenance, alteration, repair or service of irrigation systems must display the irrigator's license number.
- Trailers that advertise irrigation service must have irrigator's license number displayed.
- Currently, homeowners may still install their own irrigation systems but a permit application and plans are still required. The homeowner **MUST** follow these same requirements and inspections.
- Beginning 1/1/2010 either an irrigator **OR** an irrigation technician **MUST BE ON SITE** during installation, repair, or alteration of an irrigation system.

### **Irrigation Plans**

- Irrigation plans **MUST** include the following: must be to scale, areas not covered must be noted, seal, signature and date, physical features and boundaries, north arrow, legend, equipment legend showing the symbols used, zone flow measurement for each zone, location and type of controller and sensor, location type and size of water source, backflow preventing device, water emission device (sprinkler head), valve, pressure regulation component, main lines, lateral piping, scale used design pressure, and the brand, model and size of all components refer to maximum flow for appropriate meter size.
- The plan may be hand-drawn or computer generated, but must be to scale. The scale must be shown.
- Records must be maintained for 3 years.

## **Sprinkler Heads**

- Must be spaced to provide for head to head coverage or as per manufacturers recommendations, with adjustments for local wind conditions as needed.
- Sprinkler heads within a valved zone must have matched precipitation rates and irrigate at the same rate.
- Must be placed at least 6 inches from impervious surfaces such as streets, sidewalks and driveways.
- No above ground sprinklers in areas less than 48” in length or width that have pedestrian or vehicle traffic on two or more sides.
- Use of sprinklers is prohibited on landscaped strips less than 6 feet wide.
- Heads must be attached to rigid lateral lines with flexible pipe or swing joints.
- Use of shrub risers prohibited.
- Must be installed in a manner that meets the needs of plants at maturity.
- Use of low-angle spray heads is encouraged where appropriate.

## **Controllers**

- Must be capable of providing multiple irrigation programs, with at least 3 start times per program.
- Must be capable of limiting irrigation frequency to once every 7 days and once every 14 days.
- Must have a water budgeting feature.
- Must be equipped with an operating rain shutoff device or soil-moisture shutoff device.
- If an existing automatic controller is replaced, then a rain shutoff device upgrade is required if not already present.

## **Valves**

- All landscape irrigation systems must have an automatic master valve.
- Zone valves must be equipped with an adjustable flow control.
- All valves must be enclosed in an accessible valve box.
- Check valves are required where elevation differences may result in low-head drainage onto impervious surfaces.

## **Pressure Control**

- Landscape irrigation systems must be designed to the lowest static water pressure.
- If pressures exceed manufacturer's specifications, a pressure regulating device must be installed on the high pressure zone(s).

## **Backflow Prevention**

- Irrigation systems **MUST** be protected by Reduced Pressure Zone (RPZ.) Properties with septic systems must have separate zones to prevent excess water preventing the OSSF from operating correctly.

## **Industrial, Commercial, Institutional and Multi-Family Residential Systems**

- A separate metered water service must be utilized for the landscape irrigation system.
- Landscape irrigation systems must be equipped with a freeze sensor that will automatically shut down the irrigation system when ambient temperatures fall below 32 degrees F.

## **Existing Landscape Irrigation Systems**

- A WCID17 permit is required if repair or alteration work is required upstream of the backflow prevention device, and an isolation valve must be provided if not already present.

Examples of **Minor** Repairs – No Permit Required:

- Repair or replacement, addition or deletion of heads in an existing zone.
- Lateral line repairs.
- Service or repair of valves, including master valves.

Examples of **Major** Repairs –Permit Required:

- Replacement of Backflow Prevention device (BFP).
- Repair of main line between meter and BFP.
- Addition of new zones.

## **Miscellaneous Requirements**

- Pipe depth per manufacturer of **MINIMUM** of 6 inches.
- Trenches and holes must be returned to original grade using native soil, no rock.
- Wiring must be UL rated for direct burial and must also be buried a **MINIMUM** of 6 inches.
- Wiring splices must be waterproof.
- No hose bibs will be connected to irrigation systems.

- Landscape irrigation systems must consist of separate irrigated zones based on water requirements, so that turf and shrub areas, sun and shade areas, and flat and sloping areas are watered separately.
- TCEQ contact number for rules, enforcement assistance, technical requirement questions and licensing activities is Occupational Licensing at (512) 239-6133.