ORDINANCE NO. 308-01-09-2024

AN ORDINANCE OF THE CITY OF WEST TAWAKONI PROVIDING FOR "BACKFLOW PREVENTION"; PROVIDING FOR SEVERABILITY; AND THAT THIS ORDINANCE SHALL BECOME EFFECTIVE FROM AND AFTER ITS PASSAGE AND ADOPTION AND PUBLICAITON IN THE OFFICIAL NEWSPAPER OF THE CITY.

WHEREAS, the City of West Tawakoni is authorized to adopt ordinances pursuant to Texas Local Government Code; and

WHEREAS, in order to better serve and protect the health, safety, welfare and well-being of the citizens of the City of West Tawakoni, Texas the City Council do hereby adopt this ordinance under the following terms and conditions as follows:

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WEST TAWAKONI, TEXAS THAT:

Section 1. Backflow Prevention

Section 1.1. Cross Connection Control and Prevention

Section 1.11. Cross connection standards. Every source of contamination or possible contamination from any contaminant which originates from, or is located at, a residential or commercial establishment, and said source of contamination or possible contamination is connected to any public potable water supply or provides potable water to the public shall be equipped with the protection required under the provisions of this article.

Section 1.12. Definitions. For the purpose of this article, the following definitions shall apply unless the context clearly indicates or requires a different meaning. If a word used in this article is not contained in the following list, it shall have the definition listed in the most recent edition of the Manual of Cross Connection Control published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California. The following definitions shall apply to this article:

Air gap means a physical separation between the free-flowing discharge end of a potable water supply piping and/or appurtenance and an open or non-pressure receiving vessel, plumbing fixture or another device. An "approved air-gap separation" shall be at least twice the diameter of the supply pipe measured vertically above the overflow rim of the vessel, plumbing fixture or other device, and shall not be less than one inch in any case.

Approved backflow prevention assembly or backflow assembly or assembly means any testable assembly to counteract back pressure or prevent back siphonage.

Atmospheric vacuum backflow prevention device or atmospheric vacuum breaker or AVB means a device used to prevent back siphonage in non-health hazard conditions. This device cannot be tested and cannot prevent backpressure backflow.

Auxiliary supply means any water source or system other than the public potable water system that is or may be available in a building or on real property, including reuse water, groundwater or surface water used for industrial, irrigation or any other purpose.

Backflow means the flow in the direction opposite to the normal flow of the City's potable water system, or the introduction of any foreign liquids, gases, or substances into the City's potable water system.

Backflow prevention assembly tester means a licensed tester who is registered with the City's third-party vendor to test backflow pressure assemblies on any domestic, commercial, industrial or irrigation service.

Backpressure means any elevation of pressure in the downstream piping system (by any means) above the supply pressure at the point of consideration which would cause, or tend to cause, a reversal of the normal direction of the flow of water in the City's potable water system, or the introduction of fluids, mixtures, or substances from any source other than the intended source.

Back siphonage means the flow of water or other liquids, mixture, or substances into the distribution pipes of a potable water supply system from any source, other than its intended source, caused by a sudden reduction of pressure in the potable water supply system.

Boresight or boresight to daylight means the provision of adequate drainage for assemblies installed in vaults through the use of an unobstructed drainpipe.

Commercial establishment means any property or location which is used for the manufacture, production, storage, wholesaling or retailing of any good or ware which is, or may be, placed in the flow of commerce, or any property or location which is used for the provision of any service for compensation.

Contaminants means any foreign material, solid or liquid, not common to the potable water supply which makes or may make the water unfit or undesirable for human or animal consumption.

Contamination means the admission of contaminants into the potable water supply system.

Cross connections means any connection, physical or otherwise, between a potable water supply system and any plumbing fixture or any tank, receptable, equipment, or device through which it may be possible for any reuse, non-potable, used, unclean, polluted and/or contaminated water, or other substances, to enter into any part of such potable water system under any condition or set of conditions.

Cross connection control device means any device placed upon any connection, physical or otherwise, between a potable water supply system and any plumbing fixture or any tank, receptacle, equipment, or device, which is designed to prevent reuse, non-potable, used, unclean, polluted and/or contaminated water, or other substances, from entering into any part of such potable water system under any condition or set of conditions.

Degree of hazard means the hazard classification that shall be assigned to all actual or potential cross connections.

A. The term "health hazard" means an actual or potential threat of contamination of a physical or toxic nature to the public potable water system or the consumer's potable water system that would be a danger to health.
B. The term "high hazard" means the classification assigned to an actual or potential cross connection that potentially could allow a substance that may cause illness or death to backflow into the potable water supply.
C. The term "low hazard" means the classification assigned to an actual or potential cross connection that potentially could allow a substance that may be objectionable but not hazardous to a person's health to backflow into the potable water supply.

D. The term “plumbing hazard” means an internal or plumbing-type cross connection in a consumer’s potable water system that may be either a pollution or a contamination-type hazard.
E. The term “pollution hazard” means an actual or potential threat to the physical properties of the water system or the potability of the public or the consumer’s potable water system but which would not constitute a health or system hazard, as defined herein. Maximum degree of intensity of pollution which the potable water system could be degraded under this definition would cause a nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances.
F. The term “system hazard” means an actual or potential threat of severe danger to the physical properties of the public or consumer’s potable water supply or of pollution or contamination that would have detrimental effect on the quality of the potable water in the system.

City Building Official or Licensed authorized personnel means City Building Official or Licensed authorized personnel of utilities and environmental services, or his designee.

Double check detector backflow prevention assembly or double check detector or DCDA means an assembly composed of a line-size approved double check assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately for very low rates of flow.

Double check valve backflow prevention assembly or double check assembly or double check or DC means an assembly which consists of two independently acting, approved check valves, including tightly closing resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks.

Mobile unit means any operation which may have the potential to introduce contaminants into a potable water system from a mobile source. These include, but are not limited to, carpet-cleaning vehicles, water-hauling vehicles, street-cleaning vehicles, liquid-waste vehicles, power-wash operation, and pest control vehicles.

Non-residential use means water used by any person other than a residential customer of the water supply and include all uses not specifically included in “residential uses.”

Point-of-use isolation means the appropriate backflow prevention within the consumer’s water system that the point at which the actual or potential cross connection exists.

Potable water supply means any water supply intended or used for human consumption or other domestic use.

Premises means any piece of property to which water is provided, including all improvements, mobile structures, and structures located on the property.

Premises isolation means the appropriate backflow prevention at the service connection between the public water system and the water user.

Pressure vacuum breaker backflow prevention assembly or pressure vacuum breaker or PVB means an assembly which provides protection against back siphonage but does not provide adequate protection

against backpressure backflow. The assembly is a combination of a single check valve with an AVB and can be used with downstream resilient seated shutoff valves. In addition, the assembly must have suction and discharge gate valves and resilient seated test cocks which allow the complete testing of the assembly.

Public water system or water system means any public or privately owned water system which supplies water for public domestic use. The system will include all services, reservoirs, facilities, and ay equipment used in the process of producing, treating, storing, or conveying the water for public consumption.

Reduced pressure principal detector backflow prevention assembly or reduced pressure detector or RPDA means an assembly composed of a line-size approved reduced pressure principal assembly with a bypass containing a specific water meter and an approved reduces pressure principal backflow prevention assembly. The meter must be capable of accurately registering very low rates of flow.

Reduced pressure principal backflow prevention assembly or reduced pressure principal assembly or RP assembly or RP means an assembly containing two independently acting approved check valves together with a hydraulically operated, mechanically independent pressure differential relief valve located between the check valves and below the first check. The assembly shall include properly located resilient seated test cocks and a tightly closing resilient seated shutoff valve the end of the assembly.

Residential use means water use of any residential customer of the water supply and shall include, but is not limited to, single-family dwellings, duplexes, multiplex, housing, and apartments where the individual units are each on a separate meter; or, in cases where two or more units are served by one meter, the units are full-time dwellings.

Service connection means the point of delivery at which the water supplier loses control of the water.

Spill-resistant pressure vacuum breaker or SVB means 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. This assembly must be equipped with a properly located resilient seated test cock and tightly closing resilient seated shutoff valves attached at each end of the assembly.

Tamper means to interfere in a harmful or disruptive manner, or to make alterations or adjustments.

Thermal expansion means heated water that does not have the space to expand.

Third party vendor means a third party contracted by the City to provide backflow testing notification and data management services on behalf of the City.

Used water means water supplied by a public water system to a water user's system after it has passed through the service connection.

Water customer means the person or company on the water billing account agreement with the City.

Section 1.13. Right-of-way encroachment. No person shall install or maintain an assembly, or any part thereof, upon or within any City right-of-way except as provided in this article.

A. An assembly required by the City may be installed upon or within any City right-of-way only if the owner demonstrates to the City's satisfaction that there is no other feasible location for installing the assembly and installing it in the right-of-way will not interfere with traffic, utilities, or any other purpose for which the right-of-way exists. The person installing an

assembly must obtain express written approval from the City regarding the location, height, depth, enclosure, and other requisites of the assembly prior to its installation.

B. All permits and inspections required by any applicable code or regulation to perform work in the right-of-way shall be obtained prior to the installation of the assembly.

C. The assembly shall be installed below or flush with the surrounding grade except when it is not practicable to install it in this manner. Any assembly or portion of an assembly which extends above ground shall be located no closer than 18 inches to the face of any curb.

D. The City shall not be liable for any damage done to or caused by an assembly installed in a right-of-way. A person that installs an assembly in a City right-of-way shall repair, clean up, and restore any and all streets, alleys, highways, public throughfares, public utility easements, public ways, and other public property within a reasonable time, not to exceed ten days after the completion of the work, to as good or better condition as existed prior to the commencement of the work and to the satisfaction of the City Building Official or Licensed authorized personnel.

E. A property owner shall, at the request of the City and at the owner's expense, relocate an assembly that encroaches upon any City right-of-way when such relocation is deemed necessary by the City.

F. A person commits an offense if he fails to relocate an assembly located in or upon any City right-of-way after receiving a written order from the City Building Official or Licensed authorized personnel, requesting such relocation.

Section 1.14. Multiple connections. The owner of any premises requiring multiple service connections for adequacy of supply and/or fire protection must install an assembly on each of the additional service lines to the premises. The type of assembly required will be determined by the degree of hazard that may occur in the event of an interconnect between any of the buildings on the premises.

Section 1.15. Protection required, installation.

A. The assembly protection which is required under this article shall be any of the duly authorized assemblies listed in the (IPC) International Plumbing Code, or as determined by the City Building Official or Licensed authorized personnel. Each assembly must be approved in writing by the City Building Official or Licensed authorized personnel, of the City prior to installation. Failure to obtain such written approval prior to installation of the assembly may result in the assembly failing to meet final approval by the City Building Official or Licensed authorized personnel. The City Building Official or Licensed authorized personnel, shall determine the type and location of assembly to be installed within the area served by the City. An assembly shall be required in each of the following circumstances, but the City Building Official or Licensed authorized personnel, is not limited to requiring the installation of an assembly only in the following circumstances:

    a. The nature and extent of any activity on or near the premises, or the materials used in connection with any activity on or near the premises, or materials stored on or near the premises, may contaminate or pollute the potable water supply.

    b. Premises having any one or more cross connections identified or one or more cross connections present on the premises.

c. One or more cross connections are present on the premises and the cross connections are protected by an atmospheric vacuum breaker device (AVB).
d. Internal cross connections are present that are not correctable
e. Intricate plumbing arrangements are present which make it impractical to ascertain whether cross connections exist.
f. There is a repeated history of cross connections being established or re-established on the premises.
g. There is unduly restricted entry so that inspections for cross connections cannot be made with sufficient frequency to assure that cross connections do not exist
h. Materials are being used on the premises such that, if backflow should occur, a health hazard may result.
i. Installation of an approved backflow prevention assembly is deemed to be necessary to accomplish the purpose of these regulations in the sole judgment of the City.
j. An appropriate cross connection survey report form has not been filed with the utility department of the City after a request by the City.
k. A fire sprinkler system on the premises is connected to the City's water system.
l. All new construction, if deemed necessary as a result of the customer service inspection. The type of assembly required shall be commensurate with the degree of hazard as determined by the City Building Official or Licensed authorized personnel.
m. When a building is constructed on commercial premises, and the end use of such building is not determined or could change, a reduced pressure principal backflow prevention assembly must be installed at the service connection that supplies water for public domestic use.
n. Any used water return system is present on the premises.
o. In the event a point-of-use assembly has not had the testing or repair done as required by this section, a premises isolation assembly will be required.
p. If it is determined that additions or alterations have been made to the plumbing system without obtaining proper permits, premises isolation may be required.
q. All multistory buildings or any building with a booster pump or elevated storage tank.
r. Retrofitting will be required on all high hazard connections, and in additional circumstances in which the City deems it necessary to retrofit.

B. All assemblies installed after the effective date of the ordinance from which this article is derived shall be installed in a manner designed to facilitate ease of inspection by the City Building Official or Licensed authorized personnel of the City. Any currently installed assemblies that, in the opinion of the City Building Official or Licensed authorized personnel, are located in inaccessible locations or where the tester is subjected to physical danger, shall be relocated to a location approved in writing by the City Building Official or Licensed authorized personnel.

Section 1.16. Testing of assemblies

A. The City Building Official or Licensed authorized personnel, shall inspect the test, or cause to be inspected and tested, all assemblies in each of the following circumstances.
   a. Immediately after installation.
   b. Whenever the assembly is relocated.

c. A minimum of once every 12 months for all assemblies.
d. Premises that have been vacated and unoccupied for 12 months, prior to occupancy; or
e. Immediately after repairs have been made to the assembly.

B. All assembly testing shall be performed by a licensed backflow prevention assembly tester registered with the third-party vendor.

C. Duly authorized employees of the City are authorized to enter any public or private property at any reasonable time for the purpose of enforcing this article. Persons and occupants of premises which are provided water service by the City, either directly or indirectly, shall allow the City ready access at all reasonable times to all parts of the premises for the purposes of inspection, testing, records, examination, or in the performance of any of their duties. Where persons or occupants of premises have security measures in force which would require proper identification and clearance before entry onto their premises, the persons and occupants of the premises shall make necessary arrangements with their security personnel so that upon presentation of suitable identification, personnel from the City will be permitted to enter, without delay, for the purposes of performing their responsibilities.

D. The City shall not be liable on any person for any damage to an assembly that occurs during testing or repairing.

E. The City Building Official or Licensed authorized personnel, may cause a water use survey to be conducted at any commercial establishment located in the City which is served by a public water supply, or which provides water to the public. Upon determination by the City Building Official or Licensed authorized personnel that the commercial establishment falls under the provision of this article and requires an assembly, the City Building Official or Licensed authorized personnel, shall issue a notice to abate the condition or order the commercial establishment to install the proper assembly.

F. It is the responsibility of the property owner to have all assemblies tested upon installation in accordance with this article.

G. After the initial testing upon installation, it is the responsibility of the water customer to have all assemblies subsequently tested in accordance with the article. Assemblies may be required to be tested more frequently if the City Building Official or Licensed authorized personnel, deems it necessary.

H. All results from assembly testing, repairs and replacements by a licensed backflow prevention assembly tester shall be submitted to the third-party vendor.

Section 1.17. Thermal expansion. It is the responsibility of the property owner to eliminate the possibility of thermal expansion if a closed system has been created by the installation of an assembly.

Section 1.18. Pressure loss. Any reduction in water pressure caused by the installation of an assembly is not responsibility of the City. The City shall not be liable to any person for damages resulting from any reduction in water pressure caused by the installation of an assembly.

Section 1.19. Residential service connections. Any property owner at any residential property which has been determined to have an actual or potential cross connection will be required to eliminate the actual or potential cross connection or have an approved backflow assembly installed in accordance with this article.

Section 1.20. Customer service inspection.

A. Pursuant to commission water system regulations, a customer service inspection for cross connection control shall be completed by the City prior to providing continuous water service in each of the following circumstances:
    a. Water service to a newly constructed facility or previously non existing premises.
    b. After any material improvement to buildings or premises.
    c. Any correction or addition to the plumbing of any facility or premises served by the City; or
    d. The City Building Official or Licensed authorized personnel, deems it necessary.
B. Permanent water service shall not be supplied to a newly constructed facility until after the customer service inspection is completed.

Section 1.21. Installation guidelines and requirements for backflow prevention assemblies.

A. The following requirements shall apply to the installation of all assemblies:
    a. Approved backflow prevention assemblies shall be installed in accordance with state laws, commission rules, this article, and any other applicable law or regulation. The assembly installer must obtain the required plumbing permits and have the installation inspected by the City Building Official or licensed authorized personnel.
    b. With respect to facilities where the City Building Official or Licensed authorized personnel, requires an assembly to be installed at the point of delivery of the water supply, the installation of the assembly must be made at a point prior to any branch in the line. Such installation must be made on private property within two feet of the water meter. If deemed necessary, the City Building Official or Licensed authorized personnel, may specify other areas for installation of the assembly. Assemblies that must be installed, or are located on, City rights-of-way are the responsibility of the business or entity that the water line is serving.
    c. All assemblies must be protected from damage caused by freezing or other severe weather conditions.
    d. All assemblies shall be of a type and model approved in writing by the City Building Official or Licensed authorized personnel, prior to installation.
    e. All vertical installations of assemblies must have prior written approval by the City Building Official or Licensed authorized personnel.
    f. Approved backflow prevention assemblies that are larger than four inches and installed more than five feet above floor level must have a suitable platform for use by testing, inspection, or maintenance personnel.
    g. Bypass lines are prohibited. Pipe fittings which could be used for connecting a bypass line must not be installed on the premises.
    h. Lines should be thoroughly flushed prior to installation of an assembly. A strainer with blowout tapping may be required ahead of the assembly.
    i. All facilities that require continuous, uninterrupted water service and are required to have an assembly must make provisions for the parallel installation of assemblies of the same type so that testing, repair, and maintenance can be performed without interrupting the water service to the premises. The assemblies should be sized in such

a manner that either assembly, operating independently, will provide the maximum flow required.

j. The property owner assumes all responsibility for any damages resulting from installation of an assembly.

k. The water customer assumes all responsibility for any damages resulting from operation and/or maintenance of an assembly and shall be responsible for keeping all assembly vaults reasonably free of silt and debris.

l. Upon completion of installation, the City Building Official or Licensed authorized personnel shall be notified by the Permit Holder, and all assemblies must be inspected and tested. All assemblies must be approved in writing by and registered with the City Building Official or Licensed authorized personnel, and the property owner shall provide to the City Building Official or Licensed authorized personnel, the date of installation, manufacturer, model, type, size and serial number of the assembly, and initial test report.

m. Requests for variances from the specifications and requirements of this article will be evaluated on a case-by-case basis. Any deviations from this article must have prior written approval of the City Building Official or Licensed authorized personnel.

B. Upon written approval by the City Building Official or Licensed authorized personnel, reduced pressure principal backflow prevention assemblies (RPs) may be utilized on-premises where a substance is handled that would be hazardous to health if introduced into the potable water system. The RP is normally used in locations where an air gap is impractical. The RP must be effective against both back siphonage and backpressure.

C. (PVB) Pressure vacuum backflow devices are not allowed in flood zones.

a. RPs must be sized to provide an adequate supply of water and pressure for the premises being served. Flow characteristics are not standard. The manufacturer's specifications must be consulted for specific performance data.

b. Each RP assembly must be readily accessible for testing and maintenance and must be located in an area where water damage to building or furnishings would not occur in the event of a relief valve discharge. The property owner assumes all responsibility for any damage caused by water discharge from a RP assembly.

c. An approved air gap shall be located at the relief valve orifice of RP assemblies. This air gap shall be at least twice the inside diameter of the incoming supply line as measured vertically above the top rim of the drain and in no case less than one inch. An approved air gap funnel assembly may be used to direct minor discharges away from the assembly; however, this assembly may not be used to control flow in a continuous relief situation. Drain lines to accommodate full relief valve discharge flow would be installed.

d. No part of an RP assembly shall be submerged in water or installed in a location subject to flooding. RPs must be installed above grade in well-drained areas.

e. RP assembly enclosures shall be designed for ready access and sized to allow for the minimum clearances established below. Removable protective enclosures should be installed on smaller RP assemblies. Daylight drain ports must be provided to accommodate full pressure discharge from the RP assembly.

f. RP assemblies two inches and smaller shall have at least six inches of clearance on both sides and on top of the assembly, and 12 inches of clearance below and behind the assembly. All RP assemblies larger than two inches shall have a minimum of 12 inches of clearance on the back side, 24 inches of clearance on the test cock side. The relief valve opening shall be at least 12 inches (plus nominal size of assembly) above the floor or highest possible water level. Headroom of 60 inches is required in vaults without a fully removable top. A minimum access opening of 35 inches in diameter is required on all vault lids.

g. Vertical installation of RP assemblies is prohibited, unless if the assembly is approved for vertical installations.

h. All RP assemblies must be tested in accordance with this article. The initial testing is the responsibility of the property owner. The property owner must notify the City Building Official or Licensed authorized personnel, upon the installation of any assembly.

D. Reduced pressure principal detector backflow prevention assemblies (RPDAs) may be utilized in all installations requiring a reduced pressure principal backflow prevention assembly and detector metering.

a. RPDAs shall comply with the installation requirements applicable for reduced pressure principal backflow assemblies (RPs).

b. Each line-size RP assembly and the bypass RP assembly must be tested for proper functioning. A separate test report for each assembly must be completed by the licensed tester; unless if the RPDA is a Type II bypass and one test report must be completed.

E. Double check valve backflow prevention assemblies (DCs) may be utilized on premises where a substance is handled that would be objectionable but not hazardous to health if introduced into the potable water system.

a. DCs must be sized to provide an adequate supply of water and pressure for the premises being served. The manufacturer's specifications must be consulted for specific performance data.

b. Premises where an uninterrupted water supply is critical must be provided with two DC assemblies installed in parallel. DC assemblies should be sized in such a manner that either assembly, operating independently, will provide the maximum flow required.

c. Each DC assembly shall be readily accessible with adequate room for testing and maintenance. DCs may be installed below grade, provided that all test cocks are fitted with brass pipe plugs. All vaults shall be well drained, constructed of suitable materials, and sized to allow for the minimum clearances established below.

d. DC assemblies two inches and smaller shall have at least six inches of clearance below and on both sides of the assembly, and if located in a vault, the bottom of the assembly shall be not more than 24 inches below grade. All DC assemblies larger than two inches shall have a minimum clearance of 12 inches on the back side, 24 inches of clearance on the test cock side, and 12 inches of clearance below the assembly. Headroom of 60 inches is required in vaults without a fully removable top. A minimum access opening of 36 inches in diameter is required on all vault lids. "Y"

patter DCs shall be installed so that the checks are horizontal and the test cocks face upward. These clearance standards apply to all DC assemblies installed in vaults, enclosures, or meter boxes.

e. Vertical installation of DC assemblies is prohibited, unless if the assembly is approved for vertical installations.

f. All DCs must be tested in accordance with this article. The initial testing is the responsibility of the assembly and property owner. The property owner must notify the City Building Official or Licensed authorized personnel upon the installation of any assembly.

F. Double check detector backflow prevention assemblies (DCDA) may be utilized in all installations requiring a DC and detector metering.

a. DCDAs shall comply with the installation requirements applicable for DCs.

b. Each line-sized DC assembly and the bypass DC assembly must be tested for proper functioning. A separate test report for each assembly must be competed by the licensed tester; unless if het DCDA is a Type II bypass and one test report must be completed.

G. Pressure vacuum breaker backflow prevention assemblies (PVBs) may be utilized at point-of-use protection only and where a substance is handled that would be objectionable but not hazardous to health if introduced into the potable water system. PVBs protect against back siphonage only and shall not be installed where there is potential for backpressure contamination.

a. Each PVB assembly shall be installed a minimum of 12 inches above the highest downstream piping.

b. PVBs shall not be installed in any area subject to flooding or where damage may occur from water discharge.

c. Each PVB assembly shall be readily accessible for testing and maintenance, with a minimum clearance of 12 inches in all areas immediately adjacent to the assembly.

d. All PVBs must be tested in accordance with this article. The initial testing is the responsibility of the assembly and property owner. The property owner must notify the City Building Official or Licensed authorized personnel upon the installation of any assembly.

H. Spill-resistant pressure vacuum breaker backflow prevention assemblies (SVBs) may be utilized in all installations requiring a pressure vacuum breaker. SVBs shall comply with the installation requirements applicable for pressure vacuum breaker backflow prevention assemblies (PVBs).

Section 1.22. Air gap separation. Air gap separations provide maximum protection from backflow hazards and may be utilized in water systems situated on premises where a substance is present which would be hazardous to health if introduce into the potable water system.

A. An air gap separation shall be at least twice the diameter of the supply pipeline measured vertically above the top rim of the receiving vessel, and in no case less than one inch. If splashing is a problem, tubular screens may be attached or the supply line may be cut at a 45 -degree angle, and the air gap distance shall in such case be measured from the bottom of the angle. Hoses shall not be used.

B. Air gap separations shall not be altered in any way without prior written approval from the City Building Official or Licensed authorized personnel and must be accessible for inspection at all reasonable times.
C. Side walls, ribs, or similar obstruction shall be spaced from the inside edge of the spout opening to a distance greater than three times the diameter of the effective opening for a single, or to a distance greater than four times the effective opening for two intersecting walls.
D. In systems where there are three or more side walls, ribs, or similar obstructions extending from the water surface to or above the horizontal plane of the spout opening in a manner other than specified, the air gap shall be measured from the tip of the wall.
E. The effective opening shall be the minimum cross-sectional area at the seat of the control valve or the supply pipe or tubing which feeds the assembly or outlet. If two or more lines supply one outlet, the effective opening shall be the sum of the cross-sectional areas of the individual supply lines or the area of the single outlet, whichever is smaller.

Section 1.23. Fire systems. An approved DCDA or RPDA shall be installed on the fire sprinkler systems comprised of piping material that is not approved for potable water use and/or that does not provide for periodic flow-through during each 24-hour period, unless a variance has bee granted in writing by the City Building Official or Licensed authorized personnel. A RPDA must be installed if any solution or substance other than the potable water may be introduced into the sprinkler system.

Section 1.24. Responsibilities.

A. All property owners shall comply with the applicable provisions of this article. In the event of any changes to the plumbing system, it is the responsibility of the property owners to notify the City Building Official or Licensed authorized personnel. All property owners are also responsible for the following.
    a. Payment of all costs designated the responsibility of the property owner pursuant to this article, and the purchase and installation of the assemblies required by this article.
    b. To install all assemblies in accordance with this article and acceptable industry practices.
B. All water customers shall comply with the applicable provisions of this article. All water customers are also responsible for the following:
    a. Payment of all costs designated the responsibility of the water customer pursuant to this article, and all maintenance, testing and required repairs excluding costs for installation and initial testing of assemblies required by this article.
    b. Shall annually test, or cause to be tested, all assemblies on the premises. Such tests shall be conducted by a licensed backflow prevention assembly tester.
    c. Maintain all assemblies in properly working order at all times, including making repairs as required to ensure the proper functioning of the assemblies.
    d. Maintain all assemblies such that the assemblies may be tested by a method that has been approved by the City Building Official or Licensed authorized personnel.
    e. Each record related to assembly installation, testing and repair shall be maintained on the premises for a minimum of three years.
C. All licensed backflow prevention assembly testers shall:

a. Annually register with the third-party vendor, pay any required fee per the City of West Tawakoni's Comprehensive Fee Schedule and provide the information required by this article.
b. Maintain testing equipment in proper working condition/calibration.
c. Maintain the design or operation characteristics of an assembly.
d. Ensure that assemblies are tested in compliance with accepted industry practices, commission regulations, and all other applicable laws and regulations.
e. Enter the required testing data, including test gauge serial numbers, on third party vendors website.
f. Report test results electronically to the third-party vendor's website within five days of testing. For any new assemblies, either new installs or previously undocumented assemblies not in the third-party vendor's system, the tester may submit by e-mail or fax the test results to the third -party vendor for the initial year.
g. Provide a copy of the completed initial test report required after installation to the property owners subject to the testing requirements of this article. All other completed test reports after the initial test report shall be provided to the water customer.
h. Maintain each testing and/or repair record for a minimum of three years.
i. If not obtained by the property owner, apply for, and obtain a building permit from the building official of the city prior to commencing any work on any assembly devise.
j. Pay the third-party vendor fee as a data entry charge for each test report submitted to the third-party vendor's website.
k. Immediately turn off all devices that fail a test.

D. The City Building Official or Licensed authorized personnel, shall have the authority to enforce the provisions of this article, state law and regulations regarding cross connections. The city Building Official or Licensed authorized personnel, shall inspect and initially test, or cause to be tested, all assemblies installed pursuant to the requirements of this article. Permanent water service shall not be provided to new facilities until all assemblies have been tested and are functioning properly. Except in cases where the testing of assemblies must be delayed until the installation of internal production or auxiliary equipment, the City Building Official or Licensed authorized personnel shall not approve a certificate of occupancy until all assemblies have been tested and are functioning properly.

E. The third-party vendor shall:
a. Through the use of its proprietary software, maintain an online database and website for testers to register and input test reports.
b. Send by mail a notice to the water customer approximately 30 days prior to the testing due date, advising the water customer that the assembly is due for testing, and transmit a copy of the notice to the last tester of record.
c. Send by mail a second notice to the water customer once the testing due date has passed if a test report for the assembly as not been submitted.
d. Transmit a notice of noncompliance to the City Building Official or Licensed authorized personnel by electronic transmission if the third-party vendor fails to receive a test report within 15 days of the mailing the second notice.

Section 1.25. Backflow prevention assembly tester registration required. Persons desiring to be approved backflow prevention assembly testers within the City must provide to the third-party vendor proof of commission licensing and provide proof that their testing equipment is able to maintain a calibration of plus or minus 0.2 paid accuracy. The third-party vendor shall maintain a database of licensed and registered testers.

Section 1.26. Fees

A. All property owners shall:
    a. Have the assembly tested as required by a licensed tester upon installation of an assembly. All property owners shall pay the testing fee to the tester upon completion of the initial testing of an assembly. If a property owner fails to test the assembly upon installation, the city Building Official or Licensed authorized personnel, may perform the test and assess a testing fee per the City of West Tawakoni's Comprehensive Fee Schedule plus the actual cost of the test for each separate assembly device on which the City Building Official or Licensed authorized personnel performs a test.
    b. If an assembly is deemed not to be working properly upon the initial inspection or initial testing of the assembly after installation, the City Building Official or Licensed authorized personnel, shall have the necessary repairs and/or adjustments made immediately and shall retest the assembly. The property owner will then be required to pay the actual cost of the retest and repair required.
B. All water customers shall:
    a. Have the assembly routinely tested as required by a licensed tester. Upon receipt of a notification that testing is required, all water customers shall have the assembly tested by a licensed tester and pay the testing fee to the tester upon completion of the testing.
    b. If the assembly is located on residential premises and categorized as "low hazard," the water customer may in lieu of have the assembly tested, choose to notify the City Building Official or Licensed authorized personnel within the timeframe set forth in the notification, to lock the assembly in the closed position and tag with a do not operate notice. Removal of this tag and/or lock is a violation of this section.
    c. If a water customer fails to test the assembly or notify the City Building Official or Licensed authorized personnel to lock the assembly within the required timeframe, the City Building Official or Licensed authorized personnel may perform the test and assess a testing fee per the City of West Tawakoni's Comprehensive Fee Schedule plus the actual cost of the test for each separate assembly device on which the City Building Official or Licensed authorized personnel performs a test.
    d. If an assembly is deemed not to be working properly after testing, the City Building Official or Licensed authorized personnel shall have the necessary repairs and/or adjustments made immediately and shall retest the assembly. The property owner will then be required to pay the actual cost of the retest and repair required.
    e. If the assembly is located on a residential premises and categorized as "low hazard," after an assembly is tested and deemed to not be working properly, the water customer can choose to immediately notify the City Building Official or Licensed

authorized personnel to lock the assembly in the closed position and tag with a do not operate notice in lieu of a retest. Removal of this tag and/or lock is a violation of this section.

Section 1.27. Compliance for lawn irrigation or sprinkler systems. All persons installing commercial and residential lawn irrigation or sprinkler systems shall annually register with the City Building Official or Licensed authorized personnel and obtain a permit from the building inspection department of the City prior to making such installations. The installation requirements must comply with standards for the applicable assembly required by this article. Interconnections of the potable water supply with an alternate water source are prohibited. Appropriate backflow prevention assemblies must be installed on the premises if any mechanical injection stations are used with the irrigation or sprinkler system.

Section 1.28. Mobile units. The connection of a mobile unit to any potable water system is prohibited unless such connection is protected by an air gap or an approved backflow prevention assembly. Prior to approval and annual assembly testing of any air gap or assembly must be obtained from the City Building Official or Licensed authorized personnel before connecting a mobile unit to any potable water system. Testing fees shall be paid by the owner or operator of the mobile units prior to any inspection or testing of the air gap or assembly.

Section 1.29. Enforcement

A. Violations.
    a. A person commits an offense if he fails to maintain an assembly in compliance with this article.
    b. A person commits an offense if he fails to comply with a repair order issued by the City Building Official or Licensed authorized personnel.
    c. A person commits an offense if backflow from premises he owns, controls, operates, or manages enters a public potable water supply system.
    d. A person commits an offense if he fails to pay any fees required by this article.
    e. A person commits an offense if he reinstates water service to premises discontinued or disconnected pursuant to the provisions of this article, except as directed by the City Building Official or Licensed authorized personnel.
    f. A person owning or in control of premises commits an offense if he allows an unregistered or unlicensed tester to perform testing work on his premises.
    g. A person commits an offense if he tests an assembly within the City without being registered with the City Building Official or Licensed authorized personnel.
    h. A person commits an offense if he tests an assembly within the City without being licensed by the commission.
    i. A person commits an offense if he possesses on his premises a cross connection that is not protected by an approved backflow prevention assembly.
    j. A person commits an offense if he tampers with a backflow assembly or valve that has been shut off and tagged by the City Building Official or Licensed authorized personnel.
B. Punishment for violations; other remedies

a. A person who violates any provision of this section is guilty of a misdemeanor and upon conviction is punishable by a fine as provided for a violation of an ordinance or regulation governing public health and sanitation.
b. In addition to proceeding under the authority of this article, the City is entitled to pursue any and all other criminal and civil remedies to which it is entitled pursuant to the authority granted by any other applicable laws, regulations, or ordinances.

C. In addition to the penalties provided for by this article, the City is entitled to impose penalties or fees provided for by other provisions of this Code for failure to timely pay any bill, or portion thereof, for water, sanitary sewer, and/or reuse water services.

D. A tester's registration may be revoked by the City if the City Building Official or Licensed authorized personnel determines that the tester:
a. Has falsely, incompletely, or inaccurately submitted assembly testing reports.
b. Has used inaccurate gauges.
c. Has created a threat to public health or the environment
d. Has failed to register with third party vendor.
e. Has failed to submit a test report within five days of the test date; or
f. Has violated any other provision of this article.

Section 1.30. Compliance for temporary fire hydrant meters. All persons utilizing a fire hydrant for a temporary meter shall sign a contract and pay a deposit prior to having the temporary meter installed. Interconnections of the potable water supply with an alternate water source are prohibited. Appropriate backflow prevention assemblies must be installed on the premises at time of a temporary meter installation. A licensed backflow tester, contracted by persons utilizing temporary meters, must be present to test backflow assembly at time of installation. The backflow assembly must pass for fire hydrant to remain on. Backflow assembly must then be tested on an annual basis. Failure to maintain testing and proper use will result in immediate removal of temporary meter and loss of deposit.

Section 2. This ordinance shall be cumulative of all provisions of the city of West Tawakoni, Texas, except where the provision of this Ordinance are in direct conflict with the provision of such Ordinances, in which event the more restrictive provision shall apply.

Section 3. it is hereby declared to be the intention of the City Council of the City of West Tawakoni that the phrases, clauses, sentences, paragraphs, and sections of this Ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this Ordinance should be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs or sections of this Ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

Section 4. All rights and privileges of the City of West Tawakoni are expressly saved as to any and all violations of the provision of any Ordinances affecting land use or development, which have accrued at the time of the effective date of this Ordinance; and, as 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 5. This Ordinance shall be effective immediately upon the passage, approval and publication as required by law.

PASSED AND APPROVED this___ day of January, 2024.

_____
Jim Turnipseed, Mayor

ATTEST:

_____
Kim Cowley, City Secretary