Section 1.01 Designation of Code

The provisions of this Chapter, including the adopted portions of the International Plumbing Code and the International Fuel Gas Code, as amended, are hereby designated the Plumbing Code of the City of Arlington, also referred to in this Chapter as "the Code" or "this Code".

Section 1.015 <u>Electronic Submittal of Final Plans and Other Documents</u>

Final plans or other documents required to be submitted under this Chapter and that will be archived must be submitted in an electronic format specified by the Director of Community Development and Planning ("CDP Director") as a condition to issuance of any type of permit, approval, or other action related to the final plans or documents. The City may provide an electronic conversion service for a fee in the amount set forth by City Council resolution. The CDP Director shall provide a schedule indicating which documents must be provided electronically, at which point during the approval process, and other information as necessary to implement an electronic archiving program.

Section 1.02 Adoption of Code; Conflicts

- A. The International Plumbing Code, 2015 Edition, referred to in this Chapter as the "IPC" and the International Fuel Gas Code, 2015 Edition, referred to in this Chapter as the "IFGC", as adopted and published by the International Code Council are herein adopted and designated, together with the additions, deletions, and amendments hereinafter contained, as the Plumbing Code of the City, the same as though such Codes were copied at length herein. Copies of the IPC and IFGC adopted in this Section shall be kept on file in the office of the City Secretary.
- B. In the event of a conflict between the adopted provisions of the IPC and IFGC and other provisions of this Chapter, the other (non-IPC and non-IFGC) provisions of this Chapter shall be controlling.

Section 1.03 Intent

The purpose of this Code is to provide minimum standards to safeguard life, limb, health, property and the public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operations and maintenance or use of piping systems, fixtures, plumbing equipment and systems used for water, sewage, and fuel gas plumbing systems.

Section 1.04 Scope

A. The provisions of this code shall apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within this jurisdiction. This code shall also regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. The installation of fuel gas distribution piping and equipment, fuel-gas-fired water heaters and water heater venting systems shall be regulated by the International Fuel Gas Code. Provisions in the appendices shall not apply unless specifically adopted.

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with the International Residential Code.

- B. This ordinance shall not be applied to work done by the employees of the City in the scope of their employment or other companies furnishing water in the laying of water mains and services and City sewer mains and services, or to the installation of gas distributing mains and services in the streets and alleys by employees of the gas distributing company, or any work performed by such gas distributing company on any piping or connection up to and including the outlet connections of the service meter. Nothing in this Code shall be construed as prohibiting an individual from negotiating with the gas company for the repairs, replacements, or installation of yard or service lines (that line carrying the unmeasured gas) on his/her premises or as requiring a license or bond from any gas company. Such work shall be performed by qualified employees of the gas company in accordance with all State and Federal regulations.
- C. If any section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

Section 1.05 <u>Amendments</u>, <u>Additions and Deletions – IPC</u>

The adoption by reference of the International Plumbing Code, as provided in Section 1.02 hereof, is made subject to the following terms and is modified and amended as follows:

- A. By the addition of Article II of this Chapter.
- B. By the addition of Article III of this Chapter.
- C. By the deletion of the following sections of the IPC:
 - 1. The deletion of Section 101, entitled **General**, in its entirety.
 - 2. The deletion of Section 109, **Means of appeal**, in its entirety.

- D. By the amendment and addition of the following sections of the IPC:
 - 1. Adoption of Appendix C, Structural Safety.
 - 2. The amendment of Section 102.8, **Referenced codes and standards**, to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 13 and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where the requirements of reference standards or manufacturer's installation instructions do not conform to minimum provisions of this code, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the National Electrical Code (NEC) shall mean the Electrical Code as adopted.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer's installation instruction shall apply.

- 3. The amendment of Section 103.1, **General**, to read as follows.
 - **103.1 General.** The executive official in charge of plumbing inspection shall be known as the Code Official.
- 4. The amendment of Section 104.4, **Right of entry**, to read as follows:
 - **104.4 Right of entry.** Whenever it is necessary to make an inspection to enforce the provisions of this chapter, or whenever the Code Official has reasonable cause to believe that there exists in any building or upon any premises any conditions or violations of this chapter that make the building or premises unsafe, unsanitary, dangerous or hazardous, the Code Official shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the Code Official by this chapter. If such building or premises is occupied, the Code Official shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the Code Official shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. If entry is refused, or if no owner or other person having charge or control of the building or premises can be located, the Code Official shall have recourse to every remedy provided by law to secure entry.

- 5. The amendment of Section 106.1, **When required**, to read as follows:
 - **106.1 When required.** Any owner, authorized agent or contractor who desires to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the code official and obtain the required permit for the work. A permit may only be issued to a registrant as provided in Article III of this Chapter.
- 6. The deletion of Section 106.4, **By whom application is made**, in its entirety.
- 7. The amendment of Section 106.5, **Permit issuance**, to read as follows:
 - **106.5 Permit issuance.** The application, construction documents and other data filed by an applicant for permit shall be reviewed by the code official. If the code official finds that the proposed work conforms to the requirements of this code and all laws and ordinances applicable thereto, and that the fees as established by resolution of the City Council from time to time, a permit shall be issued.
- 8. The amendment of Section 106.6, **Fees**, to read as follows:
 - **106.6 Fees and refunds.** Any person, firm or corporation desiring a permit as required by this Plumbing Code shall, at or before the time of permit issuance, pay a fee as specified in the fee structure as approved by the City Council of the City of Arlington by resolution and which may be amended from time to time by said City Council.
 - **106.6.1** Any person who commences any work on a plumbing system before obtaining the necessary permits shall be subject to 100 percent of the usual permit fee in addition to the required permit fees.
 - **106.6.2 Standards**. The fee standards as set out in the Construction Chapter shall apply to calculations and fees.
 - **106.6.3** Refund of a fee submitted for any administrative action under this Chapter shall be made in accordance with Section 4.12 of the "Construction" Chapter.
 - **106.6.4** When the replacement of a contractor occurs during a project for which a permit has been issued pursuant to this

Mechanical Code, the Administrative Authority may prorate the amount of the permit fee for the new contractor based on said Administrative Authority's determination of the percentage of work remaining.

106.6.5 When it is determined after a permit has been issued that the scope of work is to be significantly changed, the Administrative Authority may authorize and require that appropriate adjustments be effected to the permit fee. Any increase in the permit fee shall be paid prior to performing any part of such increased scope of work. Any decrease in the permit fee which is based on previously approved work which will not be performed as earlier defined may be refunded in the amount of fifty percent (50%) of the fee represented by the percentage of work not to be performed; provided, however, that determination of such percentage and specific authorization of such refund shall be issued by the Administrative Authority. Refunds, if made, shall be made to the original permittee in accordance with Article IV of the Construction Chapter.

9. The amendment of Section 107.1, **General**, by adding an exception to read as follows:

Exception: The owner of a property may choose to contract with a Third Party Provider that is properly registered with the City for inspections. Inspections performed by Third Party Organizations are subject to the terms of the program as authorized by resolution of the City Council of the City of Arlington. A Third Party Provider shall not be authorized to grant a Certificate of Occupancy.

10. The amendment of Section 107.4, **Testing**, to read as follows:

107.4 Testing. Plumbing work and systems shall be tested as required in Section 312 and in accordance with Sections 107.4.1 through 107.4.3. Tests shall be made by the permit holder and may be observed by the code official.

11. The amendment of Section 108.2, entitled **Notice of violation**, to read as follows:

108.2 Notice of violation. The Code Official is authorized to serve a notice of violation or order to the person responsible for the erection, installation, alteration, extension, repair, removal or demolition of plumbing work in violation of the provisions of this Chapter, or in violation of a detail statement or the approved construction documents thereunder, or in violation of a permit or certificate issued under the provisions of this Chapter. Such order

shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

- 12. The deletion of Section 108.3, entitled **Prosecution of violation**, in its entirety.
- 13. The amendment of Section 108.4, **Violation penalties**, to read as follows:

108.4 Violation penalties.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use or maintain any plumbing work or other work or cause or permit the same to be done in violation of this Chapter. When not otherwise specified, each day that prohibited conditions are maintained shall constitute a separate offense.

If the definition of an offense under this Chapter does not prescribe a culpable mental state, then a culpable mental state is not required. Such offense shall be punishable by a fine not to exceed Five Hundred Dollars and No Cents (\$500.00). Although not required, if a culpable mental state is in fact alleged in the charge of the offense and the offense governs fire safety, zoning, or public health and sanitation, including dumping of refuse, such offense shall be punishable by a fine not to exceed Two Thousand Dollars and No Cents (\$2,000.00).

If the definition of an offense under this Chapter prescribes a culpable mental state and the offense governs fire safety, zoning, or public health and sanitation, including dumping of refuse, then a culpable mental state is required and the offense shall be punishable by a fine not to exceed Two Thousand Dollars and No Cents (\$2,000.00).

The issuing or granting of a permit or approval of plans and specifications by the City shall not be deemed or construed to be a permit for, or an approval of, any violation of any of the provisions of this Code or any other ordinance of the City. No permit presuming to give authority to violate or cancel the provisions of this Code, or any other ordinance of the City, shall be valid, except insofar as the work or use which is authorized is lawful.

The issuing or granting of a permit or approval of plans by the City shall not prevent the Administrative Authority from thereafter requiring the correction of errors in said plans and specifications or from preventing construction operations being carried on thereunder when in violation of this Code or of any other ordinance of the City, or from revoking any certificate of approval when issued in error.

14. The amendment of Section 108.5, entitled **Stop work orders**, to read as follows:

108.5 Stop work orders. Any work is being done contrary to the provisions of this Code, the Administrative Authority may order the work stopped by notice in writing served on any persons engaged in the doing or causing such work to be done. Any such person shall forthwith stop such work until:

- a. He or she is authorized by the Administrative Authority to proceed with the work; or
- b. An appeal perfected pursuant to Section 2.03 has resulted in a waiver of the condition causing the stop order, or a finding that there is no cause for a stop order.

Failure to stop such work, in addition to penalties and remedies elsewhere set forth, shall void any appeal.

15. The amendment of Section 202 to amend the definition of "Code Official" and the addition of new definitions to read as follows:

BUILDING CODE. Building Code shall mean the International Building Code and the International Residential Code as adopted by this jurisdiction.

CODE OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. For the purpose of this code, the Code Official shall be the Building Official or designee.

ELECTRICAL CODE. Electrical Code shall mean the National Electrical Code as adopted by this jurisdiction. For the purpose of this code, all references to NFPA 70 shall be assumed to mean the Electrical Code as defined herein.

ENERGY CODE. Energy Code shall mean the International Energy Conservation Code as adopted by this jurisdiction.

FIRE PREVENTION CODE (FIRE CODE). Fire Prevention Code shall mean the *International Fire Code* as adopted by this jurisdiction.

MECHANICAL CODE. Mechanical Code shall mean the International Mechanical Code as adopted by this jurisdiction.

PLUMBING CODE. Plumbing Code shall mean the International Plumbing Code as adopted by this jurisdiction.

- **SHALL**. Shall, as it applies to an act or duty to be performed by the Code Official pursuant to any section of the Code, is discretionary. Its use in all other applications in this Code shall be mandatory.
- 16. The amendment of Section 305.4, **Freezing**, to read as follows:
 - **305.4 Freezing**. Water, soil or waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing unless adequate provision is made to protect such pipe from freezing. Piping in unheated attic, crawl space areas, and exterior walls shall be protected with not less than three-quarters of an inch (3/4") (19.05 mm) thickness of approved pipe insulation. Joints in insulation shall be sealed per manufacturer installation requirements. The use of tape for joining the insulation is prohibited unless approved per manufacturer. Water service piping shall be not less than 12 inches (305 mm) deep or less than 6 inches (152 mm) below the frost line.
- 17. The amendment of Section 305.4.1, **Sewer depth**, to read as follows:
 - **305.4.1 Sewer depth**. Building sewers shall be a minimum of 12 inches (304 mm) below grade.
- 18. The amendment of Section 305.7, **Protection of components of plumbing systems**, to read as follows:
 - **305.7 Protection of components of plumbing system.** Components of a plumbing system installed within 3 feet along alleyways, driveways, parking garages or other locations in a manner in which they would be exposed to damage shall be recessed into the wall or otherwise protected in an approved manner.
- 19. The amendment of Section 312.2, **Drainage and vent water test**, to read as follows:
 - 312.2 Drainage and vent water test. A water test shall be applied to the building drain system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest openings of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 5-foot (1524 mm) head of water. In testing successive sections, at least the upper 5 feet (1524 mm) of the next preceding section shall be tested so that no joint or pipe in the building, except the uppermost 5 feet (1524 mm) of the system, shall have been submitted to a test of less than a 5-foot (1524 mm) head of water. The water shall be kept in the system,

or in the portion under test, for at least 15 minutes before inspection starts. The system shall then be tight at all points.

- 20. The amendment of Section 312.6, **Gravity sewer test**, to read as follows:
 - **312.6 Gravity sewer test.** Gravity sewer tests shall consist of plugging the end of the building sewer at the point of connection with the public sewer, filling the building sewer with water, testing with not less than a 5 foot (1524 mm) head of water and maintaining such pressure for 15 minutes.
- 21. The amendment of Section 312.10.1, **Inspections**, to read as follows:
 - **312.10.1 Inspections.** When required by the Water Resources Services Division, annual inspections shall be made of all backflow prevention assemblies and air gaps to determine whether they are operable. In the absence of local provisions, the owner is responsible to ensure that inspections are performed annually.
- 22. The amendment of Section 312.10.2, **Testing**, to read as follows:
 - **312.10.2 Testing.** Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, double-detector check valve assemblies and pressure vacuum breaker assemblies shall be tested at the time of installation, immediately after repairs or relocation and when otherwise required by the Water Resources Services Division. The testing procedure shall be performed in accordance as required by the Water Resources Division. In the absence of local provisions, the owner is responsible to ensure that testing is performed at least annually and is done in accordance with one of the following standards:

ASSE 5013, ASSE 5015, ASSE 5020, ASSE 5047, ASSE 5048, ASSE 5052, ASSE 5056, CSA B64.10 OR CAS B64.10.1

- 23. The amendment of Section 314.2.1, entitled **Condensate disposal**, to read as follows:
 - **314.2.1 Condensate disposal.** Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to a permanently wet p-trap. Condensate shall not discharge in a publicly exposed area such as into a street, alley, sidewalk or other areas so as to cause a nuisance

Exceptions:

1. Condensate may discharge directly to a roof drain that connects to an underground storm sewer system,

- 2. Condensate may discharge directly onto roofs covered with membrane type roof coverings where the condensate will drain to a roof drain that connects to an underground storm sewer system,
- 3. Condensate may discharge to a landscaped area containing flowers and other bedding plants other than turf. There must be five square feet of landscaped area for each ton of refrigeration, or
- 4. Condensate may discharge to a French drain consisting of a pit excavated below grade that is not less than 24 inches (610 mm) in any dimension. The pit shall be filled with coarse gravel and the drainpipe shall extend into the pit and be securely anchored. A single drain shall not receive the condensate discharge of more than 10 tons nominal of combined cooling capacity. The pit shall be covered with sod after inspection. The French drain shall not be located so that it will receive direct discharge from a roof or a downspout.
- 24. The addition of Section 403.6, **Additional fixtures for food preparation facilities**, to read as follows:
 - **403.5** Additional fixtures for food preparation facilities. In addition to the fixtures required in this Chapter, all food service facilities shall be provided with additional fixtures set out in this section.
 - **403.5.1 Hand washing lavatory.** At least one hand washing lavatory shall be provided for use by employees that is accessible from food preparation, food dispensing and warewashing areas. Additional hand washing lavatories may be required based on convenience of use by employees.
 - **403.5.2 Service sink.** In new or remodeled food service establishments, at least one service sink or one floor sink shall be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tools and for the disposal of mop water and similar liquid waste. The location of the service sink(s) and/or mop sink(s) shall be approved by the City of Arlington health department.
- 25. The amendment of Section 403.2, entitled **Separate facilities**, to add Exception 4 and Exception 5 to read as follows:
 - 4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 50 or less.
 - 5. Separate facilities shall not be required in B-occupancy medical offices classified as business occupancies.

- 26. The amendment of Section 409.2, entitled **Water connection**, to read as follows:
 - **409.2 Water connection**. The water supply to a commercial dishwashing machine shall be protected against back-flow by an air gap or back-flow prevention in accordance with Section 608.
- 27. The amendment of Section 410.2, entitled **Small occupancies**, to read as follows:
 - **410.2 Small occupancies.** Drinking fountains shall not be required for an occupant load of 30 or fewer.
- 28. The amendment of Section 412.4, entitled **Public laundries and central washing facilities**, to read as follows:
 - **412.4 Required location for floor drains.** Floor drains shall be installed in the following areas.
 - In public coin-operated laundries and in the central washing facilities of multiple family dwellings, the rooms containing automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area. Such drains shall have a minimum outlet of not less than 3 inches (76 mm) in diameter.
 - 2. Commercial kitchens. In lieu of floor drains in commercial kitchens, the code official may accept floor sinks.
 - 3. Public restrooms.
- 29. The addition of Section 414.3, **Rain water**, to read as follows:
 - **414.3 Rain water.** The receptacle receiving waste from the wash area shall be protected in such a manner as to prevent the intrusion of rain water. The location of the receptacle is subject to the approval of the Water Resource Division of Water Utilities.
- 30. The amendment of Section 419.3, **Surrounding material**, to read as follows:
 - **419.3 Surrounding material.** Wall and floor space to point 2 feet (610 mm) in front of a urinal lip and 4 feet (1219 mm) above the floor and at least 2 feet (610 mm) to each side of the urinal shall be waterproofed with a smooth, readily cleanable, hard, nonabsorbent material.

- 31. The amendment of Section 502.3, entitled **Appliances in attics**, to read as follows:
 - **502.3 Appliances in attics**. Attics containing a water heater shall be provided with an opening and unobstructed passageway large enough to allow removal of the water heater. The passageway shall be not less than 30 inches (762 mm) in height and 22 inches (559 mm) in width and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from the opening to the water heater. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) in width. A level service space of not less than 30 inches (762 mm) in length and 30 inches (762 mm) in width shall be present at the font or service side of the water heater. The clear access opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm) where such dimensions are large enough to allow removal of the water heater. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:
 - 1. A permanent stair.
 - 2. A pull down stair with a minimum 300 lb (136 kg) capacity.
 - 3. An access door from an upper floor level.
 - 4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

- 1. The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening.
- 2. Where the passageway is not less than 6 feet high (1829 mm) for its entire length, the passageway shall not be limited in length.
- 32. The addition of Section 502.3.1, **Electrical requirements**, to read as follows:
 - **502.3.1 Electrical requirements.** A lighting fixture controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or within 25 feet (7619 mm) of the equipment location in accordance with the electrical code.

- 33. The addition of Section 502.6, **Water heaters above ground or floor**, to read as follows:
 - **502.6 Water heaters above ground or floor.** When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A max 10 gallon water heater (or larger with approval) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

- 34. The addition of Section 502.7, **Illumination and electrical outlet requirements**, to read as follows:
 - **502.7 Illumination and electrical outlet requirements.** Whenever the mezzanine or platform is not adequately lighted and/or access to a receptacle outlet is not available from the main level within 25' of water heater, lighting and a receptacle outlet shall be provided in accordance with Section 502.1.
- 35. The amendment of Section 504.6, entitled **Requirements for discharge piping**, to read as follows:
 - **504.6 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:
 - 1. Not be directly connected to the drainage system.
 - 2. Discharge through an air gap.
 - 3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
 - 4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when *approved* by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

5. Discharge to an indirect waste receptor or to the outdoors.

- 6. Discharge in a manner that does not cause personal injury or structural damage.
- 7. Discharge to a termination point that is readily observable by the building occupants.
- 8. Not be trapped.
- 9. Be installed so as to flow by gravity.
- 10. Terminate not more than 6 inches above and not less than two times the discharge pipe diameter above the floor or flood level rim of the waste receptor.
- 11. Not have a threaded connection at the end of such piping.
- 12. Not have valves or tee fittings. Tee fittings shall be allowed to connect multiple relief devices to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.
- 13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
- 36. The amendment of Section 504.7.1, entitled **Pan size and drain**, to read as follows:
 - **Section 504.7.1 Pan size and drain**. The pan shall be not less than 11/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.
- 37. The addition of Section 604.4.1, entitled **State maximum flow rate**, to read as follows:
 - **604.4.1 State maximum flow rate.** Where the State mandated maximum flow rate is more restrictive than those of this section, the State flow rate shall take precedence.

- 38. The addition of Section 605.5.2, entitled **Push type fittings**, to read as follows:
 - **605.5.2 Push type fittings.** Push type fittings are prohibited for direct burial unless listed for such use.
- 39. The amendment of Section 608.16.5, entitled **Connections to lawn** irrigation system, to read as follows:
 - **608.16.5 Connections to lawn irrigation systems.** The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.
- 40. The amendment of Section 608.17, **Protection of individual water supplies**, to read as follows:
 - **608.17 Protection of individual water supplies.** An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with applicable local regulations. In the absence of other local regulations, installation shall be in accordance with Sections 608.17.1 through 608.17.8.
- 41. The amendment of Section 610.1, entitled **General**, to read as follows:
 - **610.1 General**. New or repaired potable water systems shall be purged of deleterious matter and disinfected prior to utilization. The method to be followed shall be that prescribed by the health authority or water purveyor having jurisdiction or, in the absence of a prescribed method, the procedure described in either AWWA C651 or AWWA C652, or as described in this section. This requirement shall apply to "on-site" or "in-plant" fabrication of a system or to a modular portion of a system.
 - 1. The pipe system shall be flushed with clean, potable water until dirty water does not appear at the points of outlet.
 - 2. The system or part thereof shall be filled with a water/chlorine solution containing at least 50 parts per million (50 mg/L) of chlorine, and the system or part thereof shall be valved off and allowed to stand for 24 hours; or the system or part thereof shall be filled with a water/chlorine

solution containing at least 200 parts per million (200 mg/L) of chlorine and allowed to stand for 3 hours.

- 3. Following the required standing time, the system shall be flushed with clean potable water until the chlorine is purged from the system.
- 4. The procedure shall be repeated where shown by a bacteriological examination that contamination remains present in the system.

Exception: With prior approval the Code Official may wave this requirement when deemed un-necessary.

- 42. The amendment of Section 701.2, **Sewer required**, to read as follows:
 - **701.2 Sewer required.** Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer, where available, or an approved private sewage disposal system in accordance with county regulation. The availability of the public sewer to the building shall be determined by the Water Utilities Department.
- 43. The amendment of Section 701.5, **Damage to drainage system or public sewer**, to read as follows:
 - **701.5** Damage to drainage system or public sewer. Wastes detrimental to the public sewer system or detrimental to the functioning of the sewer treatment plant, as determined by the Water Resources Division of the Water Utilities Department, shall be disposed of or treated as directed by the Water Resources Division of the Water Utilities Department. A sewer line receiving such waste or with potential to receive such waste shall be fitted with a test well specified by the Water Resources Division of the Water Utilities Department.
- 44. The amendment of Section 702.5, **Chemical waste system**, to read as follows:
 - **702.5 Chemical waste system.** A chemical waste system shall be completely separated from the sanitary drainage system. The chemical waste shall be treated as required by the Water Resources Department before discharging to the sanitary drainage system. Separate drainage systems for chemical wastes and vent pipes shall be of an approved material that is resistant to corrosion and degradation for the concentrations of chemicals involved.
- 45. The deletion of Section 703.6, entitled **Combined sanitary and storm** public sewer, in its entirety.

- 46. The addition of Section 704.5, entitled **Single stack fittings**, to read as follows:
 - **704.5 Single stack fittings.** Single stack fittings with internal baffle, PVC schedule 40 or cast iron single stack shall be designed by a registered engineer and comply to a national recognized standard.
- 47. The amendment of Section 705.11.2, entitled **Solvent cement**, to read as follows:
 - **705.11.2 Solvent cementing**. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent cement joints shall be permitted above or below ground.
- 48. The addition of Section 712.5, entitled **Dual pump system**, to read as follows:
 - **712.5 Dual pump system.** All sumps shall be automatically discharged and, when in any "public use" occupancy where the sump serves more than 10 fixture units, shall be provided with dual pumps or ejectors arranged to function independently in case of overload or mechanical failure. For storm drainage sumps and pumping systems, see Section 1113.
- 49. The amendment of the title of Section 714 to read as follows:

SECTION 714 ENGINEERED DRAINAGE DESIGN

- 50. The amendment of Section 714.1, entitled **Design of drainage system**, to read as follows:
 - **714.1 Design of drainage system.** The sizing, design and layout of the drainage system shall be designed by a registered engineer using approved design methods.
- 51. The amendment of Section 802.1.1, **Food Handling**, to read as follows:
 - **802.1.1 Food Handling.** Equipment and fixtures utilized for the storage, preparation and handling of food shall discharge through an indirect waste pipe by means of an air gap into a floor sink.

- 52. The amendment of Section 802.3.3, **Standpipes**, to read as follows:
 - **802.3.3 Standpipes.** Standpipes shall be individually trapped. Standpipes shall extend a minimum of 18 inches (457mm) and a maximum of 42 inches (1066mm) above the trap weir. Access shall be provided to all standpipe traps and drains for rodding. The p-trap on the standpipe for a washing machine shall not be installed below the floor.
- 53. The amendment of Section 803.1, **Neutralizing device required for corrosive wastes**, to read as follows:
 - **803.1** Neutralizing device required for corrosive wastes. Corrosive liquids, spent acids or other harmful chemicals that destroy or injure a drain, sewer, soil or waste pipe, or create noxious or toxic fumes or interfere with sewage treatment processes, shall not be discharged into the plumbing system unless approved by the Water Resources Department and the Code Official. Such devices shall be automatically provided with a sufficient supply of diluting water or neutralizing medium so as to make the contents noninjurious before discharge into the drainage system. The nature of the corrosive or harmful waste and the method of its treatment or dilution shall be approved prior to installation.
- 54. The addition of Section 803.3, **Backwash from swimming pools**, to read as follows:
 - **803.3 Backwash from swimming pools.** Any backwash from a swimming pool shall discharge into the sanitary sewer system or other approved methods as allowed by the Texas Commission on Environmental Quality and the administrative authority. An indirect connection shall be made by means of an air gap discharging into a tail piece with the opening installed a minimum of 6 inches (152 mm) above adjacent grade. A minimum size 3-inch (76 mm) p-trap installed not less than 12 inches (304 mm) below grade may connect to the yard cleanout riser by a sanitary tee fitting.
- 55. The amendment of Section 903.1, entitled **Roof extension**, to read as follows:
 - **903.1 Roof extension.** Open vent pipes that extend through a roof shall terminate not less than six (6) inches (152 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.
- 56. The deletion of Section 917, entitled **Single Stack Vent System**, in its entirety.

- 57. The deletion of Section 1002.10, entitled **Plumbing in mental health** facilities, in its entirety.
- 58. The amendment of Section 1003.2, **Approval**, to read as follows:
 - **1003.2 Approval.** All requirements regarding the size, type, location and listing of interceptors and/or separators shall be regulated by the Water Utilities Department. All installations of interceptors and/or separators shall be inspected by the code official.
- 59. The addition of Section 1003.11, **Test wells**, to read as follows:
 - **1003.11 Test wells.** The size, type, location and listing of test wells shall be regulated by the Water Resources Department. A test well shall be installed on the outlet of each individual interceptor and/or separator. The installation of a test well shall include a retaining device as specified by the Water Resources Department. All installations of test wells shall be inspected by the code official.
- 60. The amendment of Section 1101.3, **Prohibited drainage**, to read as follows:
 - **1101.3 Prohibited drainage.** Storm water shall not be drained into sewers intended for sewage only or over sidewalks intended for public use.
- 61. The amendment of Section 1101.8, entitled **Cleanouts required**, to read as follows:
 - **1101.8 Cleanouts required.** Cleanouts shall be installed in the storm drainage system and shall comply with the provisions of this code for sanitary drainage pipe cleanouts.
- 62. The amendment of Section 1106.1, **General**, to read as follows:
 - **1106.1 General.** The size of the vertical conductors and leader, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on six (6) inches per hour rainfall rate.
- 63. The amendment of Section 1108.3, entitled **Sizing of secondary drains**, to read as follows:
 - 1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow

through the primary system shall not be considered when sizing the secondary roof drain system.

- 64. The deletion of Section 1109, entitled **Combined Sanitary and Storm Public Sewer**, in its entirety.
- 65. The amendment of Section 1202.1, entitled **Nonflammable medical** gases, by deleting Exception 2.
- 66. The addition of Section 1202.2, **Requirements for medical gas** installations and installers, to read as follows:
 - **1202.2** Requirements for medical gas installations and installers. All persons, firms or individuals must be registered with the City of Arlington as required by this code in order to install or alter medical gas installations. In order to be qualified to register as a medical gas installer, the Responsible Master Plumber must also hold a current Medical Gas Installation Endorsement as issued by the Texas State Board of Plumbing Examiners. All individuals installing and/or altering piping systems used to transport gases for medical purposes shall be a master or journeyman plumber that also holds a current Medical Gas Installation Endorsement as issued by the Texas State Board of Plumbing Examiners.
- 67. The addition of Section 1202.3, **Testing and certification of medical gas** systems, to read as follows:
 - **1202.3 Testing and certification of medical gas systems.** All testing and certification of medical gas piping systems shall be performed by an individual that is certified to do so. All testing and certification shall be done in accordance with NFPA 99C. A City of Arlington "Medical Gas Piping System Installation Compliance Certificate" and "Medical Gas Piping System Verification Certificate of Compliance" shall be submitted to the code official at or prior to requesting a final inspection.