Memorandum

To: Honorable Mayor Shetter and members of the Burleson City Council

From: Shai Roos, AICP Director of Community and Economic Development

Date: January 20, 2009

Subject: Ordinance B-784-09, amending Chapter 82, Utilities, of the Code of Ordinances of the City of Burleson by adding regulations regarding the installation of irrigation systems within the corporate limits of the city. (Final Reading)

Council Action Requested:
Approve Ordinance B-784-09 on final reading, amending Chapter 82, Utilities, of the Code of Ordinances of the City of Burleson, by adding regulations regarding the installation of irrigation systems within the corporate limits of the city.

Background Information:
The City Council unanimously approved this ordinance at their first reading on January 5, 2009.

During the 2007 legislative session, the Texas Legislative adopted House Bill 1656 which amended Chapter 401 of the Texas Local Government Code to require a city with a population of 20,000 or more to regulate the installation of irrigation systems within the corporate limits of the city. House Bill 1656 becomes effective January 1, 2009. Council action on this ordinance will validate the intent of that bill.

The purpose of this regulation is to ensure irrigation systems are properly installed thereby conserving water, avoiding wasteful use, and improving the overall quality of life for the citizens of Burleson. Toward that end, this ordinance was personalized for Burleson using the TML model ordinance developed by a regional committee of municipal representatives involved in public works and building/code enforcement.

Board Citizen Input:
Various meetings have been held throughout the region by TCEQ (Texas Commission on Environmental Quality) introducing cities and members of the irrigation industry to the new state mandate. A notice and copy of our ordinance has been mailed out to all registered irrigators working in Burleson, alerting them to the new regulation and local procedures.

Financial Considerations:
The new regulations will require a plan review and multiple field inspections for each irrigation system proposed. To address this need, we will need to contract out for that service as the current level of staffing does not allow for absorbing the additional duties. In order to support this service contract, a permit fee increase is recommended with the adoption of this ordinance. The new fee will be $200 (currently $25).

Attachments:
1. Ordinance B-784-09

Staff Contact:
Shai Roos, AICP
Director of Community and Economic Development
817-447- 5400 ext. 238
sroos@ burlesontx.com

ORDINANCE NO. B-784-09

AN ORDINANCE PROVIDING FOR THE AMENDMENT OF CHAPTER 82, "UTILITIES", ARTICLE I SECTIONS 82-15 THROUGH 82-37 PREVIOUSLY RESERVED, NOW TO BE "IRRIGATION SYSTEM INSTALLATIONS" OF THE CODE OF THE CITY OF BURLESON. PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABLILITY CLAUSE; PROVIDING FOR A PENALTY FOR VIOLATIONS HEREOF; PROVIDING FOR PUBLICATION; AND PROVIDING A SAVINGS CLAUSE;

WHEREAS, the City Council of the City of Burleson has determined that water conservation and environmental protection are important issues and concerns affecting the city; and

WHEREAS, properly-installed irrigation systems will conserve water, help avoid wasteful use, and improve the overall quality of life for the citizens of Burleson; and

WHEREAS, during the 2007 legislative session, the Texas Legislature adopted House Bill 1656; and

WHEREAS, House Bill 1656 amended Chapter 401 of the Texas Local Government Code to require a city with a population of 20,000 or more to regulate the installation of irrigation systems within the corporate limits of the city; and

WHEREAS, the provisions herein are necessary to promote and protect the health, safety, and welfare of the public by creating an urban environment that is protective of the city's water supply and provides an enhanced quality of life for the citizens of the City of Burleson.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CIY OF BURLESON:

Chapter 82, "Utilities" of the Burleson Code of Ordinances is hereby amended by adding the following new Article:

ARTICLE I, IRRIGIATON SYSTEM INSTALLATION

Section 82-15. Definitions

The following words and terms, when used in this ordinance, have the following meanings, unless the context clearly indicates otherwise.

(1) **Air gap** – A complete physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel.

(2) **Atmospheric Vacuum Breaker** – An assembly containing an air inlet valve, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum. Also known as an Atmospheric Vacuum Breaker Back-Siphonage Prevention Assembly.

(3) **Backflow prevention**- The mechanical prevention of reverse flow, or back siphonage, of nonpotable water from an irrigation system into the potable water source.

(4) **Backflow prevention assembly**- Any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.

(5) **Completion of irrigation system installation** - When the landscape irrigation system has been installed, all minimum standards met, all tests performed, and the irrigator is satisfied that the system is operating correctly.

(6) **Consulting**- The act of providing advice, guidance, review or recommendations related to landscape irrigation systems.

(7) **Cross-connection**-An actual or potential connection between a potable water source and an irrigation system that may contain contaminates or pollutants or any source of water that has been treated to a lesser degree in the treatment process.

(8) **Design**- The act of determining the various elements of a landscape irrigation systems that will include, but not be limited to, elements such as collecting site specific information, defining the scope of the project, defining plant watering needs, selecting and laying out emission devices, locating system components, conducting hydraulics calculations, identifying any local regulatory requirements, or scheduling irrigation work at a site. Completion of the various components will result in an irrigation plan.

(9) **Design pressure**- The pressure that is required for an emission device to operate properly. Design pressure is calculated by adding the operating pressure necessary at an emission device to the total of all pressure losses accumulated from an emission device to the water source.

(10) **Double Check Valve**- An assembly that is composed of two independently acting, approved check valves, including tightly closed resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. Also known as a Double Check Valve Backflow Prevention Assembly.

(11) **Emission device**- Any device that is contained within an irrigation system and that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, and drip irrigation emitters.

(12) **Employed**- Engaged or hired to provide consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems. A person is employed if that person is in an employer-employee relationship as defined by Internal Revenue Code, 26 United Sates Code Service, § 3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

(13) **Head-to-Head spacing**- The spacing of spray or rotary heads equal to the manufacturer's published radius of the head.

(14) **Health hazard**- A cross-connection or potential cross-connection with an irrigation system that involves any substance that may, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing such effects.

(15) **Hydraulics**- The science of dynamic and static water; the mathematical computation of determining pressure losses and pressure requirements of an irrigation system.

(16) **Inspector**- A licensed plumbing inspector, water district operator, other governmental entity, or irrigation inspector who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor.

(17) **Installer**- A person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed

according to Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

(18) **Irrigation inspector**- A person who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor and is required to be licensed under Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

(19) **Irrigation plan**- A scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.

(20) **Irrigation services**- Selling, designing, installing, maintaining, altering, repairing, servicing, permitting, providing consulting services regarding, or connecting an irrigation system to a water supply.

(21) **Irrigation system**- An assembly of component parts that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, and/or to reduce dust or control erosion. This term does not include a system that is used on or by an agricultural operation as defined by Texas Agricultural Code, § 251.002.

(22) **Irrigation technician**- A person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an irrigation system, including any water supply, and who is required to be licensed under Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations).

(23) **Irrigation zone**- A subdivision of an irrigation system with a matched precipitation rate based on plant material type (such as turf, shrubs, or trees), microclimate factors (such as sun/shade ratio), topographic features (such as

slope) and soil conditions (such as sand, loam, clay, or combination) or for hydrological control.

(24) **Irrigator**-A person who sells, designs, offers consultations regarding, installs, maintains, alters, repairs, services or supervises the installation of an irrigation system, including the connection of such system to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under Title 30, Texas Administrative Code, Chapter 30.

(25) **Irrigator-in-Charge**- The irrigator responsible for all irrigation work performed by an exempt business owner, including, but not limited to obtaining permits, developing design plans, supervising the work of other irrigators or irrigation technicians, and installing, selling, maintaining, altering, repairing, or servicing a landscape irrigation system.

(26) **Landscape irrigation**- The science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.

(27) **License**- An occupational license that is issued by Texas Commission of Environmental Quality under Title 30, Texas Administrative Code, Chapter 30 to an individual that authorizes the individual to engage in an activity that is covered by Title 30, Texas Administrative Code, Chapter 30.

(28) **Mainline**- A pipe within an irrigation system that delivers water from the water source to the individual zone valves.

(29) **Maintenance checklist**- A document made available to the irrigation system's owner or owner's representative that contains information regarding the operation and maintenance of the irrigation system, including, but not limited to: checking and repairing the irrigations system, setting the automatic controller, checking the rain or moisture sensor, cleaning filters, pruning grass and plants

away from irrigation emitters, using and operating the irrigation system, the precipitation rates of each irrigation zone within the system, any water conservation measures currently in effect from the water purveyor, the name of the water purveyor, a suggested seasonal or monthly watering schedule based on current evapotranspiration data for the geographic region, and the minimum water requirements for the plant material in each zone based on the soil type and plant material where the system is installed.

(30) **Major maintenance, alteration, repair, or service**- Any activity that involves opening to the atmosphere the irrigation main line at any point prior to the discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a main supply pipe, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to the atmosphere.

(31) **Master valve**- A remote control valve located after the backflow prevention device that controls the flow of water to the irrigation system mainline.

(32) **Matched precipitation rate**- The condition in which all sprinkler heads within an irrigation zone apply water at the same rate.

(33) **New installation**- An irrigation system installed at a location where one did not previously exist.

(34) **Pass-through contract**- A written contract between a contractor or builder and a licensed irrigator or exempt business owner to perform part or all of the irrigation services relating to an irrigation system.

(35) **Potable water**- Water that is suitable for human consumption.

(36) **Pressure Vacuum Breaker**- An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. Also known as a Pressure Vacuum Breaker Back-siphonage Prevention Assembly.

(37) **Reclaimed water**- Domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.

(38) **Records of landscape irrigation activities**- The irrigation plans, contracts, warranty information, invoices, copies of permits and other documents that relate to the installation, maintenance, alteration, repair, or service or a landscape irrigation system.

(39) **Reduced Pressure Principle Backflow Prevention Assembly**- An assembly containing two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.

(40) **Static water pressure**- The pressure of water when it is not moving.

(41) **Supervision**- The on-the-job oversight and direction by a licensed irrigator who is fulfilling his or her professional responsibility to the client and/or employer in compliance with local or state requirements. Also a licensed installer working under the direction of a licensed irrigator or licensed irrigator to install, maintain, alter, repair or service an irrigation system.

(42) **Water conservation**- The design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.

(43) **Zone flow**- A measurement, in gallons per minute or gallons per hour, of the actual flow of water through a zone valve, calculated by individually opening each zone valve and obtaining a valid reading after the pressure has stabilized. For design purposes, the zone flow is the total flow of all nozzles in the zone at a specific pressure.

(44) **Zone valve**- An automatic valve that controls a single zone of a landscape irrigation system.

Section 82-16. Valid License Required

Any person who connects an irrigation system to a water supply within the city limits of Burleson must hold a valid license, as defined by Title 30, Texas Administrative Code, Chapter 30 and required by Chapter 1903 of the Texas Occupations Code, or as defined by Chapter 365, Title 22 of the Texas Administrative Code and required by Chapter 1301 of the Texas Occupations Code.

Exemptions

A property owner is not required to be licensed in accordance with Texas Occupations Code, Title 12 § 1903.002 (c)(1) if he or she is performing irrigation work in a building or on a premises owned or occupied by the person as the person's home. A home or property owner who installs an irrigation system must meet the standards contained in Title 30, Texas Administrative Code, Chapter 344 regarding spacing, water pressure, spraying water over impervious materials, rain or moisture shut-off devices or other technology, backflow prevention and isolation valves. The city may, at any point, adopt more stringent requirements for a home or property owner who installs an irrigation system. See Texas Occupations Code § 1903.002 for other exemptions to the licensing requirement.

Section 82-17. Permit Required

Any person installing an irrigation system within the city limits of Burleson is required to obtain a permit from the city. Any plan approved for a permit must be in compliance with the requirements of this chapter.

Exemptions

(1) An irrigation system that is an on-site sewage disposal system, as defined by Section 355.002, Health and Safety Code; or

(2) An irrigation system used on or by an agricultural operation as defined by Section 251.002, Agriculture Code; or

(3) An irrigation system connected to a groundwater well used by the property owner for domestic use.

Section 82-18. Backflow Prevention Methods and Devices

(a) Any irrigation system that is connected to the potable water supply must be connected through a backflow prevention method approved by the Texas Commission on Environmental Quality (TCEQ). The backflow prevention device must be approved by the American Society of Sanitary Engineers; or the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California; or the International Plumbing Code; or any other laboratory that has equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies. The backflow prevention device must be installed in accordance with the laboratory approval standards or if the approval does not include specific installation information, the manufacturer's current published recommendations.

(b) If conditions that present a health hazard exist, one of the following methods must be used to prevent backflow;

1. An air gap may be used if:

a. there is an unobstructed physical separation; and
b. the distance from the lowest point of the water supply outlet to the flood rim of the fixture or assembly into which the outlet discharges is at least one inch or twice the diameter of the water supply outlet, whichever is greater.

2. Reduced pressure principle backflow prevention assemblies may be used if:

a. The device is installed at a minimum of 12 inches above ground in a location that will ensure that the assembly will not be submerged; and
b. Drainage is provided for any water that may be discharged through the assembly relief valve.

3. Pressure vacuum breakers may be used if:

a. No back-pressure condition will occur; and
b. The device is installed at a minimum of 12 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler.

4. Atmospheric vacuum breakers may be used if:

a. No back-pressure will be present;
b. There are no shutoff valves downstream from the atmospheric vacuum breaker;
c. The device is installed at a minimum of six inches above any downstream piping and the highest downstream opening. Pop-up

sprinklers are measured from the retracted position from the tip of the sprinkler;

d. There is no continuous pressure on the supply side of the atmospheric vacuum breaker for more than 12 hours in any 24-hour period; and

e. A separate atmospheric vacuum breaker is installed on the discharge side of each irrigation control valve, between the valve and all the emission devices that the valve controls.

(c) Backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.

(d) If there are no conditions that present a health hazard, double check valve backflow prevention assemblies may be used to prevent backflow if the device is tested upon installation and test cocks are used for testing only.

(e) If a double check valve is installed below ground:

1. test cocks must be plugged, except when the double check valve is being tested;
2. test cock plugs must be threaded, water-tight, and made of non-ferrous material;
3. a y-type strainer is installed on the inlet side of the double check valve;
4. there must be a clearance between any fill material and the bottom of the double check valve to allow space for testing and repair; and
5. there must be space on the side of the double check valve to test and repair the double check valve.

(f) If an existing irrigation system without a backflow-prevention assembly requires major maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow

prevention method before any major maintenance, alteration, repair, or service is performed.

(g) If an irrigation system is connected to a potable water supply through a double check valve, pressure vacuum breaker, or reduced pressure principle backflow assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.

(h) The irrigator shall ensure the backflow prevention device is tested by a licensed Backflow Prevention Assembly Tester prior to being placed in service and the test results provided to the local water purveyor and the irrigation system's owner or owner's representative within ten business days of testing of the backflow prevention device.

Section 82-19. Specific Conditions and Cross-Connection Control

(a) Before any chemical is added to an irrigation system connected to the potable water supply, the irrigation system must be connected through a reduced pressure principle backflow prevention assembly or air gap.

(b) Connection of any additional water source to an irrigation system that is connected to the potable water supply can only be done if the irrigation system is connected to the potable water supply through a reduced-pressure principle backflow prevention assembly or an air gap.

(c) Irrigation system components with chemical additives induced by aspiration, injection, or emission system connected to any potable water supply must be connected through a reduced pressure principle backflow device.

(d) If an irrigation system is designed or installed on a property that is served by an on-site sewage facility, as defined in Title 30, Texas Administrative Code, Chapter 285, then:

1. All irrigation piping and valves must meet the separation distances from the On-site Sewage Facilities system as required for a private water line in Title 30, Texas Administrative Code, Section 285.91(10);
2. Any connections using a private or public potable water source that is not the city's potable water system must be connected to the water source through a reduced pressure principle backflow prevention assembly as defined in Title 30, Texas Administrative Code, Section 344.50; and
3. Any water from the irrigation system that is applied to the surface of the area utilized by the On-site Sewage Facility system must be controlled on a separate irrigation zone or zones so as to allow complete control of any irrigation to that area so that there will not be excess water that would prevent the On-site Sewage Facilities system from operating effectively.

Section 82-20. Water Conservation

All irrigation systems shall be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation as defined in the Definitions section of this ordinance.

Section 82-21. Irrigation Plan Design: Minimum Standards

(a) An irrigator shall prepare an irrigation plan for each site where a new irrigation system will be installed. A paper or electronic copy of the irrigation plan must be on the job site at all times during the installation of the irrigation system. A drawing showing the actual installation of the system is due to each irrigation system owner after all new irrigation system installations. During the installation of the irrigation system, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

1. diminish the operation integrity of the irrigation system;
2. violate any requirements of the ordinance; and
3. go unnoted in red on the irrigation plan.

(b) The irrigation plan must include complete coverage of the area to be irrigated. If a system does not provide complete coverage of the area to be irrigated, it must be noted on the irrigation plan.

(c) All irrigation plans used for construction must be drawn to scale. The plan must include, at a minimum, the following information:

1. the irrigator's seal, signature, and date of signing;
2. all major physical features and the boundaries of the areas to be watered;
3. a North arrow;
4. a legend;
5. the zone flow measurement for each zone
6. location and type of each:
    a. controller; and
    b. sensor (for example, but not limited to, rain, moisture, wind, flow, or freeze);
7. location, type and size of each
    a. water source, such as, but not limited to a water meter and point(s) of connection;
    b. backflow prevention device;
    c. water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick couplers, bubblers, drip, or micro-sprays;
    d. valve, including, but not limited to, zone valves, master valves, and isolation valves;
    e. pressure regulation components; and
    f. main line and lateral piping.

8. the scale used; and
9. the design pressure.

Section 82-22. Design and Installation: Minimum Requirements

(a) No irrigation design or installation shall require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

(b) Spacing.

1. The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure.
2. New irrigation systems shall not utilize above-ground spray emission devices in landscapes that are les than 48 inches not including the impervious surfaces in either length or width and which contain impervious pedestrian or vehicular traffic surfaces along two or more perimeters. If pop-up sprays or rotary sprinkler heads are used in a new irrigation system, the sprinkler heads must direct flow away from any adjacent surface and shall not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.
3. Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscape area.

(c) Water pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the

manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads.

(d) Piping. Piping in irrigation systems must be designed and installed so that the flow of water in the pipe will not exceed a velocity of five feet per second for polyvinyl chloride (PVC) pipe.

(e) Irrigation zones. Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements.

(f) Matched precipitation rate. Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.

(g) Irrigation systems shall not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar, or any other impervious material, such as, but not limited to, walls, fences, sidewalks, streets, etc.

(h) Master valve. When provided, a master valve shall be installed on the discharge side of the backflow prevention device on all new installations.

(i) PVC pipe primer solvent. All new irrigation systems that ate installed using PVC pipe and fittings shall be primed with a colored primer prior to applying the PVC cement in accordance with the International Plumbing Code (Section 605).

(j) Rain and freeze shut-off devices or other technology. All new automatically controlled irrigation systems must include sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freeze or rainfall. Rain and freeze shut-off technology must be installed according to the manufacturer’s published recommendations. Repairs to existing automatic

irrigation systems that require replacement of an existing controller must include a sensor or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freeze or rainfall.

(k) Isolation valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device.

(l) Depth coverage of piping. Piping in all irrigation systems must be installed according to the manufacturer's published specifications for depth coverage of piping.

1. If the manufacturer has not published specifications for depth coverage of piping, the piping must be installed to provide minimum depth coverage of six inches of select backfill, between the top of the pipe and the natural grade of the topsoil. All portions of the irrigation system that fail to meet this standard must be noted on the irrigation plan. If the area being irrigated has rock at the depth of six inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues.
2. if a utility, man-made structure, or roots create an unavoidable obstacle, which makes the six-inch depth coverage requirement impractical, the piping shall be installed to provide minimum of two inches of select back fill between the top of the pipe and the natural grade of the topsoil.
3. All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.

(m) Wiring irrigation systems.

1. Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.

2. Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation.
3. Electrical wire splices which may be exposed to moisture must be waterproof as certified by the wire splice manufacturer.
4. Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of six inches of select backfill.

(n) Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system. If a hose bib (an outdoor water faucet that has hose threads on the spout) is connected to an irrigation system for the purpose of providing supplemental water to an area, the hose bib must be installed using a quick coupler key on a quick coupler installed in a covered purple valve box and the hose bib and any hoses connected to the bib must be labeled "non potable, not safe for drinking." An isolation valve must be installed upstream of a quick coupler connecting a hose bib to an irrigation system.

(o) Beginning January 1, 2010, either a licensed irrigator or a licensed irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not onsite, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.

Section 82-23. Completion of Irrigation System Installation

Upon completion of the irrigation system, the irrigator or irrigation technician who provided supervision for the on-site installation shall be required to complete four items:

(a) a final “walk through” with the irrigation system’s owner or the owner’s representative to explain the operation of the system;

(b) the maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system’s owner or the owner’s representative and shall sign, date, and seal the checklist. If the irrigation system’s owner or the owner’s representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the irrigation system’s owner or the owner’s representative signature line. The irrigation system’s owner or the owner’s representative will be given the original maintenance checklist and a duplicate copy of the maintenance checklist shall be maintained by the irrigator. The items on the maintenance checklist shall include but are not limited to:

1. the manufacturer’s manual for the automatic controller, if the system is automatic;
2. a seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coeffiecient factors, and site factors;
3. a list of components, such as the nozzle, or pump filters, and other such components; that require maintenance and the recommended frequency for the service; and
4. the statement, “this irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan and is properly adjusted for the most efficient application of water at this time.”

(c) A permanent sticker which contains the irrigator’s name, license number, company name, telephone number and the dates of the warranty period shall be

affixed to each automatic controller installed by the irrigator or irrigation technician. If the irrigation system is manual, the sticker must be printed with waterproof ink and include the items of information as noted above.

(d) The irrigation plan indicating the actual installation of the system must be provided to the irrigation system's owner or the owner's representative.

Section 82-24. Maintenance, Alteration, Repair, or Service of Irrigation Systems

(a) The licensed irrigator is responsible for all work that the irrigator performed during the maintenance, alteration, repair, or service of an irrigation system during the warranty period. The irrigator or business owner is not responsible for the professional negligence of any other irrigator who subsequently conducts any irrigation service on the same irrigation system.

(b) All trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system must be backfilled and compacted to the original grade.

(c) Colored PVC pipe primer solvent must be used on all pipe and fittings used in the maintenance, alteration, repair, or service of an irrigation system in accordance with the International Plumbing Code (Section 605).

(d) When maintenance, alteration, repair, or service of an irrigation system involves excavation work at the water meter or backflow prevention device, an isolation valve shall be installed, if an isolation valve is not present.

Section 82-25. Reclaimed Water

Reclaimed water may be utilized in landscape irrigation systems if:

(a) there is no direct contact with edible crops, unless the crop is pasteurized before consumption;

(b) the irrigation system does not spray water across property lines that do not belong to the irrigation systems owner;

(c) the irrigation system is installed using purple components;

(d) the domestic potable water line is connected using an air gap or a reduced pressure principle backflow prevention device, in accordance with Title 30, Texas Administrative Code, Section 290.47(i) (relating to Appendices);

(e) a minimum of an eight inch by eight inch sign, in English and Spanish, is prominently posted on/in the area that is being irrigated, that reads, “RECLAIMED WATER-DO NOT DRINK” and “AGUA DE RECUPERACION-NO BEBER”; and

(f) backflow prevention on the reclaimed water supply line shall be in accordance with the regulations of the city’s water provider.

Section 82-26. Advertisement Requirements

(a) All vehicles used in the performance of irrigation installation, maintenance, alteration, repair, or service must display the irrigator’s license number in the form of “LI_____ “ in a contrasting color of block letters at least two inches high, on both sides of the vehicle.

(b) All forms of written and electronic advertisements for irrigation services must display the irrigator’s license number in the form of “LI_____ “. Any form of advertisement, including business cards, and estimates which displays an entity’s or individual’s name other than that of the licensed irrigator must also display the name of the licensed irrigator and the licensed irrigator’s license number. Trailers that advertise irrigation services must display the irrigator’s license number.

(c) The name, mailing address, and telephone number of the commission must be prominently displayed on a legible sign and displayed in plain view for the purpose of addressing complaints at the permanent structure where irrigation business is primarily conducted and irrigation records are kept.

Section 82-27. Contracts

(a) All contracts to install an irrigation system must be in writing and signed by each party and must specify the irrigator's name, license number, business address, current business telephone numbers, the date that each party signed the agreement, the total agreed price, and must contain the statement, "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 13087, Austin, Texas 78711-3087. TCEQ'S website is: www.tceq.state.tx.us." all contracts must include the irrigator's seal, signature, and date.

(b) All written estimates, proposals, bids, and invoices relating to the installation or repair of an irrigation system(s) must include the irrigator's name, license number, business address current business telephone numbers, and must contain the statement, "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 13087, Austin, Texas 78711-3087. TCEQ'S website is: www.tceq.state.tx.us."

(c) An individual who agrees by contract to provide irrigation services as defined in Title 30, Texas Administrative Code, Section 344.30 (relating to License Required) shall hold an irrigator license issued under Title 30, Texas Administrative Code, Chapter 30 (relating to Occupational Licenses and Registrations) unless the contract is a pass-through contract as defined in Title 30, Texas Administrative Code, Section 344.1(36) (relating to Definitions). If a pass-through contract includes irrigation services, then the irrigation portion of the contract can only be performed by a licensed irrigator. If an irrigator installs a system pursuant to a pass through contract, the irrigator shall still be responsible

for providing the irrigation systems' owner or through contract, the irrigator shall still be responsible for providing the irrigation system's owner or owner's representative a copy of the warranty and all other documents required under this chapter. A pass-through contract must identify by name and license number of the irrigator that will perform the work and must provide a mechanism for contacting the irrigator for irrigation system warranty work.

(d) The contract must include the dates that the warranty is valid.

Section 82-28. Warranties for Systems

(a) On all installations of new irrigation systems, an irrigator shall present the irrigation system's owner or owner's representative with a written warranty covering materials and labor furnished in the new installation of the irrigation system. The irrigator shall be responsible for adhering to terms of the warranty. If the irrigator's warranty is less than the manufacturer's warranty for the system components, then the irrigator shall provide the irrigation system's owner or owner's representative with applicable information regarding the manufacturer's warranty as part of an irrigator's contract, a separate warranty document is not required.

(b) An irrigator's written warranty on new irrigation systems must specify the irrigator's name, business address, current business telephone numbers, and must contain the signature of the irrigation system's owner or owner's representative confirming receipt of the warranty and must contain the statement, "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 13087, Austin, Texas 78711-3087. TCEQ'S website is: www.tceq.state.tx.us." All contracts must include the irrigator's seal, signature, and date.

(c) On all maintenance, alterations, repairs, or service to existing irrigation systems, an irrigator shall present the irrigation system's owner or owner's representative

a written document that identifies the materials furnished in the maintenance, alterations, repairs, or service. If a warranty is provided, the irrigator shall abide by the terms. The warranty document must include the irrigator's name and business contact information.

Section 82-29. Duties and Responsibilities of Irrigation Inspectors

A licensed irrigation inspector or licensed plumbing inspector shall enforce the ordinance of the city, and shall be responsible for:

(a) verifying that the appropriate permits have been obtained for an irrigation system and that the irrigator and installer or irrigation technician, if applicable, are licensed;

(b) inspecting the irrigation system;

(c) determining that the irrigation system complies with the requirements of this article;

(d) determining that the appropriate backflow prevention device was installed, tested, and test results provided to the city;

(e) investigating complaints related to irrigation system installation, maintenance, alterations, repairs, or service of an irrigation system and advertisement of irrigation services; and

(f) maintaining records according to this chapter.

Section 82-30. Items not covered by this ordinance

Any item not covered by this ordinance and required by law shall be governed by the Texas Occupations Code, the Texas Water Code, Title 30 of the Texas Administrative Code, and any other applicable state statute or Texas Commission on Environmental Quality rule.

Section 82-31. Fees

The city council hereby establishes the fee for a permit for each irrigation system to be $200.00 up until September 30th, 2009. This fee may be amended by resolution of the city council in a schedule of fees. The fees for an irrigation system permit shall be a part of the schedule of fees and shall be amended as a part of that schedule starting October 1, 2009.

Section 82-32. Severability

If an article, section, sub-section, sentence or phrase of this Ordinance should be held to be invalid for any reason whatsoever, such invalidity shall not affect the remaining portions of this Ordinance which shall remain in full force and effect and to this end the provisions of this Ordinance are declared to be severable.

Section 82-33. Cumulative

All ordinances or parts of ordinances not consistent or conflicting with the provisions of this Ordinance are herby repealed. Provided that such repeal shall be only to the extent of such inconsistency and in all other respects this Ordinance shall be cumulative of other ordinances regulating and governing the subject matter covered in this Ordinance.

Section 82-34. Penalty

Any person, firm, association or persons, company, corporation, or their agents, servants, or employees violating or failing to comply with any of the provisions of this article shall be fined, two thousand dollars ($2,000.00), and each day any violation of non compliance continues shall constitute a separate and distinct offense. The penalty provided herein shall be cumulative of other remedies provided in V.T.C.A. Local Government Code Section 54.016 and as may be amended, and such remedies may be exercised in enforcing this article whether or not there has been a complaint filed.

Section 82-35. Savings

All rights and remedies of the City of Burleson are expressly saved as to any and all violations of the provisions of any ordinances affecting irrigation systems and irrigation system regulations which have accrued at the time of the effective date of this ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances, same shall not be affected by this ordinance but may be prosecuted until final disposition by the courts.

Section 82-36. Publication

The City Secretary of the City of Burleson is hereby directed to publish in the official newspaper of the City of Burleson, the caption, penalty clause and effective date clause of this ordinance at least two (2) times within fourteen (14) days after the passage of this ordinance as required by Section 36 of the Charter of the City of Burleson.

Section 82-37. Effective date

PASSED AND APPROVED this _____day of _____, 2009.

_____

MAYOR

ATTEST:

_____

City Secretary

First reading: _____