ORDINANCE NO. 3606

AN ORDINANCE OF THE CITY OF FARMERS BRANCH, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 22 "BUILDINGS AND BUILDING REGULATIONS" BY AMENDING ARTICLE III "CONSTRUCTION STANDARDS" TO ADOPT THE PROVISIONS OF THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE WITH AMENDMENTS AND APPENDIX E "SUPPLEMENTARY ACCESSIBILITY REGULATIONS", APPENDIX F "RODENT PROOFING", APPENDIX G "FLOOD RESTRAINT CONSTRUCTION" AND APPENDIX J "GRADING"; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS ($2,000.00) FOR EACH OFFENSE; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the International Code Council (ICC) has developed a set of comprehensive and coordinated national model construction codes (known generally as the "International Codes"); and

WHEREAS, the City of Farmers Branch has been involved throughout the development process of the International Codes through participation with the North Texas Chapter of the International Code Council and through the regional review process by the Regional Codes Coordinating Committee of the North Central Texas Council of Governments (NCTCOG); and

WHEREAS, the creation of the 2018 editions of the International Codes by the ICC was in conjunction with the International Conference of Building Officials (ICBO), the organization whose codes the City of Farmers Branch has adopted since the 1970s; and

WHEREAS, the International Codes have been reviewed by the NCTCOG and City staff; and

WHEREAS, the City's building and construction codes are intended to be updated periodically, with the 2018 editions of the International Codes being the most current published building and construction codes for which local amendments have been developed; and

WHEREAS, the City Council of the City of Farmers Branch has determined that it is in the best interest of the citizens of the City of Farmers Branch to adopt the 2018 editions of the International Codes, as stated herein, as the minimum standards for the construction, use, occupancy and maintenance of buildings and structures within the City limits, as set forth herein, and to adopt local amendments to said codes in order to account for unique local practices and/or conditions relating to the design and construction of structures within the City;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FARMERS BRANCH, TEXAS, THAT:

SECTION 1. Chapter 22 "Buildings and Building Regulations" of the Code of Ordinances of the City of Farmers Branch, Texas, is amended by amending Article III "Construction Standards" by adopting the provisions of the 2018 Edition of the International Building Code with amendments and Appendix E "Supplementary Accessibility Regulations", Appendix F "Rodent Proofing", Appendix G "Flood Restraint Construction" and Appendix J "Grading", to read as follows:

"**CHAPTER 22. BUILDINGS AND BUILDING REGULATIONS**

ARTICLE III. - CONSTRUCTION STANDARDS

Sec. 22-86. **Adoption of International Building Code; purpose.**

There is hereby adopted by the City of Farmers Branch, Texas, for the purpose of establishing rules and regulations for the design, quality of materials, erection, construction, installation, alteration, repair, location, relocation, replacement, conversion, addition to, moving, removal, demolition, conversion, occupancy, equipment, use, height, area and maintenance of all building or structures, the 2018 *International Building Code*, published by the International Code Council, including Appendix E "Supplementary Accessibility Regulations", Appendix F "Rodent Proofing", Appendix G "Flood Restraint Construction" and Appendix J "Grading"; with the exception of such sections thereof as are hereafter deleted, modified or amended by this Ordinance, and the same are hereby adopted and incorporated herein, the same as if entirely set out at length herein, and from the date of which this Ordinance shall take effect, the provisions hereof shall be controlling within the corporate limits of the City of Farmers Branch, Texas. This code shall be known as the "Building Code" or the "Farmers Branch Building Code".

Sec. 22-87. Local Amendments to International Building Code.

For purposes of enforcement of the provisions of the Building Code within the incorporated limits of the City, the following sections, paragraphs, and sentences of the 2015 Edition of the International Building Code are hereby amended as follows:

Section 101.4 is amended to read as follows:

101.4 Referenced codes. The other codes listed in Sections 101.4.1 through 101.4.8 and referenced elsewhere in this code, when specifically adopted, shall be considered part of the requirements of this code to the prescribed extent of each such reference. 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 Electrical Code shall mean the Electrical Code as adopted.

Section 101.4 is amended by adding a new Section 101.4.8 to read as follows:

101.4.7 Electrical. The provisions of the Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

Sections 103 and 103.1 is amended by replacing the phrase "Department of Building Safety" with "Building Inspections Department-City of Farmers Branch" where it appears.

Section 104.2.1 is deleted.

Section 104.10.1 is deleted.

Section 105.2 is amended to read as follows:

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

1. Retaining Walls which are not over two feet (2') in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids. A building permit must be obtained for any wall two feet (2') in height or higher. In addition to the building permit application, the retaining wall contractor needs to submit two construction plans identifying the height and length of each portion of the retaining wall, as well as the material being used for the wall. If any portion of the retaining wall is four feet (4') in height or higher, the construction plans must be prepared by a certified professional engineer. The wall shall be measured from the bottom of the footing to the top of the wall. It will be the responsibility of the retaining wall contractor to have his certified professional engineer inspect his walls following construction, if any portion is over four feet (4') in height. Walls under four feet (4') will be the sole responsibility of the retaining wall contractor.

2. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18,927 L) and the ratio of height to diameter or width does not exceed 2 to 1.

3. Sidewalks and driveways not more than 30 inches (762 mm) above grade and not over any basement or story below and which are not part of an accessible route.

4. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

5. Temporary motion picture, television and theater stage sets and scenery.

6. Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.

7. Swings and other playground equipment accessory to one- and two-family dwellings.

8. Window awnings supported by an exterior wall of Group R-3, as applicable in Section 101.2, and Group U occupancies.

9. Movable cases, counters and partitions not over 5 feet 9 inches (5'9") (1,753 mm) in height.

Section 109 is amended by adding Sections 109.7, 109.8, 109.8.1, 109.8.2 and 109.9 to read as follows:

109.7 Re-inspection Fee. A re-inspection fee as established by city council resolution may be charged when:

1. The inspection called for is not ready when the inspector arrives;

2. No building address or permit card is clearly posted;

3. City approved plans are not on the job site available to the inspector;

4. The building is locked or work otherwise not available for inspection when called;

5. The job site is red-tagged twice for the same item;

6. The original red tag has been removed from the job site; and

7. Failure to maintain erosion control, trash control or tree protection.

Any re-inspection fees assessed shall be paid before any more inspections are made on that job site.

109.8 Work without a permit.

109.8.1 Investigation. Whenever work for which a permit is required by this code has been commenced without first obtaining a permit, a special

investigation shall be made before a permit may be issued for such work.

109.8.2 Fee. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code or the city fee schedule as applicable. The payment of such investigation fee shall not exempt the applicant from compliance with all other provisions of either this code or the technical codes nor from penalty prescribed by law.

109.9 Unauthorized cover up fee. Any work concealed without first obtaining the required inspection in violation of Section 110 shall be assessed a fee as set forth in the city fee schedule.

Section 110.3.5 is amended by deleting the "Exception".

Section 202 is amended by amending the definitions of "Ambulatory Health Care Facility," "Atrium," "High-Rise Building," and "Special Inspector" to read as follows:

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to individuals who are rendered incapable of self-preservation by the services provided. This group may include but not be limited to the following:

- Dialysis centers
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

ATRIUM. An opening connecting three or more stories… {Balance remains unchanged}

HIGH-RISE BUILDING. A building with an occupied floor located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

SPECIAL INSPECTOR. A qualified person employed or retained by an approved agency who shall prove to the satisfaction of the registered design professional in responsible charge and the Building Official as having the competence necessary to inspect a particular type of construction requiring special inspection.

Section 202 is amended by adding definitions for the phrases "Assisted Living Facilities," and "Repair Garage" to read as follows:

ASSISTED LIVING FACILITIES. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff.

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs

Section 303.1.3 is amended to read as follows:

303.1.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy except when applying the assembly requirements of Chapters 10 and 11.

Section 304.1 is amended to add the following to the list of occupancies:

Fire stations
Police stations with detention facilities for 5 or less

Section 307.1 is amended by adding the following language to the end of Exception 4. Cleaning Establishments:

See also IFC chapter 21, Dry Cleaning Plant provisions.

Section 403.1 is amended by amending Paragraph 3 under "Exceptions" to read as follows:

3. Open air portions of buildings with a Group A-5 occupancy in accordance with Section 303.6.

Section 403.3 is amended by deleting Paragraph 2 under "Exceptions."

Section 403.3.2 is amended by amending the first paragraph to read as follows*:*

403.3.2 Water supply to required fire pumps. In buildings that are more than 120 feet (36.5 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the

connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Section 404.5 is amended by deleting the paragraph titled "Exception."

Section 406.3.3.1 is amended by adding the following sentence:

A fire separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm).

Section 506.3.1 is amended to by adding the following sentence:

In order to be considered as accessible, if not in direct contact with a street or fire lane, a minimum 10-foot wide pathway meeting fire department access from the street or approved fire lane shall be provided.

Section 602.1.1 is amended by adding the following sentence:

Where a building contains more than one distinct type of construction, the building shall comply with the most restrictive area, height, and stories, for the lesser type of construction or be separated by fire walls.

Section 708.4.2 is amended by amending paragraph 1 under "Exceptions" to read as follows:

Exceptions:

1. Buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that sprinkler protection is provided in the space between the top of the fire partition and the underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1. Portions of buildings containing concealed spaces filled with noncombustible insulation as permitted for sprinkler omission shall not apply to this exception for draftstopping.

Section 718.3 is amended by adding a paragraph title "Exceptions" to read as follows:

Exceptions: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. and provided that in combustible construction, sprinkler protection is provided in the floor space.

Section 718.4 is amended by amending the paragraph titled "Exceptions" to read as follows:

> **Exceptions:** Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and provided that in combustible construction, sprinkler protection is provided in the attic space.

Section 901.6.1 is amended by adding a new Section 901.6.1.1 to read as follows:

901.6.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be backflushed or inspected by approved camera when foreign material is present or when caps are missing, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.

2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the *fire code official*) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.

3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.

4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the *fire code official*.

5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.

6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (*fire code official*) shall be followed.

7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.

8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.

9. Contact the *fire code official* for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the *fire code official*.

Section 901.6 is amended by adding Sections 901.6.4, 901.6.5, and 901.6.6 to read as follows:

901.6.4 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

901.6.5 Systems in high-rise buildings. The owner of a high-rise building shall be responsible for assuring that the fire and life-safety systems required by the Building Code are maintained in an operable condition at all times. Unless otherwise required by the chief, quarterly tests of such systems shall be conducted by approved persons. A written record shall be maintained and shall be made available to the inspection authority.

901.6.6 Smoke-control systems. Mechanical smoke-control systems, such as those in high-rise buildings, buildings containing atria, covered mall buildings and mechanical ventilation systems utilized in smokeproof enclosures and for smoke-removal systems utilized in high-piled combustible storage occupancies, shall be maintained in an operable condition at all times. Unless otherwise required by the chief, quarterly tests of such systems shall be conducted by approved persons. A written record shall be maintained and shall be made available to the inspection authority.

Section 901.7 is amended to read as follows:

901.7 Systems Out of Service. Where a required *fire protection system* is out of service or in the event of an excessive number of activations, the fire department

and the *fire code official* shall be notified immediately and, where required by the *fire code official*, the building shall either be evacuated or an *approved fire watch* shall be provided for all occupants left unprotected by the shut down until the *fire protection system* has been returned to service. *... {Remaining text unchanged}*

Section 903.1.1 is amended to read as follows:

903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standard, or as approved by the fire code official.

Section 903.2 is amended to read as follows:

903.2 Where required. *Approved automatic sprinkler systems* in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating "ELEVATOR MACHINERY – NO STORAGE ALLOWED."

Section 903.2.8.5, is amended by adding Section 903.2.8.5 to read as follows:

903.2.8.5 Townhouses. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all Group R-3 Townhouse Occupancies

Section 903.2.9 is amended by adding Section 903.2.9.3 to read as follows:

903.2.9.3 Self-service storage facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

Section 903.2.11.3 is amended to read as follows:

903.2.11.3 Buildings 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories other than penthouses in compliance with Section 1510 of the *International Building Code* located 35 feet (10 668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exceptions:

1. Open parking structures in compliance with Section 406.5 of the International Building Code, having no other occupancies above the

subject garage and has a minimum of two complete sides unobstructed for fire department access by roadway or fire lane.

2. All Group R-3 Single Family Home (detached) Occupancies.

Amend Section 903.2.11 by adding Sections 903.2.11.7, 903.2.11.8, and 903.2.11.9 to read as follows*:*

903.2.11.7 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 of the IFC to determine if those provisions apply.

903.2.11.8 Spray Booths and Rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

903.2.11.9 Buildings Over 6,000 sq. ft. An automatic sprinkler system shall be installed throughout all buildings with a building area over 6,000 sq. ft. or greater and in all existing buildings that are enlarged to be 6,000 sq. ft. or greater. For the purpose of this provision, fire walls shall not define separate buildings.

In all buildings and structures where Section 903.2 of the International Fire Code requires automatic sprinkler systems to be installed in buildings or structures of less than 6,000 square feet shall be enforced.

Firewalls or fire barriers shall not be used to subdivide a building or structure into separate buildings to avoid the requirement to install a fire extinguishing system or automatic sprinkler system as required by this Section 903.2.

Exception: Open parking garages in compliance with Section 406.5 of the *International Building Code*.

Section 903.3.1.1.1 is amended to read as follows:

903.3.1.1.1 Exempt locations. When approved by the building official and fire code official, automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion and/or rate of rise heat detectors. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard as determined by the building official or fire code official.

2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the building official or fire code official.

3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.

4. Elevator machine rooms, machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

Section 903.3.1.2 is amended by adding Section 903.3.1.2.3 to read as follows:

903.3.1.2.3 Attics, Open Breezeways, and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, open breezeways, and in the following attic spaces:

1. Attics that are used or intended for living purposes or storage shall be protected by an automatic sprinkler system.

2. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick-response intermediate temperature sprinkler shall be installed above the equipment.

3. Attic spaces of buildings that are two or more stories in height above grade plane or above the lowest level of fire department vehicle access.

4. Group R-4, Condition 2 occupancy attics not required by Item 1 or 3 to have sprinklers shall comply with one of the following:

    4.1. Provide automatic sprinkler system protection.

    4.2. Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.

    4.3. Construct the attic using noncombustible materials.

    4.4. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the International Building Code.

    4.5. Fill the attic with noncombustible insulation.

Section 903.3.1.3 is amended to read as follows:

903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings, Group R-3 and R-4 Condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.

Section 903.3.1 is amended by adding Section 903.3.1.4 to read as follows:

903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

> **Exception:** Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:
>
> 1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
>
> 2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
>
> 3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official.

Section 903.3.5 is amended to read as follows:

903.3.5 Water supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the International Plumbing Code. Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

Section 903.4 is amended by adding the following paragraph after the *Exceptions*.

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Section 903.4.2 is amended to read as follows:

903.4.2 Alarms. An approved audible device, located on the exterior of the building in an approved location, shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

Section 903.4.3 is amended to read as follows:

903.4.3 Floor control valves. Approved supervised indicating control valves and shall be provided at the point of connection to the riser on each floor in all buildings.

Section 905.2 is amended to read as follows:

905.2 Installation standards. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual Dry Standpipes shall be supervised with a minimum of 10 psig and a maximum 40-psig-air pressure with a high/low alarm.

Section 905.3 is amended by adding Section 905.3.9 to read as follows:

905.3.9 Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 150 feet (45720 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry and semi-automatic dry, or manual dry standpipes are allowed as provided for in NFPA 14 when approved by Code Official.

2. R-2 occupancies of four stories or less in height having no interior corridors.

Section 905.4 is amended to read as follows:

905.4 Location of Class I standpipe hose connections.

Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.

2. On each side of the wall adjacent to the exit opening of a horizontal exit.

   Exception: Where floor areas adjacent to a horizontal exit are reachable from an interior exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the horizontal exit.

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

   Exception: Where floor areas adjacent to an exit passageway are reachable from an exit stairway hose connection by a 30- foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.

4. In covered mall buildings, adjacent to each exterior public entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.

5. Where the roof has a slope less than four unit's vertical in 12 unit's horizontal (33.3-percent slope), each standpipe shall be provided with a two-way ~~a~~ hose connection located to serve the roof or at the highest landing of an exit stairway with stair access to the roof provided in accordance with Section 1011.12.

6. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60960 mm) from a hose connection, the fire code official

is authorized to require that additional hose connections be provided in approved locations.

7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

Section 905.9 is amended by adding the following paragraph after the *Exceptions*:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Paragraph 1 of Section 906.1 is amended to read in its entirety as follows, including the deletion of the *Exception*:

1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.

Section 907.1 is amended by adding Section 907.1.4 to read as follows:

907.1.4 Design Standards. Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

Section 907.2.1 is amended to read as follows:

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an occupant load of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the International Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11lux) at the walking surface level, and

2. Stop any conflicting or confusing sounds and visual distractions.

Section 907.2.3 is amended to read in its entirety as follows:

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarms system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, where portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less when provided with an approved automatic sprinkler system.

    1.1 Residential In-Home day care with not more than 12 children may use hard-wired or wireless interconnected single station detectors with battery backup in all habitable rooms. (For care of more than five children 2 ½ or less years of age, see Section 907.2.6).

2. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an *approved* occupant notification signal in accordance with Section 907.5.

Section 907.2.4 is amended by deleting the paragraph titled "Exception."

Section 907.2.7 is amended by deleting Exception 2:

Section 907.2.8.1 is amended by deleting Exceptions 2, 2.1, 2.2, and 2.3.

Section 907.2.9.1 is amended by deleting Exceptions 2 and 3.

Exception 3 in Section 907.2.12 is amended to read as follows:

3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1; however, this exception does not apply to accessory uses including but not limited to skyboxes, restaurants and similarly enclosed areas.

Section 907.2.12.1.1 is amended by amending numbered paragraph 1 and adding a new numbered paragraph 3 to read as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room, and Central Control Station.

* * *

3. For Group R, Division 1 Occupancies, in all interior corridors serving as a means of egress for an occupant load of 10 or more.

Section 907.4.2 is amended by adding Section 907.4.2.7 to read as follows:

907.4.2.7 Type. Manual alarm actuating devices shall be an approved double action type.

Section 907.6.1 is amended by adding Section 907.6.1.1 to read as follows:

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from an addressable input (monitor) module may be wired Class B, provided the distance from the addressable module to the initiating device is ten feet or less.

Section 907.6.3 is amended by deleting all "Exceptions."

Section 907.6.4.2 is amended to read as follows:

907.6.4.2 High-rise buildings. In high-rise buildings, a separate zone by floor or an addressable fire alarm system shall be provided, based on the current fire alarm system installation for each of the following types of alarm-initiating devices where provided:

1. Smoke detectors

2. Sprinkler waterflow devices.

3. Manual fire alarm boxes.

4. Other approved types of automatic fire detection devices or suppression systems.

5. In Group B office buildings, corridor walls and ceilings need not be of fire resistive construction within office spaces of a single tenant when the space is equipped with an automatic smoke-detection system within the corridor. The actuation of any detector shall activate alarms audible in all areas served by the corridor. The smoke-detection system shall be connected to the building's fire alarm system where such a system is provided.

Section 907.6.6 is amended by adding a sentence at the end of paragraph to read as follows*:*

See 907.6.3 for the required information transmitted to the supervising station.

Section 907.6.6 is amended by adding Section 907.6.6.3 to read as follows:

907.6.6.3 Communication requirements. All alarm systems, new or replacement, shall transmit alarm, supervisory and trouble signals descriptively to the approved central station, remote supervisory station or proprietary supervising station as defined in NFPA 72, with the correct device designation and location of addressable device identification. Alarms shall not be permitted to be transmitted as a general alarm or zone condition.

Section 909.2 is amended by adding Section 909.2.1 to read as follows:

909.2.1 Smoke-control System for High-Rises. A smoke control system meeting the requirements of Section 909 in the International Fire Code-2018 Edition and this code shall be provided for high-rise buildings.

Section 909 is amended by adding Section 909.22 and related subsections to read as follows:

909.22 Stairway or Ramp Pressurization Alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smoke proof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the

building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the fire department as per Section 105.7.

909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smoke proof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

909.22.1.1 Ventilation Systems. Smoke proof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smoke proof enclosure or connected to the smoke proof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

2. Equipment, control wiring, power wiring and ductwork shall be located within the smoke proof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.

2. Where encased with not less than 2 inches (51 mm) of concrete.

3. Control wiring and power wiring protected by a listed electrical circuit protective systems with a fire-resistance rating of not less than 2 hours.

909.22.1.2 Standby Power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

909.22.1.3 Acceptance and Testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

Section 910.2 is amended by the first sentence and Exceptions 2 and 3 to read as follows:

910.2 Where Required. Smoke and heat vents or a mechanical smoke removal system shall be installed as required by Sections 910.2.1, 910.2.2, and 910.2.3.

Exceptions:

1. *Unchanged*

2. Where areas of buildings are equipped with early suppression fast-response (ESFR) sprinklers, only manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas. Automatic smoke and heat vents are prohibited.

3. Only manual smoke and heat removal shall be required in areas of buildings equipped with control mode special application sprinklers with a response time index of $50(m*s)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

Section 910.2 is amended by adding Section 910.2.3 to read as follows:

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as Section follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 5,000 square feet in single floor area.

   Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3, and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

   Exception: Buildings of noncombustible construction containing only noncombustible materials.

Section 910.3 is amended by adding Section 910.3.4 and related subsections to read as follows:

910.3.4 Vent Operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically. The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only systems per Section 910.2.

910.3.4.2 Nonsprinklered Buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents.

910.3.4.3 Gravity-operated drop out vents. Automatic smoke and heat vents containing heat sensitive glazing designed to shrink and drop out of

the vent opening when exposed to fire shall fully open within 5 minutes after the vent cavity is exposed to a simulated fire represented by a time-temperature gradient that reaches an air temperature of 500 degrees F (260 degrees C) within 5 minutes

Section 910.4.3.1 is amended to read as follows:

[F] 910.4.3.1 Makeup air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m2 per 0.4719 m3/s) of smoke exhaust.

Section 910.4.4 is amended to read as follows:

910.4.4 Activation. The mechanical smoke removal system shall be activated automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

Section 912.2 is amended by adding Section 912.2.3 to read as follows*:*

912.2.3 Hydrant Distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

Section 913.2.1 is amended by adding the following second paragraph and exception to read as follows:

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the *fire code official*. Access keys shall be provided in the key box as required by Section 506.1.

Section 1006.2.2 is amended by adding Section 1006.2.2.7 to read as follows:

1006.2.2.7 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the Electrical Code as adopted.

Section 1009.1 is amended by adding Exception 4 to read as follows:

4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009.

Section 1009.8 is amended by adding Paragraph 7 under "Exceptions" to read as follows:

7. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009 and Chapter.

Section 1010.1.9.5 is amended by amending Exceptions 3 and 4 to read as follows:

3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M, or S occupancy, manually operated edge-or surface-mounted bolts are permitted on the inactive leaf. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.

4. Where a pair of doors serves a Group A, B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress width requirements and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The inactive leaf shall contain no doorknobs, *panic* bars or similar operating hardware.

Section 1015.8 is amended by amending paragraph 1 to read as follows:

1. Operable windows where the top of the sill of the opening is located more than 55-ft (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

Section 1020.1 is amended by adding Exception 6 to read as follows:

6. In Group B office buildings, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor.

Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

Section 1029.1.1.1 is deleted.

Section 1101.1 is amended by adding an "Exception" to read as follows:

Exception: Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be incompliance with the requirements of this chapter.

Exception: Temporary buildings used for construction offices, sales offices leasing offices or other moved on to a project. Duration of the permit shall be determined by the building official or by the City Council as part of site plan approval.

Section 2901.1 is amended to read as follows:

2901.1 Scope. The provisions of this chapter and the… *{intervening text unchanged} …*conform to the *International Private Sewage Disposal Code.* The provisions of this Chapter are meant to work in coordination with the provisions of Chapter 4 of the International Plumbing Code. Should any conflicts arise between the two chapters, the Building Official shall determine which provision applies.

Section 2902.1 is amended by adding the following sentence:

In other than E Occupancies, the minimum number of fixtures in Table 2902.1 may be lowered, if requested in writing, by the applicant stating reasons for a reduced number and approved by the Building Official.

Table 2902.1; is amended by adding footnote g to read as follows:

g. Drinking fountains are not required in M Occupancies with an occupant load of 100 or less, B Occupancies with an occupant load of 25 or less, and for dining and/or drinking establishments.

Section 2902.1 is amended by adding a new Section 2902.1.4 to read as follows:

2902.1.3 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.

2902.1.4.1 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 ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.

2902.1.4.2 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 tool 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's health department.

Section 3001.2 Emergency Elevator Communication Systems for the deaf, hard of hearing and speech impaired is deleted.

Section 3002.1 is amended by adding "Exceptions" to read as follows:

Exceptions:

1 Elevators completely located within atriums shall not require hoistway enclosure protection.

2. Elevators in open or enclosed parking garages that serve only the parking garage, and complying with Sections 406.5 and 406.6, respectively, shall not require hoistway enclosure protection

Section 3005.4 is amended to read in its entirety as follows:

3005.4. Machine Rooms, control rooms, machinery spaces and control spaces. Elevator machine rooms, control rooms, control spaces and machinery spaces shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.

Section 3005 is amended by adding Section 3005.7 to read as follows.

3005.7 Fire Protection in Machine rooms, control rooms, machinery spaces and control spaces.

3005.7.1 Automatic sprinkler system. The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, except as otherwise permitted by Section 903.3.1.1.1 and as prohibited by Section 3005.7.2.1.

3005.7.2.1 Prohibited locations. Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoist-ways.

3005.7.2.2 Sprinkler system monitoring. The sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.

3005.7.3 Water protection. An approved method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the elevator lobby shall be provided.

3005.7.4 Shunt trip. Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

Section 3005 is amended by adding Section 3005.8 to read as follows:

3005.8 Storage. Storage shall not be allowed within the elevator machine room, control room, machinery spaces and or control spaces. Provide approved signage at each entry to the above listed locations stating: "No Storage Allowed.

Section 3006.2 is amended by amending paragraph 5 to read as follows:

5. The building is a high rise and the elevator hoistway is more than 55 feet (16 764 mm) in height. The height of the hoistway shall be measured from the lowest floor at or above grade to the highest floors served by the hoistway.

Section 3109.1 is amended to read as follows:

3109.1 General. Swimming pools shall comply with the requirements of sections 3109.2 through 3109.5 and other applicable sections of this code and other applicable state laws.

SECTION 2. All provisions of the Ordinances of the City of Farmers Branch, Texas, in conflict with the provisions of this ordinance be, and the same are hereby, repealed, and all other provisions of the Ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

SECTION 3. An offense committed before the effective date of this ordinance is governed by prior law and the provisions of the Code of Ordinances, as amended, in effect when the offense was committed, and the former law is continued in effect for this purpose.

SECTION 4. Should any word, sentence, paragraph, subdivision, clause, phrase or section of this ordinance, be adjudged or held to be void or unconstitutional, the same shall not affect the validity of the remaining portions of said ordinance, which shall remain in full force and effect.

SECTION 5. Any person violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Code of Ordinances of the City of Farmers

Branch as heretofore amended and, upon conviction, shall be punished by a fine not to exceed the sum of Two Thousand Dollars ($2,000.00).

SECTION 6. This ordinance shall take effect on the January 1, 2020, following its passage in accordance with the provisions of the charter and state law.

DULY PASSED BY THE CITY COUNCIL OF THE CITY OF FARMERS BRANCH, TEXAS, ON THE 12TH DAY OF NOVEMBER 2019.

ATTEST: **APPROVED:**

_____ _____

Amy Piukana, City Secretary Robert C. Dye, Mayor

APPROVED AS TO FORM:

_____

Peter G. Smith, City Attorney
(kbl:11/1/19:111844)