

IRRIGATION PERMIT SUBMITTAL REQUIREMENTS

Irrigation Permit Required: The installer of an irrigation system shall hold a license issued under Sec. 1903.251, TEX. OCCUPATIONS CODE, and shall obtain a permit from the City before installing an irrigation system. To obtain a permit, the applicant shall first file an application with the Department of Building Inspection. Unless otherwise exempted from registration, the installer of an irrigation system shall be registered with the City as an irrigation contractor in accordance with the provisions of Chapter 22, Article II, Colleyville Code of Ordinances.

Plan Review Submittal Requirements

Plans: A state of Texas licensed irrigator must prepare and submit a paper or electronic copy (minimum 2-copies if paper plans) to the Building Inspection Department for a conformation review. All plans must be appropriately sealed by a state of Texas licensed irrigator. There will be an admistration plan review **fee of \$49.50 (UAC; Table 3-D) for** each City confirmation review. An additional fee of \$75.00 will be charged for the actual irrigation permit at the time of issuance.

Plan Minimum Design Standards: Irrigation plans shall be drawn to scale and must reflect complete coverage unless otherwise noted. Plans shall include the irrigator's seal, signature and date of signing. Plans shall also include all major physical features and boundaries of areas to be watered, a north arrow, a legend, zone flow for each zone, type and location of controller and the type and location of sensors (e.g. rain-freeze. Plans shall also include the location, type and size of each device such as; water meters, backflow devices, water emission devices, sprinkler heads, all valves and couplers, y-strainers, gauges, main and lateral piping, design pressure and the plan shall identify the scale used. For a complete copy of State Law TAC 30; 344 go to:

http://www.tceq.state.tx.us/assets/public/compliance/compliance_support/regulatory/irrigation/forms_li/rulesforregguid_063008.pdf

Minimum Design and Installation Requirements

Spacing: The maximum design and spacing of emission devices shall not exceed the spacing published in the manufacturer's installation standards. New irrigation systems shall not utilize above-ground spray emission devices in landscapes that are less than 48 inches (width/length) and which contain impervious surfaces along two or more perimeters. Pop-up sprays or rotary sprinkler heads shall direct their flow away from any adjacent surface and shall not be closer thank 4-inches from a hardscape.

Water Pressure, Piping, Zones, Precipitation Rate: Emission devices shall be installed to operate at and not above their manufacturer's listed operating pressures. Piping shall be designed and installed so that the flow of water in the pipe does not exceed 5-feet per second in polyvinyl chloride (PVC) pipe. Systems shall be zoned based on plant materials, microclimate factors, topography, soil conditions and hydrological requirements. Zones must be designed to match the precipitation rate of the emission devices in each zone. System shall be designed so as to not spray over impervious surfaces.

Master Valve, Pipe Primer, Rain Sensors, Isolation Valve: When provided, a master valve shall be installed on the discharge side of the backflow prevention device. Irrigation systems utilizing PVC pipe shall be installed with the use of a colored primer solvent in accordance with the International Plumbing Code. All new automatic systems and system alterations that involve the replacement of the controller shall include a rain sensing shut-off device. All new systems must include an isolation valve between the water meter and the backflow prevention device.

Piping Coverage: All system piping must be installed in accordance with its manufacturer's installation standards. In the case where the manufacturer's installation standards are not published minimum depth coverage of 6-inches of select fill, between the top of the pipe and the natural grade, shall be maintained. Any proposed alterations to the minimum depth requirements must be noted on the City approved plan. All trenches and holes must be backfilled and compacted to the original grade.

Wiring: All underground electrical wiring shall be UL listed for under ground use. All electrical wiring and components must comply (size, type, protection, etc) with their manufacturer's listings and the National Electrical Code. Under ground electrical wiring must be covered with a minimum of 6-inches of select fill and all underground splices must be waterproof as certified by the wire splice manufacturer.

Non-Potable Water: Water contained within the piping of an irrigation system is deemed non-potable. No drinking or domestic water usage (e.g. filling swimming pools, fountains, etc) shall be connected to the system. If a supplemental hose bib is connected to the system it shall be through a quick coupler (and keyed) installed in a purple valve box and the hose bib and hoses shall be labeled "non-potable; not safe for drinking". An isolation vale must be installed upstream of a quick coupler connecting a hose bib to the irrigation system.

Piping Within Right-Of-Way: Irrigation piping within the Public Right of Way shall be installed perpendicular (right angles) to the R.O.W. / curb line/ roadway. The only exception shall be buried drip tubing.

- (a) No valves, supply lines or wiring is permitted within the R.O.W.
- (b) Installer shall minimize the amount of piping in the R.O.W. being careful to keep the layout orderly and predictable.
- (c) Any variances may be considered by the Director of Public Works

WATER WELLS: Properties with an alternative water source (well water) have the potential for a cross connection of the municipal water supply. Any alternative water supply not regulated by the TCEQ is considered a high health hazard. The City of Colleyville is obligated to protect the municipal water system and the customer from any health hazards due to cross connections. Thus, the City of Colleyville shall require any water customer with an alternative water source to create two physical separations from the alternative water sources, where appropriate. The two acceptable physical separations are either a reduced pressure principal assembly (RPZ) or an air gap. When adding an RPZ, a closed loop plumbing system is created. At that time, an expansion tank will be required to be added to all water heaters on site. This is not required for tankless water heaters. A separate permit will be required for adding an RPZ and for any expansion tanks.