ORDINANCE NO. 991

Adopting Landscape Irrigation Standards

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF CANYON, TEXAS: AMENDING THE CODE OF ORDINANCES BY CREATING CHAPTER 158, LANDSCAPE IRRIGATION, IN ORDER TO ESTABLISH MINIMUM STANDARDS FOR INSTALLATION OF LANDSCAPE IRRIGATION SYSTEMS WITHIN THE CITY; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEALER; PROVIDING FOR PENALTY; PROVIDING FOR PUBLICATION AND EFFECTIVE DATE.

WHEREAS; the City Commission has determined that water conservation and environmental protection are important issues and concerns affecting the city; and

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

WHEREAS; landscape irrigation system installation standards have been established by TCEQ Title 30 Texas Administrative Code Chapter 344; 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 and enhanced quality of life for the citizens of the City of Canyon.

NOW THEREFORE:

BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF CANYON, TEXAS;

SECTION 1: That the Code of Ordinances shall be and hereby is amended by adding Chapter 158: Landscape Irrigation, to read as follows:

158.01 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 system 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 States Code Service, §3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

(13) **Freeze Drain** - A device to allow water to drain from the heads within each zone.

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

(15) **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.

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

(17) **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.

(18) **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).

(19) **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).

(20) **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.

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

(22) **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.

(23) **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 the connection of such system in or 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 (relating to Occupational Licenses and Registrations).

(24) **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.

(25) **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.

(26) **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.

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

(28) **License** - An occupational license that is issued by the Texas Commission on 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.

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

(30) **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 irrigation 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.

(31) **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.

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

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

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

(35) **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.

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

(37) **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.

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

(39) **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 of a landscape irrigation system.

(40) **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.

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

(42) **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 an irrigation technician who is working under the direction of a licensed irrigator to install, maintain, alter, repair or service an irrigation system.

(43) **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.

(44) **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.

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

158.02 Valid License Required.

Any person who connects an irrigation system to the water supply within the city 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. The required license shall be registered with the City of Canyon in accordance with Section 150.23 of the Code of Ordinances.

Exceptions:

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. The other licensing exemptions stated in Texas Occupations Code §1903.002 (as amended or recodified) are incorporated herein.

158.03 Permit Required; Standards.

Any person installing an irrigation system within the territorial limits of the city 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 and the City of Canyon Irrigation Standards duly adopted herein. Permits are issued in accordance with said standards and Section 150.23 of the Code of Ordinances.

Exceptions:

(1) An irrigation system that is that 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.

158.04 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 comply with the International Plumbing Code as adopted by the city and/or the Uniform Plumbing Code and must be certified by the American Society of Sanitary Engineers (ASSE); or the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California; or the International Code Council-Evaluation Service (ICC ES); or the International Association of Plumbing and Mechanical Officials-Research and Testing (IAPMO R&T); or any other certifying agencies that have 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 top 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;

(5) there must be space on the side of the double check valve to test and repair the double check valve; and

(6) the valve must be installed in a sealed box to protect infiltration of soil to maintain working space.

(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.

158.05 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.

158.06 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.

158.07 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 operational integrity of the irrigation system;

(2) violate any requirements of this 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 component; and

(F) main line and lateral piping.

(8) the scale used;

(9) irrigation components in any right-of-way shall be clearly indicated on plan as being installed in the right-of-way. Further, the irrigator is solely responsible for requesting and complying with all state and local line-locate laws; and

(10) the design pressure.

158.08 Design and Installation: Minimum Standards.

(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 less 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. Each separate zone must utilize an automatic freeze drain.

(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 landscaped 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 are installed using PVC pipe and fittings shall be primed with a colored primer prior to applying the PVC cement in accordance with the Uniform Plumbing Code or the International Plumbing Code.

(j) Rain/freeze or moisture/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 moisture, rainfall, or freezing temperatures. Rain/freeze or moisture/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 moisture, rainfall, or freezing temperatures.

(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, but not less than a minimum coverage of twenty-four (24) inches except any piping not under constant pressure is permitted to have a minimum coverage of twelve (12) inches. 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 to the same depth as the irrigation system piping and an in accordance with the City of Canyon Electrical Code.

(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) 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.

158.09 Required Inspections.

The irrigator is responsible for ensuring no portion of any irrigation system is concealed prior to inspection by the City of Canyon, to include any and all piping, wiring and connections to the potable water system. This may require multiple inspections to verify compliance with the City of Canyon Irrigation Standards. The irrigator is responsible for scheduling and obtaining

approval of the final inspection, demonstrating the system is installed and performing in compliance with the City of Canyon Irrigation Standards.

158.10 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 five (5) items:

(1) A final "walk through" with the irrigation system's owner or the owner's representative to explain the operation of the system;

(2) The maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system's owner or owner's representative and shall sign, date, and seal the checklist. If the irrigation system's owner or 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 owner's representative's signature line. The irrigation system owner or 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:

(A) The manufacturer's manual for the automatic controller, if the system is automatic;

(B) 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 coefficient factors, and site factors;

(C) 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

(D) 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."

(3) 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 shall be affixed to the original maintenance checklist. The information contained on the sticker must be printed with waterproof ink and include:

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

(5) Pass the final inspection by the City of Canyon.

158.11 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 returned to the original grade with compacted select backfill.

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

(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.

158.12 Reclaimed Water.

A reclaimed water system shall be installed in accordance with the provisions for Gray Water Recycling Systems in the City of Canyon Code of Ordinances. Reclaimed water may be utilized in landscape irrigation systems if:

(1) There is no direct contact with edible crops, unless the crop is pasteurized before consumption;
(2) The irrigation system does not spray water across property lines that do not belong to the irrigation system's owner;
(3) The irrigation system is installed using purple components;
(4) 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);
(5) A minimum of an eight (8) inch by eight (8) 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 RECUPERACIÓN – NO BEBER"; and
(6) Backflow prevention on the reclaimed water supply line shall be in accordance with the regulations of the city's water provider.

158.13 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.

158.14 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 number(s), and 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 web site is: www.tceq.state.tx.us." The irrigator shall update the statement if the preceding web address should change.

(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 system's 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 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.

158.15 Warranties for Systems.

(a) On all installations of new irrigation systems, an irrigator shall, upon full payment by the owner or final inspection approval by the city, whichever occurs later, 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 the owner's representative with applicable information regarding the manufacturer's warranty period. The warranty must include the irrigator's seal, signature, and date. If the warranty is 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, and business telephone number(s), must contain the signature of the irrigation system's owner or owner's representative confirming receipt of the warranty and must include the statement: "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 130897, Austin, Texas 78711-3087. TCEQ's website is: www.tceq.state.tx.us." an irrigator shall update this statement in the event the preceding web address changes.

(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, alteration, repair, 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.

158.16 Duties and Responsibilities of City Irrigation Inspectors.

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

(1) 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;
(2) Inspecting the irrigation system;
(3) Determining that the irrigation system complies with the requirements of this chapter;
(4) Determining that the appropriate backflow prevention device was installed, tested, and test results provided to the city;
(5) Investigating complaints related to irrigation system installation, maintenance, alteration, repairs, or service of an irrigation system and advertisement of irrigation services; and
(6) Maintaining records according to this chapter.

158.17 Items not Covered by this Ordinance; Fees.

Any item not covered by their 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. Licensing and installation permit fees shall be as stated in Section 150.23.

SECTION 2: Severability. If any provision, section, subsection, clause, or the application of same to any person or set of circumstances for any reason is held to be unconstitutional, void or invalid or for any reason unenforceable, the validity of the remaining portions of this ordinance or the application thereby shall remain in effect, it being the intent of the City Commission of the City of Canyon, Texas in adopting this ordinance, that no portion thereof or provision continued

herein shall become inoperative or fail by any reasons of the unconstitutionality of any other portion or provision.

SECTION 3: Repealer. All ordinances, parts of ordinances, resolutions, and parts of resolutions in conflict with this ordinance are hereby repealed to the extent of conflict with this ordinance.

SECTION 4: Penalty. It is an offense to violate any part of this ordinance, punishable upon conviction in accordance with Section 10.99 of the City of Canyon Code of Ordinances.

SECTION 5: Publishing and Effective Date. This ordinance shall be published according to law and become effective November 1, 2013.

INTRODUCED AND PASSED by the City Commission of the City of Canyon, Texas on the 16th day of September, 2013

Quinn Alexander, Mayor

ATTEST:

Gretchen Mercer, City Clerk