AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FRISCO, TEXAS, REPEALING ORDINANCE NO. 17-11-77; ADOPTING THE 2018 EDITION OF THE INTERNATIONAL FIRE CODE, INCLUDING APPENDICES A THROUGH N, SAVE AND EXCEPT THE DELETIONS AND ADDITIONS SET FORTH HEREIN; PRESCRIBING ADDITIONAL REGULATIONS GOVERNING CONDITIONS HAZARDOUS TO LIFE AND PROPERTY FROM FIRE, HAZARDOUS MATERIALS AND EXPLOSION; REGULATING OIL AND GAS DRILLING; PROVIDING FOR A PENALTY FOR THE VIOLATION OF THIS ORDINANCE; PROVIDING A SAVINGS/REPEALING CLAUSE, SEVERABILITY CLAUSE AND AN EFFECTIVE DATE OF THIS ORDINANCE; AND PROVIDING FOR THE PUBLICATION OF THE CAPTION HEREOF.

WHEREAS, the City Council of the City of Frisco, Texas (“City Council”) has investigated and determined that it would be advantageous and beneficial to the citizens of the City of Frisco, Texas (“Frisco” or “City”), to repeal, in its entirety, Ordinance No. 17-11-77 and replace it with this Ordinance, adopting the 2018 Edition of the International Fire Code, including Appendices A through M, save and except the deletions and additions set forth below.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FRISCO, TEXAS:

SECTION 1: Findings Incorporated. The findings set forth above are incorporated into the body of this Ordinance as if fully set forth herein.

SECTION 2: Repealing of Ordinance No. 17-11-77. Ordinance No. 17-11-77 is hereby repealed, in its entirety, and replaced by this Ordinance. The effective date of the repeal discussed in this Section shall not occur until the effective date of this Ordinance, at which time Ordinance No. 17-11-77 shall be repealed. Such repeal shall not abate any pending prosecution or lawsuit or prevent any prosecution or lawsuit from being commenced for any violation of Ordinance No. 15-06-37 occurring before the effective date of this Ordinance.

SECTION 3: Adoption of the 2018 International Fire Code. The 2018 International Fire Code (“2018 International Fire Code”), copyrighted by the International Code Council, Inc., including Appendices A-N, save and except the deletions and additions set forth in Exhibit A, attached hereto and incorporated herein for all purposes, is hereby adopted as the Fire Code for Frisco, regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices and from conditions hazardous to life or property in the occupancy of buildings and premises located within Frisco. The 2018 International Fire Code is made a part of this Ordinance as if fully set forth herein. Three (3) copies of the 2018 International Fire Code are on file in the office of the City Secretary of Frisco, being marked and designated as the 2018 International Fire Code. The deletions and additions set forth in Exhibit A also are located on Frisco’s website under Development Services.
SECTION 4: Controlled Intersection Emergency Systems. All traffic-controlled intersections installed in Frisco shall be equipped with a device that is compatible with the GTT Opticom Priority Control System, or an equivalent thereof. All optical detectors shall be mounted at or near the intersection that permits a direct, unobstructed line-of-sight to the oncoming vehicle. Card racks and phase selectors must be mounted in traffic control cabinets.

SECTION 5: Penalty Provision. Any person, firm, corporation or entity violating this Ordinance, as it exists or may be amended, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in an amount not exceeding TWO THOUSAND AND NO/100 DOLLARS ($2,000.00). Each continuing day’s violation shall constitute a separate offense. The penal provisions imposed under this Ordinance shall not preclude Frisco from filing suit to enjoin the violation. Frisco retains all legal rights and remedies available to it under local, state and federal law.

SECTION 6: Savings/Repealing Clause. All provisions of any ordinance in conflict with this Ordinance are hereby repealed to the extent they are in conflict, but such repeal shall not abate any pending prosecution for violation of the repealed ordinance, nor shall the repeal prevent a prosecution from being commenced for any violation if occurring prior to the repeal of the ordinance. Any remaining portions of such ordinances shall remain in full force and effect.

SECTION 7: Severability. Should any section, subsection, sentence, clause or phrase of this Ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. Frisco hereby declares that it would have passed this Ordinance, and each section, subsection, clause or phrase thereof, regardless of whether any one or more sections, subsections, sentences, clauses or phrases is declared unconstitutional and/or invalid.

SECTION 8: Effective Date. This Ordinance shall become effective from and after its adoption and publication as required by the City Charter and by law.

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DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF FRISCO, TEXAS, on this 19th day of November, 2019.

Jeff Cheney, Mayor

ATTESTED AND CORRECTLY RECORDED:

Kristi Morrow, City Secretary

APPROVED AS TO FORM:

Abernathy, Roeder, Boyd & Hullett, P.C.
Ryan D. Pittman, City Attorneys

Dates of Publication: November 22 and November 29, 2019, Frisco Enterprise
Exhibit A
CITY OF FRISCO DELETIONS/ADDITIONS
2018 INTERNATIONAL FIRE CODE

The following deletions and additions to the 2018 International Fire Code are approved and adopted (deletions are evidenced by strikethrough and additions are evidenced by underline):

Chapter 1: Scope and Administration of the 2018 International Fire Code is amended as follows:

Section 101 Scope and General Requirements of the 2018 International Fire Code is amended as follows:

101.1 Title. These regulations shall be known as the Fire Code of the City of Frisco, Texas, hereinafter referred to as “this code.”

Section 102 Applicability of the 2018 International Fire Code is amended as follows:

102.1 Construction and design provisions. [Paragraph remains unchanged.]

3. Existing structures, facilities and conditions when required in Chapter 11 or in specific sections of this code.

102.7 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 80, and such codes and standards shall be considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2. Whenever amendments to the referenced codes and standards, as they exist or may be further amended, have been adopted by Frisco, each reference to said codes and standards shall be considered to reference the amendments and any future amendments thereto. Any reference to NFPA 70 shall mean the International Electrical Code.

Section 105 Permits of the 2018 International Fire Code is amended as follows:

105.3.3 Occupancy prohibited before approval. The building or structure shall not be occupied prior to the fire code official issuing a permit when required and conducting associated inspections indicating the applicable provisions of this code have been met.

105.7 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 – 105.7.16 105.7.26 H

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1 Unless otherwise expressly provided herein, all phrases, words and terms used herein shall have the same meaning ascribed to the same in the 2018 International Fire Code (regardless of whether such phrases, words and terms are italicized herein).

2 Other italicized and bold notations are provided throughout for informational purposes only. By way of example only, “[Paragraph remains unchanged.]”.

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**105.7.26 Electronic access control systems.** Construction permits are required for the installation or modification of an electronic access control system, as specified in Chapter 10. A separate construction permit is required for the installation or modification of a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

**Section 106 Fees** of the 2018 International Fire Code is amended as follows:

**106.2 Schedule of permit fees.** A fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

**106.2 Permit, Inspection and Miscellaneous Fees.** The following Permit, Inspection and Miscellaneous Fees shall apply to the regulations governing conditions hazardous to life and property from fire, hazardous materials and explosion.

**106.2.1 Construction and Installation Permits:**

- Water-based Fire Suppression System (per square foot of building): $0.03 per square foot (minimum fee $50.00)
  - Separate Standpipe fee: $150.00
- Single-family Residential Automatic Fire Sprinkler System: $0.03 per square foot of building (minimum fee $50.00)
- Special Fire Suppression Systems (Kitchen Hood/Clean Agent): $75.00
- Fire Alarm Systems:
  - $50.00 per building for less than 10 devices
  - $75.00 for 11 to 25 devices
  - $150.00 for 26 to 99 devices
  - $200.00 for 100 or more devices
  - $2.00 for each additional device over 100 devices
- Mechanical Trench Burn: $200.00 per day
- Underground Fire Main (Only): $50.00 per system
- Limited Access Security Gates and Perimeter Fencing: $100.00 per system
- Underground or Above Ground Storage Tank: $100.00
- Storage Tanks
  - Install, repair, repair damage to, abandon, remove, place temporarily out of service, close or perform substantial modification to a storage facility when the amounts listed in 2015 IFC Table 105.6.20 are exceeded: $100.00
  - Repair of a Fuel Line (Pressure Test): $100.00
- Battery Systems
  - Installation of battery systems with liquid capacity of
greater than 50 gallons: $100.00

- **Compressed Gases**
  - Construction of compressed gas areas or facilities with greater than exempt quantities: $100.00
- **Installation of an Industrial Oven**: $100.00
- **Drilling Fees (oil, natural gas or other well facilities not to include water)**
  - New Well: $5000.00
  - Operational Transfer Fee: $500.00
  - Appeal Fee: $100.00
- **Construction of an H-Occupancy**: $100.00 Building Access
- **Control/Egress Permit**: $50.00

### 106.2.2 Operational Permits:

- Fireworks Operational Permit: $50.00 per show
- Carnivals and Fairs: $50.00 per event
- Fire Hydrants and Valves per Section 105.6.15: $50.00 for the first (5) days, then $15.00 per day starting on day six (6)
- Drilling Operational Fee (not to include water wells): $100.00 per site per year

### 106.2.3 Plan Review and Inspection Fees:

- Re-inspection Fees
  - $50.00 first re-inspection
  - $75.00 second re-inspection
  - $100.00 third and subsequent re-inspections
- Plan Re-submittal Fee: $50.00 each occurrence
- Expedited Plan Review: $200.00
- After-hours Inspection Fee: $50.00

### 110.4 Violation penalties

Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a Class C Misdemeanor, punishable by a fine of not more than $2000.00 dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Chapter 2: Definitions of the 2018 International Fire Code is amended as follows:

Section 202 General Definitions of the 2015 International Fire Code is amended as follows:
ADDRESSABLE FIRE DETECTION SYSTEM. Any system capable of providing identification of each individual alarm-initiating device. The identification shall be in plain English and as descriptive as possible to specifically identify the location of the device in alarm. The system shall have the capability of alarm verification.

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 persons who are rendered incapable of self-preservation by the services provided. This group may include but is not limited to the following:

1. Dialysis centers
2. Procedures involving sedation
3. Sedation dentistry
4. Surgery centers
5. Colonic centers
6. Psychiatric centers

ANALOG ADDRESSABLE FIRE DETECTION SYSTEM. Any system capable of calculating a change in value by directly measurable quantities (voltage, resistance, etc.) at the sensing point. The physical analog may be conducted at the sensing point or at the main control panel. The system shall be capable of compensating for long-term changes in sensor response while maintaining a constant sensitivity. The compensation shall have a preset point at which a detector maintenance signal shall be transmitted to the control panel. The sensor shall remain capable of detecting and transmitting an alarm while in maintenance alert.

AUTOMATIC SPRINKLER SYSTEM. An automatic sprinkler system, for fire protection purposes, is an integrated system of underground and overhead piping designed in accordance with fire protection engineering standards. The system includes a suitable water supply. The portion of the system above the ground is a network of specially sized or hydraulically designed piping installed in a structure or area, generally overhead, and to which automatic sprinklers are connected in a systematic pattern. The system is usually activated by heat from a fire and discharges water over the fire area. Additionally, with regard to an automatic sprinkler system for one- and two-family dwellings, the automatic sprinkler system described herein shall comply with Section R313 of the International Residential Code, which fully complies with § 1301.551, TEX. OCC. CODE, relating to, among other things, a municipality’s authority to regulate, by ordinance, or otherwise, the installation of a multipurpose residential fire protection sprinkler system or any other fire sprinkler protection system in a new or existing one- or two-family dwelling.
DEFEND IN PLACE. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel, when required by the fire code official, for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

FIREWORKS. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, or detonation and/or activated by ignition with a match or other heat-producing device that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein.

HIGH-PILED COMBUSTIBLE STORAGE. Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet (3658 mm) in height. When required by the fire code official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet (1829 mm) in height. Any building classified as a group S Occupancy or speculative building exceeding 6,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

HIGH-RISE BUILDING. A building having any floors used for human occupancy located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

OCCUPANCY CLASSIFICATION. [Paragraph remains unchanged.]

Business Group B. [Paragraph remains unchanged.]

Fire Stations
Police Stations with detention facilities for 5 or less

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.
SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

STANDBY PERSONNEL. Qualified fire service personnel, approved by the Fire Chief. When utilized, the number required shall be as directed by the Fire Chief. Charges for utilization shall be as normally calculated by the jurisdiction.

UPGRADED OR REPLACED FIRE ALARM SYSTEM. A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

- Replacing one single board or fire alarm control unit component with a newer model
- Installing a new fire alarm control unit in addition to or in place of an existing one
- Conversion from a horn system to an emergency voice/alarm communication system
- Conversion from a conventional system to one that utilizes addressable or analog devices

The following are not considered an upgrade or replacement:

- Firmware updates
- Software updates
- Replacing boards of the same model with chips utilizing the same or newer firmware

Chapter 3. General Requirements of the 2018 International Fire Code is amended as follows:

Section 307 Open Burning, Recreational Fires and Portable Outdoor Fireplaces of the 2015 International Fire Code is amended as follows:

307.1 General. A person shall not kindle or maintain or authorize to be kindled or maintained any open burning unless conducted and approved in accordance with this Sections 307.1.1 through 307.5. Open burning shall be conducted in trenches with TCEQ approved equipment. TCEQ documented approval shall be required with the permit application. Open burning shall also be conducted as required by any other governing agencies regulating emissions.

307.1.1 Prohibited open burning. Open burning shall be prohibited that is offensive or objectionable because of smoke emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Exception: Remains unchanged.
307.2 Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, open burning or a bonfire. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

307.3 Extinguishment authority. When open burning creates or adds to a hazardous situation, or a required permit for open burning has not been obtained, the fire code official is authorized to order the extinguishment of the open burning operation. The fire code official is authorized to order the extinguishment by the permit holder, another person responsible or the fire department of open burning that creates or adds to a hazardous or objectionable situation.

307.4 Location. The location for permitted open burning shall not be less than 50 feet (15 240 mm) 300 feet (91 44m m) from any structure, and provisions shall be made to prevent the fire from spreading to within 50 feet (15 240 mm) 300 feet (91 44mm) of any structure.

Exceptions:

2. The minimum required distance from a structure shall be 25 feet (7620 mm) where the pile size is 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height.

307.4.1 Bonfires. A bonfire shall not be conducted within 50 feet (15 240 mm) 300 feet (91 44mm) of a structure or combustible material unless the fire is contained in a barbeque pit constructed of approved non-combustible materials not exceeding 3 feet or less in diameter and 2 feet or less than height. Conditions which could cause a fire to spread within 50 feet (15 240 mm) 300 feet (91 44mm) of a structure shall be eliminated prior to ignition.

307.4.4 Permanent outdoor firepit. Permanently installed outdoor firepits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

Exception: Permanently installed outdoor fireplaces constructed in accordance with the International Building Code.

307.4.5 Trench burns. Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2

307.5 Attendance. Open burning, trench burning, bonfires, recreational fires and use of portable outdoor fireplaces shall be constantly attended until the fire is extinguished. A minimum of one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be
available for immediate utilization.

Section 308 Open Flames of the 2018 International Fire Code is amended as follows:

308.1.4 Open flame cooking devices. [Paragraph remains unchanged.]

Exceptions:

2. Where buildings, balconies and decks are protected by an automatic sprinkler system.

308.1.4.1 Residential portable gas grills. LP-gas containers are allowed to be used to supply portable gas grills at residential occupancies. Such containers shall not exceed 20 pound (9.0 kg) water capacity.

Exception: Except as permitted in Section 308.1.4.1, LP-gas containers are not allowed in residential areas that offer natural gas.

308.1.6.2 Portable fueled open-flame devices [Paragraph remains unchanged.]

Exceptions:

3. Torches or flame-producing devices in accordance with Section 308.4 308.1.3.

308.1.6.3 Sky Lanterns. A person shall not release or cause to be released an free-floating device containing an open flame, such as but not limited to a sky lantern.

Section 311 Vacant Premises of the 2018 International Fire Code is amended as follows:

311.5 Placards. Any The fire code official is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards, shall be marked as required by Sections 311.5.1 through 311.5.5.

Chapter 4: Emergency Planning and Preparedness of the 2018 International Fire Code is amended as follows:

Section 401 General of the 2018 International Fire Code is amended as follows:

401.5 Making False Report, Alarms and Nuisance Alarms. A person shall not give, signal or transmit a false alarm. 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.

Section 403 Emergency Preparedness Requirements of the 2018 International Fire Code is amended as follows:

403.1 General. In addition to the requirements of Section 401, occupancies, uses and outdoor locations shall comply with the emergency preparedness requirements set forth in Sections 403.2 through 403.12.3.3. Where a fire safety and evacuation plan is required by Sections 403.2 through 403.11.4, evacuation drills shall be in accordance with Section 405 and employee training shall be in accordance with Section 406. Copies of the required, approved plans shall be provided to the fire department in an approved electronic format.

403.5 Group E Occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. A diagram depicting two evacuation routes shall be posted in a conspicuous location in each classroom. Group E occupancies shall also comply with Sections 403.5.1 through 403.5.3.

403.12.3 Crowd managers. Trained crowd managers shall be provided for facilities or events where more than 1,000 persons congregate. The minimum number of crowd managers shall be established at a ratio of one crowd manager to every 250 persons. Where approved by the fire code official, the ratio of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an approved automatic sprinkler system or based upon the nature of the event.

Exceptions:

1. The number of crowd managers may be reduced by up to 50 percent when, in the opinion of the fire code official, the fire protection provided by the facility and the nature of the event warrant a reduction.
2. Assembly occupancies used exclusively for religious worship with an occupancy load not exceeding 1,000.
3. Where approved by the fire code official, the number of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an approved automatic sprinkler system or based upon the nature of the event.

Section 404 Fire Safety Evacuation and Lock Down Plans of the 2018 International Fire Code is amended as follows:

Section 404.2.2; add Number 4.10 to read as follows:
4.10 Fire Extinguishing System Controls

Section 405 Emergency Evacuation Drills of the 2018 International Fire Code is amended as follows:

405.4 Time. The fire code official may require an evacuation drill at any time. Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

Chapter 5. Fire Service Features of the 2018 International Fire Code is amended as follows:

Section 501 General of the 2018 International Fire Code is amended as follows:

501.4 Timing of Installation. When fire apparatus access roads or a water supply for fire protection is required to be installed for any structure or development, they shall be installed, tested, and approved prior to the time of which construction has progressed beyond completion of the foundation of any structure. Such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2.

Section 503 Fire Apparatus Access Roads of the 2018 International Fire Code is amended as follows:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. The 150 feet shall be measured along a 10-foot wide unobstructed level pathway not exceeding a slope of 5:1, around the external walls of the structure. Retaining walls with a drop of 4 feet or greater shall be provided with a fence or barrier to prevent accidental falls. The provision of this section notwithstanding, fire lanes may be required to be located within 30 feet of a building if required by the fire code official to enable proper protection of the building. An unobstructed 5-foot wide level pathway shall be provided through all barriers. A continuous row of parking between the fire lane and the structure shall be considered a barrier. Fire lane easements shall be provided to serve all buildings through parking areas, to service entrances of buildings, loading areas and trash collection areas and other areas deemed necessary to be available to fire and emergency vehicles. All commercial
buildings and residential sub-divisions shall be provided with a minimum of 2 points of access. (A dead-end street with 2 points is not considered 2 points of access.) Residential sub-divisions shall not provide a second point of access through commercial developments. The fire code official is authorized to designate additional requirements for fire lanes where reasonably necessary to provide access for fire and rescue personnel. Dead-end fire lanes are not allowed unless approved by the fire code official.

Exceptions:

1. The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where reasonable conditions exist to allow for a greater distance.
   
   1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
   
   2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
   
   3. There are not more than two Group R-3 or Group U occupancies.

2. Where approved by the fire code official, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities.

503.1.4 Building Courtyards. Buildings having an interior courtyard that do not meet the requirements of Section 503.1.1 for fire department access shall provide two points of access from the fire lane to the interior courtyard. Each of the two points of access shall be a minimum of 10 feet wide in each corridor having a minimum of a 2-hour fire rating in accordance with the IBC.

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm) 24 feet (7315 mm), exclusive of shoulders, except for approved security gates, in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm) 14 feet (4267 mm). Security gates shall be installed in accordance with Section 503.6.

503.2.2 Authority. The fire code official shall have the authority to require
an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities. Fire apparatus access roads shall be designed in accordance with the City of Frisco Engineering Design Standards.

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the fire code official and shall be no less than the following:

1. For 90 or less degree turns:
   
   1.1 24-foot fire lane: minimum radius 20 feet.
   
   1.2 30-foot fire lane: minimum radius 20 feet.

2. Dimensions for Fire Department Apparatus Access Road Cul-de-sac shall be as follows:

   2.1 50-foot radius inside of curb to inside of curb.

3. Center island: No center island is permitted on Fire Apparatus Access Roads. Special consideration will be given to increased radius cul-de-sacs and roundabouts; however, trees, obstructions and/or barriers are specifically prohibited in these islands unless otherwise approved by the Fire Chief.

503.2.5 Dead-ends. Dead-end fire apparatus access roads in excess of 150 feet (45–720 mm) in length shall be provided with an approved area for turning around fire apparatus.

503.3 Marking. Where required by the fire code official, approved signs, curb paint (stripping) or other approved notices or markings that include the words NO PARKING---FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The use of multiple means of marking may be approved and/or required by the fire code official. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and replaced or repaired when necessary to provide adequate visibility. Curb paint (stripping) and signs shall comply with the following:

1. Stripping - Fire apparatus access roads shall be marked by painted lines of red traffic paint 6 inches in width to show the boundaries of the fire
The words “NO PARKING FIRE LANE” shall appear in 4 inch white letters at 25-foot intervals on the red border markings along both sides of the fire lanes.

2. **Signs** - shall read “NO PARKING FIRE LANE” and shall be 12 inches wide and 18 inches high. Signs shall be painted on a white background with letters and borders in red, using no less than 2 inch lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be 6 feet, 6 inches above finished grade. Signs shall be spaced no more than 50 feet apart. Signs may be installed on permanent buildings or walls or as approved by the fire code official. Any obstructed signs must have the obstruction removed for adequate sign visibility.

**503.4 Obstruction of fire apparatus access roads.** Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

**503.6 Security gates and barricades.** The installation of security gates across a fire apparatus access road shall be approved by the fire chief is prohibited unless approved by the fire code official. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200. Where permitted by the fire code official, to allow the incorporation of limited access control gates across dedicated or designated fire lane easements, to ensure that emergency access routes are maintained unobstructed and that emergency vehicles are not delayed entering these properties, a separate permit must be applied for the security gate and/or barricade must comply with the following:

**503.6.1 Permit required.** Prior to the installation of a gate system that extends across a fire lane, the owner or person in charge of the property must obtain a permit from the fire code official. Plans for gate systems shall be submitted to the Fire Marshal’s Office for review and approval before a permit is issued. Such plans shall be of standard blueprint quality, drawn to a standard scale, listing all details, specifications or diagrams necessary to provide a description of the work to be done and the gates mechanical operation. The permit may be revoked if the permit holder fails to maintain the gate system(s) in good working order, which may cause the delay or obstruction of emergency services gaining immediate access to the property. The fire code official may require the gates to remain open if any of the required devices are not working in accordance with Section 503.
503.6.2 Definitions. Unless otherwise expressly stated, the following words and terms shall, for purposes of subsection 503.6, have the meanings set forth below:

SECURITY GATE/PRIVACY GATE/LIMITED ACCESS GATES. Any vehicle access way from a public street to private property which has an access gate that limits or controls vehicle access onto the property.

GATE SYSTEM. A gate system includes each drive gate, pedestrian gate, operating mechanism, receiver, electrical system, chain, belt, pulley, all hardware appliances and all other types of equipment or items necessary for each gate to function as intended and described herein.

PRIMARY DRIVE GATE TYPE. The primary drive gate type that may be installed across fire lanes shall be the sliding type. If the installation of sliding gates is not possible due to the layout of the property or buildings thereon, alternate types of gate installations may be considered.

MAIN GATE. The gate and entryway designed as the primary entrance for guests, residents, deliveries, employees, patrons, etc.

OWNER. A person, corporation partnership, association or any other similar entity.

PRIMARY EMERGENCY ACCESS. The drive or access point designed as the primary point or one of several primary points of ingress/egress for emergency vehicles.

SECONDARY EMERGENCY ACCESS. The drive or access point designed as a secondary or back-up means of ingress/egress for emergency vehicles.

503.6.3 General requirements. All limited access drives from public streets shall be designed to accommodate emergency service vehicles (fire-police-medical). All limited access drives will be designated as either a primary or secondary emergency access way, as determined by the fire code official. The primary means of gate operation shall be by “Opticom”. The emitter shall be located on top of the gate or in a location not less than 9 feet tall as to prevent tampering with the equipment. An exit loop shall be provided a minimum of 14 feet from the gate if an exit loop is installed. Mini-warehouses and nonresidential buildings shall adhere to these requirements also. If the gate is not constructed as to allow for the free passage of exiting vehicles then the gate shall be fitted with an “Opticom”
emitter on each side of the gate. In the event of an operation failure, the gate shall open by means of the key switch that is mounted on the keypad or other approved location. Upon activation of the key switch, the affected gate shall automatically open to a lock-open and disabled condition. The system will require manual reset to close the gates after emergency activation.

503.6.3.1 Final system access (back-up) — electrical disconnect/chain access. In the event of an Opticom or key switch failure, the gate shall open by means of an electrical power disconnect switch in a weatherproof box. The gate shall be capable of being physically disconnected from the operator mechanism from either side of the gate. Slider gate chains shall be accessible to be cut and release the gate from the opener mechanism from either side. Swing gates shall have a pin in the swing arm mechanism secured by a Knox padlock. The padlock shall be accessible from either side of the gate.

503.6.3.2 Electrical equipment protection. All electrical and electronic equipment shall be protected from physical damage and weather by approved watertight boxes or housings.

503.6.3.3 Performance tests. Gates and gate systems shall be tested upon completion of the installation of a gate or gate system or when required by the fire department. Failure of a gate or gate system test will require that all affected gates shall be chained and locked in the open position until repaired and retested.

503.6.3.3.1 Performance test observation. The fire department shall observe all required tests.

503.6.3.3.2 Application for Knox Company Equipment (Key Box, Key Switch, Padlock) Key boxes, key switches and padlocks must be obtained from the Knox Company. Frisco receives no payment or gratuity from the Knox Company for this franchise.

503.6.3.3.3 Opticom gate openings system. All primary emergency access gates shall be equipped to operate with the “Opticom”, or equivalent, gate opening system, “Knox” key switch and fail safe manual back-up or automatic release in the event of a failure of the electrical or mechanical system. The key switch shall be located on a keypad pedestal or call box as approved by the fire code official. All automated gates must also be equipped with one flasher unit and one external lamp assembly with a red globe and guard to be
mounted separate from the enclosure. The light shall be visible from both sides of the gate, be mounted at the top of the fence within 2 feet of the gate opening and flash upon the gate being activated by the Opticom System or switch and continue to flash as long as the gate is being held by the emergency access system.

503.6.3.3.4 Automated secondary emergency access gates. All automated secondary emergency access gates shall be equipped to operate with the Knox key switch mounted on a key pad pedestal and have an electrical disconnect contained within an approved box secured by a Knox padlock to allow manual opening of the gate by emergency personnel. All manual secondary emergency access gates shall open by means of a Knox padlock.

503.6.3.3.5 Accommodation of other services. Provisions shall be made to accommodate other services including, but not limited to, Frisco Police, Public Works, Sanitation Services and Utility Services Departments, as well as, the United States Postal Service.

503.6.3.3.6 Specific requirements. The minimum clear opening width shall be not less than 24 feet and a minimum unobstructed height of 14 feet shall be maintained.

503.6.3.3.6.1 Limited access gates. Limited access gates shall be designed and constructed in a workman-like manner. Gate materials shall be approved by the fire code official. Pedestrian gates shall open fully with a minimum clear span of 48 inches and be provided with a latch or other means of securing them in the open position. Automated pedestrian gates shall open freely upon loss of power. When required by the fire code official one or multiple pedestrian gates shall be released by a Knox Padlock or by a key switch mounted in an approved box.

503.6.3.3.7 Primary system access (emergency) - opticom system. Emitter receivers shall be located at each primary access gate or point as deemed necessary by the fire code official. Upon receiving the transmission of the emitter signal at any drive gate the affected gate shall automatically open.
**503.6.3.3.8 Secondary system access (back-up) key switch.** In the event of power failure the gate shall open by means of a battery back-up system. The gate may either open automatically or be designed to provide multiple openings through a battery powered system.

Section 505 Premises Identification of the 2018 International Fire Code is amended as follows:

**505.1 Address identification.** New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained. Approved numerals of a minimum 6 inch height and of a color contrasting with the background designating the address shall be placed on all new and existing buildings or structures in a position as to be plainly visible and legible from the street or road fronting the property and from all rear alleyways/access. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where buildings do not immediately front a street, approved 6-inch height building numerals or addresses and 3 inch height suite/apartment numerals of a color contrasting with the background of the building shall be placed on all new and existing buildings or structures. Numerals or addresses shall be posted on a minimum 20 inch by 30 inch background on border. Address numbers shall be Arabic numerals or alphabet letters. The minimum stroke width for 6 inch high letters shall be 1.0 inch and the minimum stroke width for 3 inch high letters shall be 0.5 inches. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

Section 506 Key Boxes of the 2018 International Fire Code is amended as follows:

**506.1 Where required.** Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the fire code official. Key boxes, key switches and padlocks must be obtained from the Knox Company. Frisco receives no payment or gratuity from the Knox Company for this franchise.
Section 507 Fire Protection Water Supplies of the 2018 International Fire Code is amended as follows:

507.4 Water supply test date and information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA Standard 291 “Recommended Practice for Fire Flow Testing and Marking of Hydrants” and within one year of sprinkler plan submittal. The fire code official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the fire code official, as required or approved documentation of the test shall be provided to the fire code official prior to final approval of the water supply system. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the water flow test report, or as approved by the fire code official. The report must indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation. The licensed contractor must then design the fire protection system based on this fluctuation information, as per the applicable referenced NFPA standard. Reference Section 903.3.5 for additional design requirements.

507.5 Fire hydrant systems. [Paragraph remains unchanged.]

507.5.1 Where required. [Paragraph deleted.]

Exceptions: [Exceptions deleted.]

507.5.1 Where required. The location, number and type of fire hydrants connected to a water supply capable of delivering the required fire flow shall be provided on the public street or on the site of the premises or both to be protected as required and approved. A fire hydrant shall be located within 100 feet of a fire department connection. Fire hydrants shall be spaced in accordance with the following:

1. Occupancy:
   - One- and Two-Family Dwellings and Group U Occupancies: 500 feet.
   - All others structures: 300 feet.

2. Hydrants shall be provided at main entrances, all intersecting streets and at intermediate locations between intersections as prescribed above, measured, as the hose would be laid. Hydrants will be installed at all intersecting fire-apparatus access roads.
3. Fire hydrants shall be accessible to the fire department apparatus by roads meeting the requirements of Section 503.

4. Dead-end water lines shall comply with the Engineering Design Standards. The water lines shall serve no more than the following number of hydrants and fire appliances.
   - 6 inch lines: 1 hydrant or fire appliance.
   - 8 inch lines: 2 hydrants or fire appliance.

5. Appendix B, Table B105.1 of this Code shall serve as a minimum standard for fire flow in cases where number and size are negotiable.

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

Section 509 Fire Protection and Utility Equipment Identification and Access of the 2018 International Fire Code is amended as follows:

509.1.2 Sign requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of 2 inches when located inside a building and 4 inches when located outside, or as approved by the fire code official. The letters shall be of a color that contrasts with the background.

Section 511 Radio Signal Booster System Specification of the 2018 International Fire Code is hereby added as follows:

511.1 Purpose. Frisco operates a digital P25 public safety radio system. The system was designed to provide clear, intelligible, in-building communication for portable radios worn at the hip with an area coverage reliability of 95 percent or greater. This specification describes the requirements of a Radio Signal Booster System, also referred to as a DAS, BDA which will correct for a reduction in the radio signal to a level below that required to assure the 95 percent area coverage reliability needed for public safety communications caused by a new building (structure) development. Radio Signal Booster Systems will be required in any new construction of buildings that are within the city limits but do not benefit from the radio coverage delivered by Frisco’s 700/800 MHz (megahertz) trunked radio system. This system must also provide inbuilding coverage for the city back up system that also utilizes 700/800 Mhz P25.
Erection of new buildings affects the radio system coverage. The effect on radio coverage is dependent on location (distance from the radio transmitter and receiver and other buildings in the vicinity), height projected frontal area and construction materials. If Frisco’s analysis indicates that there may be a reduction in radio system coverage to a level below that considered acceptable for reliable public safety communications, corrective action will be required to assure radio system coverage reliability is retained within identified buildings. At the minimum, a Radio Signal Booster System will be required. In extreme situations, it may be necessary to install a P25 Micro Site system or a full transmit and receive site.

511.2 System design criteria for buildings and structures. The Signal Booster System shall amplify all signals within the required frequency band and provide the necessary radio system coverage into interior portions of the building including all basement levels as well as any partially underground areas of the building.

The Signal Booster System shall consist of an exterior antenna, a bi-directional amplifier system with a backup power supply mounted in a suitable location in the building and an in-building antenna and/or radiating cable system as necessary to provide the stated signal level. The bi-directional amplifier must have capabilities of channelization to prevent amplification of unwanted signals. Broadband amplifiers will not be approved. The Signal Booster must be capable of both Phase 1 FDMA and Phase 2 TDMA radio transmissions. The Signal Booster System shall be designed to operate in the 769-765 and 799-806 MHz band as well as the 806-861 MHz band. The Signal Booster System shall be designed to provide a minimum -109 dBm RF signal level or a transmitted signal BER (bit error rate) not to exceed 5%, and a minimum of 10 dB above the RF noise floor, at any point within the building.

The Signal Booster System shall employ technology that maintains maximum required output power while preventing excessive emissions per FCC requirements. All equipment must be FCC type accepted and approved for digital signal amplification. RF filtering shall be employed as necessary to reduce the emission of non-desired signals. Signal levels cannot extend beyond the building area where coverage is poor to prevent interference.

System must employ backup battery system that will sustain the system for a minimum of 2 hour.

All system designs shall be presented to Frisco for review and approval. Once the Signal Booster System is implemented, Frisco will test the installed system to verify if it meets the requirements as stated in this document. In the event the system does not meet the requirements of Frisco, the system shall be modified and upgraded so that it meets the stated performance specifications. If changes are made to building structure or expansion to the building, additional equipment will be installed if deemed necessary by City of Frisco.
Section 512  Automatic External Defibrillator (AED) Requirements of the 2018 International Fire Code Ordinance is hereby added as follows:

512.1 Definitions. Unless otherwise expressly stated, the following words and terms shall, for purposes of this Section 512, have the meanings set forth below:

AUTOMATED EXTERNAL DEFIBRILLATOR (AED). A heart monitor and defibrillator that meet the requirements of the Texas Health and Safety Code and applicable federal law.

AED OWNER. A person or entity that owns or possesses an Automatic External Defibrillator. Vendors or dealers that own or possess AEDs solely for resale are not included as owners for the purposes of this Ordinance.

512.1.1 Purpose. The purpose of this section is to promote public health, safety, and welfare by improving emergency care response times to those suffering from sudden cardiac arrest, thereby improving chances of survival. The requirements of this section are intended to provide for faster emergency response in large buildings, multi-story buildings, and/or buildings with large numbers of occupants where first responder access may be impeded due to building use, occupancy, location, layout, construction, or other reasons. This section is not intended to create a new standard of care.

512.2 Duties of AED owner. Any person who presently owns or acquires an AED on or after the effective date of this ordinance, other than vendors or dealers of AEDs owning or possessing AEDs solely for resale purposes, shall:

512.2.1 Registration. Register the AED with the fire department Emergency Medical System Coordinator or the Fire Chief. The registration shall include information about AED location, and the names of all persons expected to operate the AED, and the dates of training. A form will be provided by the fire department;

512.2.2 Inspection and maintenance. Inspect, test, store, maintain and service the AED in accordance with all federal and state laws and regulations, and in accordance with any standards established by the AED manufacturer. Documentation shall be maintained by the owner for the past 3 years of the unit being in service.

512.2.3 Notification of use. Notify the fire department as soon as possible, but in no event any later than 24 hours following any use of the AED (excluding hospitals or other end-care facilities), and provide the fire department with information relevant to the incident, including but not limited to the date, time and location of use, name of person the AED was used upon, the printout from the AED, and the nature of other emergency
response to the incident, including the name and address of any hospital, clinic or medical provider to which the person was transported following the AED use; and

512.2.4 Training unit. Any AED possessed and used solely for demonstration or training purposes, and which would not be operational in an actual emergency use situation, shall be exempt from the registration requirements of this section. Any such AED shall be clearly marked on its exterior and readily identifiable as not appropriate for emergency use.

512.2.5 AED sales. All persons selling an AED within the city, or which may reasonably be anticipated to be used within Frisco, shall:

512.2.5.1 Sale notification. Report the sale of the AED to the fire department. The information to be reported shall include the date of the sale, the manufacturer, model and serial number of the AED sold, the name and address of the seller and name of the purchaser, whether the AED sold is new or previously used, and, if known, the location where the AED is to be placed; and

512.2.5.2 Transfer of ownership. Require that the purchaser provide proof that it has or will have complied with the requirements of this ordinance at the time of transfer of the AED to the purchaser for deployment and use by the purchaser.

512.3 New Construction requiring AED. At the time work begins on the site, an AED is required to be on site. Prior to issuance of Fire approval, an AED shall be placed in all Group A “Assembly” buildings with an occupancy load of 300 or more. In all other Occupancy Use categories, an AED will be placed in buildings with an occupancy load of 200 or more.

Exception:

1. Single- or Multi-family dwelling units.
2. Parking Garages.

512.4 Placement. AEDs shall be conspicuously placed and readily accessible in the event of an emergency. AEDs shall be mounted such that the top of the AED is no more than 5 feet above the floor level.

512.5 Location. AEDs shall be located in buildings to optimally achieve a three minute response time to the person in need of emergency care using the AED. To achieve this separation, the first unit shall be placed in the following locations and other units placed accordingly to meet the intent of this code:
1. One AED shall be placed at the main entrance of every floor of the building.

2. AEDs shall be located on each floor such that the maximum length of travel measured from the most remote point on a floor to any AED shall not exceed 300 feet.

3. AEDs shall be located on each floor such that the maximum length of travel between any two AEDs shall not exceed 600 feet.

Chapter 6: Building Services and Systems of the 2018 International Fire Code is amended as follows:

Section 603 Fuel-Fired Appliances of the 2018 International Fire Code is amended as follows:

603.3.1 Fuel oil storage in outside, above-ground tanks. Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31 and Chapter 57. These fuel oil tanks must be designed to comply with UL 2085 requirements.

603.3.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 603.3.2.1 through 603.3.2.7 or and Chapter 57.

603.3.2.1 Quantity limits. One or more fuel oil storage tanks containing Class II or III combustible liquid shall be permitted in a building. The aggregate capacity of all tanks shall not exceed the following:

1. 660 gallons (2498 L) in unsprinklered buildings, where stored in a tank complying with UL 80, UL 142 or UL 2085 for Class III liquids, and also listed as a double-wall/secondary containment tank for Class II liquids.

2. 1,320 gallons (4996 L) in buildings equipped with an automatic sprinkler system in accordance with Section 903.3.1.1, where stored in a tank complying with UL 142 or UL 2085 as a double-wall/secondary containment tank.

3. 3,000 gallons (11356 L) where stored in protected above-ground tanks complying with UL 2085 and Section 5704.2.9.7 and the room is protected by an automatic sprinkler system in accordance with Section 903.3.1.1.

603.3.2.2 Restricted use and connection. Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel oil to fuel-burning or generator equipment installed in accordance with Section 603.3.2.4. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems.
Section 604 Emergency and Standby Power Systems of the 2018 International Fire Code Ordinance is amended as follows:

604.1.1 Stationary Generators. Stationary emergency and standby power generators required by this code shall be *listed* in accordance with UL 2200.

604.1.2 Installation. Emergency power systems and standby power systems shall be installed in accordance with the International Building Code, NFPA 70, 110, and NFPA 111. Existing installations shall be maintained in accordance with the original approval, except as specified in Chapter 11.

604.1.2.1 Critical operations power systems (COPS). For Critical Operations Power Systems necessary to maintain continuous power supply to facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security or business continuity, see NFPA 70.

604.2 Where required. Emergency and standby power systems shall be provided where required by Sections 604.2.1 through 604.2.18.4 604.2.24 or elsewhere identified in this code or any other referenced code.

604.2.12 Means of Egress Illumination. Emergency power shall be provided for *means of egress* illumination in accordance with Sections 1008.3 and 1104.5.1. (90 minutes)

604.2.13 Membrane Structures. Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with Section 3103.12.6.1. (90 minutes) Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with Section 2702 of the *International Building Code*. (4 hours) Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated membrane structures in accordance with section 3103.10.4.

604.2.14 Emergency voice/alarm communications systems. Emergency power shall be provided for emergency voice/alarm communications systems in the following occupancies, or as specified elsewhere in this code, as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72:

- Covered and open malls, see Section 907.2.20 and 914.2.3
- Group A occupancies, see Sections 907.2.1 and 907.5.2.2.4
- Special amusement buildings, see Section 907.2.12.3
604.2.15 **Smoke control systems.** Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, in accordance with Section 909.11:

- **Covered mall building,** see Section 402.7 of the International Building Code.
- **Atriums,** see Section 404.7 of the International Building Code.
- **Underground buildings,** see Section 405.8 of the International Building Code.
- **Group I-3,** see Section 408.4.2 of the International Building Code.
- **Stages,** see Section 410.3.7.2 of the International Building Code.
- **Special amusement buildings (as applicable to Group A’s),** see Section 411.1 in the International Building Code.
- **Smoke protected seating,** see Section 1029.6.2.1.

604.2.17 **Covered and Open Mall Buildings.** Emergency power shall be provided in accordance with Section 907.2.20 and 914.2.3.

604.2.18 **Airport Traffic Control Towers.** A standby power system shall be provided in airport traffic control towers more than 65 ft. in height. Power shall be provided to the following equipment:

1. Pressurization equipment, mechanical equipment and lighting.
2. Elevator operating equipment.
3. Fire alarm and smoke detection systems.

604.2.19 **Smokeproof enclosures and stair pressurization alternative.** Standby power shall be provided for smokeproof enclosures, stair
pressurization alternative and associated automatic fire detection systems as required by Section 909.20.6.2 of the International Building Code.

604.2.20 Elevator pressurization. Standby power shall be provided for elevator pressurization system as required by Section 909.21.5 of the International Building Code.

604.2.21 Elimination of smoke dampers in shaft penetrations. Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with Section 717.5.3, Exception 2.3 of the International Building Code.

604.2.22 Common exhaust systems for clothes dryers. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with Section 504.10 Item 7, of the International Mechanical Code.

604.2.23 Hydrogen cutoff rooms. Standby power shall be provided for mechanical ventilation and gas detection systems of Hydrogen Cutoff Rooms in accordance with the International Building Code Section 421.8.

604.2.24 Means of Egress Illumination in Existing Buildings. Emergency power shall be provided for means of egress illumination in accordance with Section 1104.5 when required by the fire code official. (90 minutes in I-2, 60 minutes elsewhere.)

604.8 Energy Time Duration. Unless a time limit is specified by the fire code official, in this chapter or elsewhere in this code, or in any other referenced code or standard, the emergency and standby power system shall be supplied with enough fuel or energy storage capacity for not less than 2-hour full-demand operation of the system.

Exception: Where the system is supplied with natural gas from a utility provider and is approved.

604.9 Emergency generators. Emergency generators shall also be electrically supervised for low battery conditions.

607.2 Where Required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors, including but not limited to cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, trailers, pavilions, or any form of roofed enclosure, as required by the fire code official.

Exceptions:
[No change to existing Exceptions.]
Additionally, fuel gas and power provided for such cooking appliances shall be interlocked with the extinguishing system, as required by Section 904.12.2. Fuel gas containers and piping/hose shall be properly maintained in good working order and in accordance with all applicable regulations.

Chapter 8: Interior Finish, Decorative Materials and Furnishings of the 2018 International Fire Code is amended as follows:

Section 805 Upholstered Furniture and Mattresses in New and Existing Buildings of the 2018 International Fire Code is amended as follows:

805.1.2.2 Heat release rate. [Paragraph deleted.]

Section 807 Decorative Materials Other Than Decorative Vegetation In New and Existing Buildings of the 2018 International Fire Code is amended as follows:

807.3 Combustible Decorative Materials. In other than Group I-3 In occupancies in Groups A, E, I, and R-1, and dormitories in Group R-2, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached.

Section 807 Decorative materials other than Decorative Vegetation in new and Existing Buildings of the 2018 International Fire Code is amended as follows:

807.5.2.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings, and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

807.5.2.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on the walls of corridors to not more than 50 percent of the specific wall to which they are attached to. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.
807.5.5.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

807.5.5.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Chapter 9: Fire Protection Systems of the 2018 International Fire Code is amended as follows:

Section 901 General of the 2018 International Fire Code is amended 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 back flushed when foreign material is present, 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, as amended) 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.

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.

Section 903 Automatic Sprinkler Systems of the 2018 International Fire Code is amended as follows:

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

903.1.2 Residential Systems. Unless specifically allowed by this code, residential sprinkler systems installed in accordance with NFPA 13D and NFPA 13R shall not be recognized for the purposes of exceptions or reductions, commonly referred to as “trade-offs”, permitted by other requirements of this code or other codes.

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. Buildings on the same lot shall adhere to the combined aggregate sum of the total square feet. Separation on the same lot does not qualify as separate square footage.

Automatic sprinklers shall not be installed in elevator machine rooms and elevator machine spaces and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Automatic sprinklers shall be installed in elevator hoistways where combustible materials are present or the elevator shaft is constructed of combustible construction. 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.”

903.2.1 Group A. An automatic sprinkler system in accordance with Section 903.3.1 shall be provided throughout buildings and portions thereof used as Group occupancies as provided in this section.

903.2.1.1 Group A-1. An automatic sprinkler system shall be provided throughout stories containing Group A-1 occupancies and throughout all stories from the Group A-1 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

903.2.1.1 Group A-1. [Paragraph remains unchanged.]

1. The fire area exceeds 42,000 square feet 5,000 square feet (464.5 m²) or is greater than two stories in height:
903.2.1.2 Group A-2. [Paragraph remains unchanged.]

1. The fire area exceeds 5,000 square feet (464.5 m²), or is greater than one story in height;

903.2.1.3 Group A-3. [Paragraph remains unchanged.]

1. The fire area exceeds 12,000 square feet (1115 m²) or is greater than two stories in height;

903.2.1.4 Group A-4. [Paragraph remains unchanged.]

1. The fire area exceeds 12,000 square feet (1115 m²) or is greater than two stories in height.

903.2.3 Group E. An automatic sprinkler system shall be provided throughout entire buildings containing a for Group E fire area occupancies as follows.

1. Throughout all Group E fire areas greater than 12,000 square feet (1115 m²) in area.

2. Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.

Exception: [Exception deleted.]

903.2.4 Group F-1. An automatic sprinkler system in accordance with Section 903.3.1 shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists the fire area exceeds 5,000 square feet (464.5 m²).

1. A Group F-1 fire area exceeds 12,000 square feet (1115 m²).

2. A Group F-1 fire area is located more than three stories above grade plane.

3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).

4. A Group F-1 occupancy used for the manufacture of
903.2.6 Group I. An automatic sprinkler system in accordance with Section 903.3.1.1, shall be provided throughout buildings with a Group I fire area.

Exceptions: [Exceptions deleted.]

903.2.7 Group M. An automatic sprinkler system in accordance with Section 903.3.1.1 shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists: where the Group M fire area exceeds 5,000 square feet (465 m²). A Group M occupancy used for the display and sale of upholstered furniture must have an automatic sprinkler system installed regardless of square footage.

1. A Group M fire area exceeds 12,000 square feet (1115 m²).

2. A Group M fire area is located more than three stories above grade plane.

3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).

4. A Group M occupancy is used for the display and sale of upholstered furniture exceeds 5,000 square feet.

903.2.8.5 Group R additions. Group R occupancies that would require an automatic sprinkler system due to additions or remodeling must add automatic sprinkler systems to those areas that are additions or alterations of the original structure.

903.2.9 Group S-1. An automatic sprinkler system in accordance with Section 903.3.1.1, shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 fire area exceeds 12,000 square feet (1115 m²).

2. A Group S-1 fire area is located more than three stories above grade plane.

3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
4. A Group S-1 fire area used for the storage of commercial trucks or buses where the fire area exceeds 5,000 square feet (464 m²).

903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the International Building Code, as shown:

1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding 10,000 square feet (929 m²).

2. Buildings no more than one story above grade plane, with a fire area containing a repair garage exceeding 12,000 square feet (1115 m²).


4. A Group S-1 fire area used for the repair of commercial trucks or buses where the fire area exceeds 5,000 square feet (464 m²).

903.2.9.3 Self service storage facilities. An automatic sprinkler system shall be installed throughout all buildings containing a Group S-1 self-service storage facility. A screen shall be installed at 18 inches below the level of the sprinkler heads to restrict storage above that level. The screen shall be a mesh of not less than 1 inch nor greater than 6 inches in size. The screen and its supports shall be installed such that all elements are at least 18 inches below any sprinkler heads.

903.2.10 Group S-2 enclosed parking garages. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.6 of the International Building Code whether either of the following conditions exist:

1. Where the fire area of the enclosed-parking garage exceeds 12,000 square feet (1115 m²) 5,000 square feet (1115 m²); or

2. Where the enclosed parking garage is located beneath and/or attached to other occupancy groups. Attached is defined as less than 10 feet of fire separation distance as defined in the IBC.

Exception: [Exception deleted.]
903.2.10.2 Group S-2 open parking garages. An automatic sprinkler system shall be provided throughout buildings classified as open parking garages in accordance with Section 406.5 of the International Building Code as follows:

1. Where the open parking garage is located beneath and/or attached to other occupancy groups. Minimum sprinkler protection must be provided at the level of the attached protected occupancy use and below. Attached is defined as less than 10 feet of fire separation distance as defined in the IBC.

903.2.11 Specific building areas and hazards. In all occupancies other than Group U, an automatic sprinkler system shall be installed for building design or hazards in the locations set forth in Sections 903.2.11.1 through 903.2.11.6.

903.2.11.3 Buildings 55-35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings with a floor level that have one or more stories with an occupant load of 30 or more other than penthouses in compliance with Section 1510 of the International Building Code located 55-35 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.

2. Occupancies in Group F-2

903.2.13 Group B. An automatic sprinkler system shall be provided for Group B occupancies where on the following condition exists:

1. Where the fire area exceeds 5,000 square feet.

903.2.14 New and Existing buildings. Automatic sprinkler systems shall be installed:

1. In all new buildings with a gross floor area of 5,000 square feet or greater and/or greater than two stories in height.

2. In existing buildings when additions are made that
increase the gross floor area to 5,000 square or greater and/or greater than two stories in height.

3. In existing buildings with a gross floor area greater than 5,000 square feet when any alteration is made affecting 30 percent or more of the building.

903.2.11.7 Spray booths and rooms. New spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

903.3.1 Standards. Sprinkler systems shall be designed and installed in accordance with Sections 903.3.1.1, unless otherwise permitted by Sections 903.3.1.2 or 903.3.1.3, and other chapters of this code, as applicable. Sprinkler systems shall be designed and installed in accordance with NFPA 13 and NFPA 13R.

903.3.1.1.1 Exempt locations. When approved by the code official, automatic sprinklers shall not be required in the following rooms or areas when specifically permitted by the fire code official and 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 such rooms meet other requirements as determined by the fire code official. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

Exceptions: [Exceptions deleted.]

903.3.1.1.2 Bathrooms. In Group R occupancies, other than Group R-4 occupancies, sprinklers shall not be required in bathrooms that do not exceed 55 square feet (5 m²) in area and are located within individual dwelling units or sleeping units, provided that walls and ceilings, including the walls and ceilings behind a shower enclosure or tub, are of noncombustible or limited-combustible materials with a 15-minute thermal barrier rating.

903.3.1.2. NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies up to and including four stories in height shall be permitted to be installed throughout in accordance with NFPA 13R. Unless specifically allowed by this code, residential sprinkler systems installed in accordance with NFPA 13R shall not be recognized for the purposes of exceptions or reductions commonly referred to as “tradeoffs”, permitted by other
requirements of this code or the International Building Code. In addition, residential sprinkler systems installed in accordance with NFPA 13R must include attic sprinkler protection to be recognized for the purposes of such trade-offs permitted by other sections of this code.

903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units and sleeping units where either of the following conditions exists:

1. The building is of Type V construction, provided that there is a roof or deck above.
2. Exterior balconies, decks and ground floor patios of dwelling units and sleeping units are constructed in accordance with Section 705.2.3.1, Exception 3 of the International Building Code.

Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

Section 903.3.1.2.3 Attics, Combustible Concealed Spaces and Attached Garages. Sprinkler protection is required in combustible attic spaces and combustible concealed spaces of such buildings two or more stories in height, in accordance with NFPA 13 and/or NFPA 13R requirements, and attached garages.

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 and Section 431B of the International Residential Code. Unless specifically allowed by this code, residential sprinkler systems installed in accordance with NFPA 13D shall not be recognized for the purposes of exceptions or reductions commonly referred to as “tradeoffs” permitted by other requirements of this code, the International Residential Code or the International Building Code.

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.

903.3.5. Water supplies. Water supplies as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every water based-fire protection system shall be designed with a 10-psi safety factor. Reference 507.4 for additional design requirements.

903.3.5.1 Domestic services. Where the domestic service provides the water supply for the automatic sprinkler system, the supply shall be in accordance with this section.

903.3.5.1 One- and two-family dwelling combination services. A single combination water supply shall be allowed as required by NFPA 13D and the International Residential Code.

903.3.5.2 Residential combination services. A single combination water supply shall be allowed provided that the domestic demand is added to the sprinkler demand as required by NFPA 13R.

903.4.2 Alarms. Approved audible device, located on the exterior of the building in an approved location, shall be connected to each 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. Alarm devices shall be provided on the exterior of the building in a location approved by the fire code official. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. At least one approved
audible sprinkler flow alarm to alert the occupants shall be provided in the interior of the building in a normally occupied location. An approved listed mechanical alarm shall be connected to every automatic sprinkler system. No electrically operated appliance shall be used unless approved by the fire code official.

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.

903.4.4 Required monitoring for water flow condition. Automatic sprinkler systems protecting one-and two-family dwellings are required to be monitored for a water flow condition for each system. Sprinkler systems 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 the fire department hose connection valves, shall be electrically supervised to initiate a supervisory signal at the Central Station upon tampering.

Section 905 Standpipe Systems of the 2018 International Fire Code is amended as follows:

905.2 Installation standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Fire department connections for standpipe systems shall be in accordance with Section 912. Manual dry systems shall be supervised with a minimum of 10 psig and maximum of 40 psig air pressure with a high/low alarm. Manual dry systems can be installed when the buildings do not exceed four (4) stories in height and parking garages that do not exceed (6) stories from the level of the fire apparatus access road and when approved by the fire code official.

905.3.1 Height. [Paragraph deleted.]

Exceptions: [Exceptions deleted.]

905.3.3 Covered and open mall buildings. [Paragraph remains unchanged.]

Exceptions:

5. At other locations as necessary so that the distance to reach all portions of a tenant spaces does not exceed 200 feet (60 960 mm) 150 feet (45 720mm) from a hose connection as the hose would be laid from a hose connection.
905.3.9. Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area and where any portion of the building’s interior area is more than 200 feet (60960 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. To determine the lowest level of Frisco Fire Department vehicle access, it shall not be required to consider recessed loading docks for 4 or less vehicles and conditions where topography makes access from the Frisco Fire Department vehicle to the building impractical or impossible.

Exceptions:

1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14 where approved by the Fire Code Official.

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

905.4 Location of Class I standpipe hose connections. [Paragraph remains unchanged.]

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

Exception. [Exception no change.]

5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), a hose connection shall be located to serve the roof or at the highest landing of a stairway with stair access to the roof provided in accordance with Section 1011.12. each standpipe shall be provided with a two way hose connection located either on the roof or at the highest landing of a stairway with stair access to the roof. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.

6. Where the most remote portion of a non-sprinklered floor or story is more than 150 feet as the hose would be laid (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200-150 feet as the hose would be laid (60 960 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 907 Fire Alarms and Detection Systems of the 2018 International Fire Code is amended as follows:

907.1.3.1 Design standards. All new or replacement alarm systems serving alarm actuating devices shall be addressable fire detection systems. Alarm system serving more than 20 smoke detectors or more than 200 total alarm activating devices shall be analog intelligent addressable fire detection systems.

Exception: Existing systems need not comply unless the total building remodel or expansion initiated after the effective date of this code, as adopted, exceeds 30 percent of the building remodel or expansion exceeds 50 percent of the building. Such systems must comply within 12 months of the permit application date.

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 where the occupant load due to the assembly occupancy is 300 or more 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 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.

Exception: [Exception remains unchanged.]

907.2.1.3 Fire alarm notification appliances. Activation of fire alarm notification appliances shall:

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

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

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing 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 must be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100 feet open space, all buildings, whether portable buildings or the main building will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions: [Exceptions no change.]

5. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.) {No change to remainder of exceptions.}

907.2.8 Group R-1 [Paragraph remains unchanged.]

907.2.8.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-1 occupancies.

Exceptions:

1. A manual fire alarm system is not required in buildings not more than two stories in height where all individual sleeping units and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by at least 1 hour fire partitions and each individual sleeping unit has an exit directly to a public way, exit court or yard.

907.2.8.1.1 Guest rooms. Manual fire alarm boxes shall be installed in all interior and exterior corridors serving guest rooms.

907.2.9 Group R-2. Fire alarm systems and smoke alarms shall be installed in Group R-2 occupancies as required in Sections 907.2.9.1, and 907.2.9.2 and 907.2.9.3.

907.2.9.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies where.
1. Any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge;

2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit; or

3. The building contains more than 16 dwelling units or sleeping units.

Exceptions:

1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, exit court or yard.

3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1026.6, Exception

907.2.12 High-rise buildings. High-rise buildings—Buildings with a floor used for human occupancy located more than 75 feet (22 860 mm) or 55 feet (16 764 mm) above the lowest level of Frisco Fire Department vehicle access shall be provided with an automatic smoke detection system in accordance with Section 907.2.12.1, a Frisco Fire Department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

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

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

907.6.1.1 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 4 feet separation horizontal and 1-foot vertical between supply and return circuit conductors. The initiating device circuit from an addressable input (monitor) module may be wired Class B provided the distance from the addressable module to the initiating device is 10 feet or less.

907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, and floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

Exceptions:

1. Fire alarm systems in single-story buildings less than 22,500 square feet (2090 m²) in area.
2. Fire alarm systems that only include manual fire alarm boxes, waterflow initiating devices and not more than 10 additional alarm initiating devices.
3. Special initiating devices that do not support individual device identification.
4. Fire alarm systems or devices that are replacing existing equipment.

907.6.4.2 High-rise buildings. In high-rise buildings, 55 feet (16 764 mm) or greater in height, a separate zone by floor shall be provided for each of the following types of alarm-initiating devices where provided:

Items 1-4 unchanged

907.6.6 Delete Exception 3 Items 1 and 2 remain
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 Smoke Control Systems of the 2018 International Fire Code is amended 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 smokeproof 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 firefighter’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 smokeproof 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. Smokeproof 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 smokeproof enclosure or connected to the smokeproof 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 smokeproof 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 Smoke and Heat Removal of the 2018 International Fire Code is amended as follows:

910.2 General. [Paragraph remains unchanged.]

Exception:

2. Only manual smoke and heat removal shall not be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.

3. Only manual smoke and heat removal shall not 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.
910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) 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.

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 910.3.4.1 through 910.3.4.3.

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.

910.4.3 Makeup Air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be manual or 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.

910.4.4 Activation. The mechanical smoke removal system shall be activated by manual controls only 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 Fire Department Connections** of the 2015 International Fire Code is amended as follows:

**912.1.1 Combination.** 5” diameter Storz and Siamese fire department connections shall be provided on all manual dry standpipes.

**912.2 Location.** *Paragraph remains unchanged.*

**912.2.1 Visible location.** Fire department connections shall be located on the street side of buildings, fully visible, recognizable and within 50 feet of from the street or nearest point of fire department vehicle access (fire lane) or as otherwise approved by the fire code chief official.

**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.

**912.8 Fire Department connection caps.** All fire department connections (FDC) shall be Knox Locking Caps to prevent vandalism and tampering.

**Section 913 Fire Pumps** of the 2018 International Fire Code is amended as follows:

**913.1 General.** *Paragraph remains unchanged.*

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 of the IFC.

**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.

**913.4 Valve supervision.** *Paragraph remains unchanged.*

3. Locking valves open.
4. Sealing of valves and approved weekly recorded inspection where valves are located within fenced enclosures under the control of the owner.

Section 914 Fire Protection Based on Special Detailed Requirements of Use and Occupancy of the 2015 International Fire Code is amended as follows:

914.3.1 Automatic sprinkler system. [Paragraph remains unchanged.]

Exception: An automatic sprinkler system shall not be required in spaces or areas of:

2. Telecommunications—equipment—buildings—used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the International Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 712 of the International Building Code, or both.

914.3.1.2 Water Supply to required Fire Pumps. In buildings that are more than 420 55 feet 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.

Exception: {No change to exception.}

Chapter 10: Means of Egress of the 2018 International Fire Code is amended as follows:

Section 1008 Means of Egress Illumination of the 2018 International Building Code is amended as follows:

1008.3.3 Rooms and spaces. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:
5. Public restrooms with an area greater than 300 square feet (27.87 m²) and toilet rooms containing two or more water closets or a combination of water closet and urinal.

Section 1009.8 add the following Exception 7:

7. Buildings regulated under State Law and built in accordance with State registered plans, including variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009 and Chapter 11.

Section 1010 Doors, Gates and Turnstiles of the 2018 International Fire Code is amended as follows:

1010.1.9.5 Bolt locks. [Paragraph remains unchanged.]

Exceptions:

3. Where a pair of doors serves an occupant load of less than 50 persons in 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 Guards of the 2018 International Fire Code is amended as follows:

Section 1015.8 Window Openings; change number 1 to read as follows:

1. Operable windows where the top of the sill of the opening is located more than 75 feet (22 860 mm) 55 (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 1017 Exit Access Travel Distance of the 2018 International Fire Code is amended as follows:

1017.2 Limitations. [Paragraph remains unchanged.]
TABLE 1017.2
EXIT ACCESS TRAVEL DISTANCE

<table>
<thead>
<tr>
<th>OCCUPANCY</th>
<th>WITHOUT SPRINKLER SYSTEM (feet)</th>
<th>WITH SPRINKLER SYSTEMb (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, E, F-1, M, R, S-1</td>
<td>200</td>
<td>250b</td>
</tr>
<tr>
<td>I-2, I-3, I-4</td>
<td>Not Permitted</td>
<td>200b</td>
</tr>
</tbody>
</table>

b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.2.

Section 1031 Maintenance of the Means of Egress of the 2018 International Fire Code is amended as follows:

1031.2 Reliability. Required exit accesses, exits, or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency where the building area served by the means of egress is occupied. An exit or exit passageway shall not be used for any purposes that interferes with a means of egress.

Chapter 11 Construction Requirements for Existing Buildings of the 2018 International Fire Code is amended as follows:

Section 1103 Fire Safety Requirements for Existing Buildings of the 2018 International Fire Code is amended as follows:

1103.2 Elevator operation. Existing elevators with a travel distance of 25 feet (7620 mm) or more above or below the main floor or other level of a building and intended to serve the needs of emergency personnel for fire-fighting or rescue purposes shall be provided with emergency operation in accordance with ASME A17.3. Provide emergency signage as required by Section 606.3.

[Exceptions 1 through 3 unchanged]

Section 1103.5.1; add sentence to read as follows:

Fire sprinkler system installation shall be completed within 24 months from date of notification by the Fire Code Official.

Section 1103.7; add Section 1103.7.8 and 1103.7.8.1 to read as follows:

1103.7.8 Fire Alarm System Design Standards. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.
Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

1103.7.8.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

1203.1.3 Emergency power systems and standby power systems shall be installed in accordance with the International Building Code, NFPA 70, NFPA 110 and NFPA 111. Existing installations shall be maintained in accordance with the original approval, except as specified in Chapter 11.

1203.1.4 through 1203.1.9 {No changes to these sections.}

1203.1.10 Critical Operations Power Systems (COPS). For Critical Operations Power Systems necessary to maintain continuous power supply to facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security, or business continuity, see NFPA 70.

1203.2 Where Required. Emergency and standby power systems shall be provided where required by Sections 1203.2.1 through 1203.2.1826 or elsewhere identified in this code or any other referenced code.

1203.2.4 Emergency Voice/alarm Communications Systems. Emergency power shall be provided for emergency voice/alarm communications systems in the following occupancies, or as specified elsewhere in this code, as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.
- Covered and Open Malls, Section 907.2.19 and 914.2.3
- Group A Occupancies, Sections 907.2.1 and 907.5.2.2.4
- Special Amusement Buildings, Section 907.2.11
- High-rise Buildings, Section 907.2.12
- Atriums, Section 907.2.13
- Deep Underground Buildings, Section 907.2.18

1203.2.5 through 1203.2.13 {No change to the existing sections.}

1203.2.14 Means of Egress Illumination. Emergency power shall be provided for means of egress illumination in accordance with Sections 1008.3 and 1104.5.1. (90 minutes)

1203.2.15 Membrane Structures. Emergency power shall be provided for exit signs in temporary tents and membrane structures in accordance with Section 3103.12.6. (90
minutes) Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with Section 2702 of the International Building Code. (4 hours) Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated membrane structures in accordance with section 3103.10.4.

1203.2.16 {No change.}

1203.2.17 Smoke Control Systems. Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, as required in Section 909.11: Covered Mall Building, International Building Code, Section 402.7 Atriums, International Building Code, Section 404.7 Underground Buildings, International Building Code, Section 405.8 Group I-3, International Building Code, Section 408.4.2 Stages, International Building Code, Section 410.2.5 Special Amusement Buildings (as applicable to Group A’s), International Building Code, Section 411.1 Smoke Protected Seating, Section 1029.6.2.

1203.2.18 {No change to the existing section.}

1203.2.19 Covered and Open Mall Buildings. Emergency power shall be provided in accordance with Section 907.2.19 and 914.2.3.

1203.2.20 Airport Traffic Control Towers. A standby power system shall be provided in airport traffic control towers more than 65 ft. in height. Power shall be provided to the following equipment:
1. Pressurization equipment, mechanical equipment and lighting.
2. Elevator operating equipment.
3. Fire alarm and smoke detection systems.

1203.2.21 Smokeproof Enclosures and Stair Pressurization Alternative. Standby power shall be provided for smokeproof enclosures, stair pressurization alternative and associated automatic fire

Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages of the 2018 International Fire Code is amended as follows:

Section 2304 Dispensing Operations of the 2018 International Fire Code is amended as follows:

2304.1 Supervision of dispensing. The dispensing of fuel at motor fuel-dispensing facilities shall be conducted by a qualified attendant or shall be under the supervision of a qualified attendant at all times or shall be in accordance with Section 2304.3.
1. Conducted by a qualified attendant;

2. Shall be under the supervision of a qualified attendant; and/or

3. Shall be an unattended self-service facility in accordance with Section 2304.3.

At any time the qualified attendant of Item (1) or (2) above is not present, such operations shall be considered as an unattended self-service facility and shall also comply with Section 2304.3.

Section 2306 Flammable and Combustible Liquid Motor Fuel-Dispensing Facilities of the 2018 International Fire Code is amended as follows:

2306.1 General. Storage of flammable and combustible liquids shall be in accordance with Chapter 57, and Sections 2306.2 through 2306.6.3 and this section. Above ground tanks are not to be used for storage or dispensing of fuels that are accessible to the public. Private and semi-private uses are permitted with primary tanks not to exceed 10,000 gallons individual or 20,000 aggregate capacities. Storage and dispensing of motor fuels from aboveground tanks shall be limited to private facilities only and shall not be accessible to the public. Primary tanks shall not exceed 10,000 gallons individual or 20,000 gallons aggregate capacities.

Chapter 24: Flammable Finishes of the 2018 International Fire Code is amended as follows:

Section 2401 General of the 2018 International Fire Code is amended as follows:

2401.2 Nonapplicability. [Paragraph deleted.]

Section 2404 Spray Finishing of the 2018 International Fire Code is amended as follows:

2404.4 Fire protection. New spray—Spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system complying with Chapter 9. Protection shall also extend to exhaust plenums, exhaust ducts and both sides of dry filters when such filters are used.

Chapter 32 High-Piled Combustible Storage of the 2018 International Fire Code is amended as follows:

Section 3206 General Fire Protection and Life Safety Requirements of the 2018 International Fire Code is amended as follows:

TABLE 3206.2
GENERAL FIRE PROTECTION AND LIFE SAFETY
h. Not required—Where storage areas are protected by either early suppression fast response (ESFR) sprinkler systems or 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 the stored commodities with 12 or fewer sprinklers, installed in accordance with NFPA 13, sprinklers, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

i. [No change to the existing exception.]

j. High hazard high-piled storage areas shall not exceed 500,000 square feet. A 2-hour fire wall constructed in accordance with Section 706 of the International Building Code shall be used to divide high-piled storage exceeding 500,000 square feet in area.

Chapter 33 Fire Safety During Construction and Demolition of the 2018 International Fire Code is amended as follows:

Section 3310 Fire Reporting of the 2018 International Fire Code is amended as follows:

3310.1 Required access. Approved vehicle access for the fire-fighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet (30,480 mm) of temporary or permanent Fire Department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available. When fire apparatus access roads are required to be installed for any structure or development, they shall be approved prior to the time construction has progressed beyond completion of the foundation of any structure.

Section 3311 Means of Egress of the 2018 International Fire Code is amended as follows:

3311.4 Stairway floor number signs. Temporary stairway floor number signs shall be provided. The sign shall be a minimum size of 18 inches by 12 inches. The number designating the floor level shall be a minimum of 5 inches in height and located in the center of the sign. The sign shall be located 5 feet above the floor landing in a position that is readily visible when the doors are in the open and closed positions.

Chapter 50 Hazardous Materials — General Provisions of the 2018 International Fire Code is amended as follows:

Section 5003 General Requirements Provisions of the 2018 International Fire Code is amended as follows:

5003.3.1. Unauthorized Discharges [Paragraph remains unchanged.]
5003.3.1.5. Fees. The fees related to a hazardous materials incident shall be as set forth in Chapter 34 (Environment) of Frisco’s Code of Ordinances, as amended.

Chapter 55: Cryogenic Fluids of the 2018 International Fire Code is amended as follows:

Section 5504 Storage of the 2018 International Fire Code is amended as follows:

5504.3. Outdoor storage. The storage of flammable cryogenic fluids in stationary containers is prohibited in all Frisco Zoning Districts except Industrial. The storage of flammable cryogenic fluids in Industrial Zoning Districts requires approval by the fire code official. Outdoor storage of containers shall be in accordance with Sections 5504.3.1. through 5504.3.1.2.3.

Chapter 56: Explosives and Fireworks of the 2018 International Fire Code is amended as follows:

Section 5601 General of the 2018 International Fire Code is amended as follows:

5601.1.3 Fireworks. [Paragraph remains unchanged.]

Exceptions:

1. Only when approved by the fire code official for fireworks displays, storage and handling of fireworks as allowed in Sections 5604 and 5608.

2. Manufacture, assembly and testing of fireworks as allowed in Section 3305.

3-2. The use of fireworks for approved displays as allowed in Section 5608.

4. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided such fireworks and facilities comply with CPSC 16 CFR Parts 1500 and 1507, and DOT 49 CFR, Parts 100-185, for consumer fireworks.

Chapter 57: Flammable and Combustible Liquids of the 2018 International Building Code is amended as follows:

Section 5703 General Requirements of the 2018 International Building Code is amended as follows:
**5703.6 Piping systems.** Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Sections 5703.6.1 through 5703.6.11. An approved method of secondary containment shall be provided for underground tank and piping systems.

**Section 5704 Storage** of the 2018 International Fire Code is amended as follows:

**5704.2.7.1 Materials used in tank construction.** The materials used in tank construction shall be in accordance with NFPA 30. The materials of construction for tanks and their appurtenances shall be compatible with the liquids to be stored. All above-ground tanks shall be designed in accordance Underwriters Laboratory Standard 2085, Protected Above-ground Tanks for Flammable and Combustible Liquids.

**5704.2.9.6.1 Locations where above-ground tanks are prohibited—Storage of Class I and Class II Liquids.** The Storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Legislation for Adoption of the International Fire Code on page xxi). must be approved by the fire code official and comply with applicable state law.

**5704.2.11.4 Leak prevention.** Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 and 5704.2.11.4.2 through 5704.2.11.4.3. An approved method of secondary containment shall be provided for underground tank and piping systems and approved by the fire code official.

**5404.2.11.4.2 Leak detection.** Underground storage tank systems shall be provided with an approved method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3.

**5704.2.11.4.3 Observation wells.** Approved sampling tubes of a minimum 4 inches in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling sump at the corners of the excavation with a minimum of 4 tubes. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines toward the dispensers, a minimum of two are required.

**Section 5706 Special Operations** of the 2018 International Fire Code is amended as follows:

**5706.2.4.4 Locations where above-ground tanks are prohibited.**

[Paragraph deleted.]
5706.2.4.4 Locations where above-ground tanks are prohibited Storage of Class I and Class II Liquids. The Storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Legislation for Adoption of the International Fire Code on page xxi) must be approved by the fire code official and comply with applicable state law.

5706.3 Well drilling and operating. [Paragraph deleted.] Section 5706.3.1-5706.3.8 is amended to read as follows:

5706.3 Oil and gas drilling regulations. Wells for oil and natural gas shall be drilled and operated in accordance with Sections 5706.3.1 through 5706.3.15.

5706.3.1 Purpose. The exploration, development drilling and production of oil, gas, minerals and otherwise in Frisco is an activity that necessitates reasonable regulation to ensure that all property owners have the right to peaceably enjoy their property and its benefits and revenues. It is hereby declared to be the purpose of this section to establish reasonable and uniform limitations, safeguards and regulations for present and future operations related to the exploring, drilling, developing, producing, transporting and storing of oil and gas and other substances produced in association with oil and gas within the corporate limits of Frisco and to the extent allowed or may be allowed by state law, Frisco’s extraterritorial jurisdiction (“ETJ”) or portions thereof, to protect the health, safety and general welfare of the public; protect the quality of the natural and built environment; accomplish the orderly and practical production of available mineral, oil and gas resources; and minimize the potential impact to property and mineral rights owners.

5706.3.2 Definitions. Unless otherwise expressly stated, the following words and terms shall, for purposes of this subsection 5706.3, have the meanings set forth below:

ABANDONMENT. As used herein shall have the same meaning ascribed to it by the Commission and includes the plugging of the well and the restoration of any well site as required by this section.

BLOWOUT PREVENTER. A mechanical, hydraulic, pneumatic or other device or combination of such devices secured to the top of a well casing, including valves, fittings and control mechanisms connected therewith, which can be closed around the drill pipe, or other tubular goods which completely close the top of the casing and are designed for preventing blowouts.
BUILDING. Any structure intended for shelter, occupancy, housing or enclosure for persons, animals or chattel. When separated by dividing walls without openings, each portion of such structure so separated shall be deemed a separate building.

CATHODIC PROTECTION. An electrochemical corrosion control technique accomplished by applying a direct current to the structure that causes the structure potential to change from the corrosion potential to a protective potential in the immunity region. The required cathodic protection current is supplied by sacrificial anode materials or by an impressed current system.

CITY ATTORNEY. The City Attorney of Frisco.

CITY CODE. The Code of Ordinances of Frisco.

COMMISSION. The Texas Railroad Commission.

COMPLETION OF DRILLING, RE-DRILLING AND/OR RE-WORKING. The date the work is completed for the drilling, re-drilling or re-working and the crew is released by completing their work or contract or by their employer.

DERRICK. Any portable framework, tower, mast and/or structure which is required or used in connection with drilling or re-working a well for the production of oil and/or gas.

DRILLING. Digging or boring a new well for the purpose of exploring for, developing or producing oil and/or gas or other hydrocarbons, or for the purpose of injecting oil, gas, water or any other fluid or substance into the earth.

DRILLING EQUIPMENT. The derrick, together with all parts of and appurtenances to such structure, every piece of apparatus, machinery or equipment used or erected or maintained for use in connection with drilling.

DRILL SITE. The premises used during the drilling or re-working of a well or wells located there and subsequent life of a well or wells or any associated operation.

EXPLORATION. Geologic or geophysical activities, including seismic surveys, related to the search for oil and/or gas or other subsurface hydrocarbons.

FIRE DEPARTMENT. The Frisco Fire Department.
FLOODPLAIN. Any property within the limits as delineated by FEMA (Federal Emergency Management Agency) of the 100-year flood plain, as amended by an engineering flood study of the ultimate developed conditions prior to any reclamation.

FRISCO. The City of Frisco, Texas.

GAS. Any fluid, either combustible or noncombustible, which is produced in a natural state from the earth and which maintains a gaseous or rarefied state at standard temperature and pressure conditions and/or the gaseous components or vapors occurring in or derived from petroleum or natural gas.

GAS WELL. The area used for development and production and all operational activities associated with oil and gas for any well drilled, to be drilled, or used for the intended or actual production of natural gas, or a well classified as a gas well under the laws of this state. Any well drilled, to be drilled, or used for the intended or actual production of natural gas.

OIL WELL. The area used for development and production and all operational activities associated with oil and gas for any well drilled, to be drilled, or used for the intended or actual production of oil, or a well classified as an oil well under the laws of this state. Any well drilled, to be drilled, or used for the intended or actual production of natural gas.

OPERATION SITE. The area used for development and production and all operational activities associated with oil and gas after drilling activities are complete.

OPERATOR. For each well, the person listed on Commission Form W-1 or P-4 for an oil and gas well that is, or will be, actually in charge and in control of drilling, maintaining, operating, pumping or controlling any well, including, without limitation, a unit operator. If the operator, as herein defined, is not the lessee under an oil and gas lease of any premises affected by the provisions of this section, then such lessee shall also be deemed to be an operator. In the event that there is no oil and gas lease relating to any premises affected by this section, the owner of the fee mineral estate in the premises shall be deemed an operator.

PERMIT. Any written license granted by Frisco for the exploration, development and production of oil and/or gas wells issued pursuant to the rules and regulations of this section.
PERSON. Both the singular and the plural and means a natural person, a corporation, association, entity, guardian, partnership, receiver, trustee, administrator, executor, fiduciary or representative of any kind.

PRACTICABLE. Available and capable of being done after taking into consideration existing technology, cost and logistics in light of the overall purpose of the activity.

RE-DRILL. Re-completion of an existing well by deepening or sidetrack operations extending more than 150 feet from the existing well bore.

RE-WORKING. Re-completion or re-entry of existing well within the existing bore hole or by deepening or sidetrack operations which do not extend more than 150 feet from the existing well bore, or replacement of well liners or casings.

RIGHT-OF-WAY. Public rights-of-way including streets, easements and other property that is dedicated to the use and benefit of the public.

STREET. Any dedicated public thoroughfare that affords a means of access to abutting property.

TANK. A container, covered or uncovered, used in conjunction with the drilling or production of oil and/or gas or other hydrocarbons for holding or storing fluids.

TECHNICAL ADVISOR. Such person(s) familiar with and educated in the oil and gas industry or the law as it relates to oil and gas matters who may be retained from time to time by Frisco.

WELL. A hole or holes, bore or bores, to any horizon, formation or strata for the purpose of producing oil, gas, liquid hydrocarbon, brine water or sulphur water, or for use as an injection well for secondary recovery, disposal or production of oil, gas or other hydrocarbons from the earth or a classified as a well under the laws of this state. Any well drilled, to be drilled, or used for the intended or actual production of natural gas.

All technical industry words or phrases related to the drilling and production of oil and gas wells not specifically defined in this section shall have the meanings customarily attributable thereto by prudent and reasonable oil and gas industry operators.
5706.3.3 Oversight.

5706.3.3.1 The fire code official, or his/her designee, shall be designated as the Oil and Gas Inspector (“Inspector”) to enforce, directly or through additional appointed staff, the provisions of this section. The Inspector shall have the authority to issue any orders or directives required to carry out the intent and purpose of this section and its particular provisions. Failure of any person to comply with any such order or directive shall constitute a violation of this section.

5706.3.3.2 The Inspector shall have permitted and unlimited access to enter and inspect any premises covered by the provisions of this section to determine compliance with the provisions of this section and all applicable laws, rules, regulations, standards or directives of this state. Failure of any person to permit access to the Inspector shall constitute a violation of this section.

5706.3.3.3 The Inspector shall photograph the proposed drilling site, leased property and adjacent roads, alleys, public utilities and right-of-ways prior to any drilling, onsite activity or disturbance of the land.

5706.3.3.4 The Inspector shall conduct periodic inspections at least once per year of all wells covered by the provisions of this section to determine that the wells are operating in accordance with proper safety parameters as set out in this section and all regulations of the Commission.

5706.3.3.5 The Inspector shall have the authority to request and receive any records, including, without limitation, any records sent to the Commission, logs, reports and the like, relating to the status or condition of any permitted well. Failure of any person to provide any such requested materials shall be deemed a violation of this section.

5706.3.3.6 Frisco may, from time-to-time, employ a technical advisor or advisors who are experienced and educated in the oil and gas industry or the law as it pertains to oil and gas matters. The function of such advisor(s) shall be to advise, counsel and/or represent Frisco on such matters relating to oil and gas operations within Frisco or its ETJ, as Frisco may want or require and the effect thereof, both present and future, on the health, welfare, comfort and safety of the citizens of Frisco. In the event such technical advisor(s) is employed for the purpose of advising, counseling and/or representing Frisco relative to an operator’s unique and particular
set of circumstances, case or request relating to this section, then the cost for fees or charges assessed pursuant to this section shall be borne entirely by the operator. Prior to the employment of a technical advisor, Frisco shall inform the operator of the intended scope of work and the estimated costs and expenses. The employment of a technical advisor shall be approved by the Frisco City Council.

5706.3.3.7 In order to hear and decide appeals of orders, decisions or determinations made by the Inspector relative to the application and interpretation of this section, the Frisco Planning and Zoning Commission is hereby appointed as the Oil and Gas Board of Appeals, referred to herein as the “Board”. The Board shall have and exercise the authority to hear and determine appeals where it is alleged there is error or abuse of discretion regarding the issuance of a permit or the revocation or suspension of any permit issued hereunder, and as provided by this section. The Board does not have the authority to grant a use that is either prohibited or denied.

5706.3.3.8 If an operator (or its officers, employees, agents, contractors or representatives) fails to comply with any requirement of a permit (including any requirement incorporated by reference as part of the permit), the Inspector shall give written notice to the operator specifying the nature of the failure and giving the operator a reasonable time to cure, taking into consideration the nature and extent of the failure, the extent of the efforts required to cure and the potential impact on the health, safety and welfare of the community and potential negative impacts upon the surrounding environment. In no event, however, shall the cure period take more than 30 calendar days. An immediate response to cure shall take place if the failure presents a risk of imminent destruction of property or injury to persons.

5706.3.3.9 If the operator fails to correct the noncompliance within 30 days from the date of the notice, the Inspector may suspend or revoke the permit pursuant to the provisions of this section.

5706.3.3.10 No person shall carry on any operations performed under the terms of the permit issued under this section during any period of any permit suspension or revocation or pending a review of the decision or order of Frisco in suspending or revoking the permit. Nothing contained herein shall be construed to prevent the necessary, diligent and bona fide efforts to cure and remedy the default or violation for which the suspension or revocation of the permit was ordered for the safety of persons or as required by the Commission.
5706.3.3.11 If the operator does not cure the noncompliance within the time specified in this section, the Inspector, upon written notice to the operator, may notify the Commission and request that the Commission take any appropriate action.

5706.3.3.12 An operator may file an appeal to the Board within 30 days of the suspension.

5706.3.3.13 If an application for a permit is denied by the Inspector, nothing herein contained shall prevent a new permit application from being submitted to the Inspector for the same well.

5706.3.3.14 The operator shall notify the Inspector of any changes to the following information within 7 business days after the change occurs:

- The name, address and phone number of the operator;
- The name, address and phone number of the person designated to receive notices from Frisco (which person must be a resident of Texas that can be served in person or by registered or certified mail); and
- The operator’s emergency action response plan (including “drive-to-maps” from public rights-of-way to each drill site).

5706.3.3.15 The operator shall notify the Inspector of any change to the name, address and 24-hour phone number of the person(s) with supervisory authority over drilling or operations activities within one business day.

5706.3.3.16 Permits may not be transferred from one operator to another without prior approval from Frisco. In order to transfer a permit to a new operator, Frisco must be supplied with all appropriate fees, as well as, the transfer of operator forms as supplied to the Commission and new insurance certificates.

5706.3.3.17 The operator shall immediately notify the Inspector of any incident resulting in product loss from a hydrocarbon storage facility or pipeline facility, blowout, fire, explosion, incident resulting in injury, death or property damage or any other significant incidents as defined by the Commission.

5706.3.3.18 A written report, containing a brief summary of the
incident, shall be submitted by the operator to the Inspector by 5:00 p.m. on the first business day following the incident.

5706.3.3.19 A follow-up report shall be submitted by the operator to the Inspector within 30 days following the incident. The operator responsible for the follow-up incident report shall include the following information and comply with the following requirements:

- operator/applicant name, phone number, address and, if possible, email address;
- description of the incident, including, but not limited to, the time, date, location and cause of the event;
- duration of the incident, that is, when it began and when it terminated to the degree that it no longer constituted a hazard to the health, safety and welfare of persons or property, regardless of the distance or separation from the place of incident;
- how the incident was brought under control and/or remedied;
- a full and complete description of the type of intercompany investigation or other investigation or inquiry that was made concerning the incident, the findings or results of such inquiry or investigation, and the action taken as a result of the findings and inquiry concerning the prevention of the existence of future hazards; and
- signed and dated by the person responsible for such report.

5706.3.3.20 The operator shall provide a copy of any “incident reports”, citations or written complaints submitted to the Commission within 30 days after the operator has notice of the existence of such reports citations or complaints. This shall include, but not limited to, notification of any reportable quantity releases of oil, natural gas and/or associated minerals, chemicals or solid and/or liquid wastes pursuant to regulatory requirements established by the Commission, and notification to the Inspector of any fire and/or equipment strikes by lightning.

5706.3.3.21 Any person who intends to re-work a permitted well using a drilling rig, or fracture stimulate a permitted well shall give
written notice to the Inspector no less than 48 hours before the activities begin. The notice must identify where the activities will be conducted and must describe the activities in detail, including whether perforating devices will be used, the duration of the activities and the time the activities will be conducted. The notice must also provide the address and 24-hour phone number of the person conducting the activities. The person conducting the activities will post a sign on the property giving the public notice of the activities, including the name, address and 24-hour phone number of the person conducting the activities.

5706.3.22 Beginning on December 31 after each well is completed, and continuing on each December 31 thereafter until the operator notifies the Inspector that the well has been abandoned and the site restored, the operator shall submit a written report to the Inspector identifying any changes to the information that was included in the application for the applicable permit that have not been previously reported to Frisco.

5706.3.23 The Inspector may, in his/her sole discretion, require the well operator to perform a soil contamination assessment paid for by the operator within 30 days once drilling operations have been completed.

5706.3.4 Permitting.

5706.3.4.1 A person desiring to engage and/or operate in oil and/or gas production activities shall apply for and obtain a permit under this section. It shall be unlawful for any person acting either for himself or as an agent, employee, representative, independent contractor, or servant for any person to drill any well, assist in any way in the site preparation, re-working, drilling, re-drilling, deepening, re-entering, activating, converting, operation, construction of rigs or tank batteries, fracturing and pressurizing or conduct any activity related to the production of oil and/or gas without first obtaining a permit issued by Frisco in accordance with this section.

5706.3.4.2 A permit shall constitute the authority for drilling, activating, operation, construction of rigs or tank batteries, stimulation, fracturing, pressurizing, production enhancement, production gathering or production maintenance, repair, re-working, testing, plugging and abandonment and/or any other activity associated with mineral exploration at the site of the well identified in the permit. A separate permit is required for each well.
5706.3.4.3 An operator shall obtain a new permit in accordance with the provisions of this section if the operator is re-entering and drilling an abandoned well.

5706.3.4.4 An operator shall obtain a new permit in accordance with the provisions of this section for the purpose of re-drilling, deepening or converting to a depth or use other than set forth in the current permit.

5706.3.4.5 A permit is not required for seismic surveys. The operator conducting the seismic survey, however, shall provide notice to the Inspector no less than 24 hours prior to the commencement of any seismic survey activities on site and therein shall provide the following information:

- operator/applicant name, phone number, address and, if possible, email address; if the operator is a corporation, the state of incorporation and if the operator is a partnership, the names and addresses of the general partners shall be provided;

- location of seismic survey;

- date and time the seismic survey will be conducted;

- detailed explanation of the seismic survey method to be used on site; and

- date and time the seismic survey will be completed.

5706.3.4.6 Notice to the Inspector of a seismic survey only provides Frisco with fair notice that a seismic survey will be performed and shall not constitute fair notice that drilling or other oil and/or gas operations or activities will occur. A permit shall not be required to fracture stimulate a permitted well after initial completion. The operator conducting the activities shall give written notice to the Inspector no less than 48 hours before the activities begin and therein shall provide the following information and comply with the following requirements:

- location where the activities will be conducted;

- date and time the activities will be conducted;

- description of the activities in detail;
• the duration of the activities and the time the activities
  will be conducted;

• the address and 24-hour phone number of the person
  conducting the activities; and

• the person conducting the activities will post a sign on
  the property giving the public notice of the activities,
  including the name, address and 24-hour phone number
  of the person conducting the activities.

5706.3.4.7 A permit shall automatically terminate if drilling is not
commenced within 62 months from the date of the issuance of the
permit. The Inspector may review the permit at any time in light of
changing development in the area of the proposed well location and
implement a termination notice which will terminate the permit if
drilling is not commenced within 60 days from the date of
notification.

5706.3.4.8 The permits required by this section are in addition to,
and not in lieu of, any permit that may be required by any other
provision of Frisco or any other governmental agency.

5706.3.4.9 No permit shall be issued for any well to be drilled that
is in non-compliance with any standard, provision, procedure and/or
recommendation detailed under any Frisco ordinance, as the same
may exist, be amended or in the future arising.

5706.3.4.10 No permit shall be issued to any operator who is in non-
compliance with any standard, provision, procedure and/or
recommendation detailed under any Frisco ordinance, as the same
may exist, be amended or in the future arising.

5706.3.4.11 No permit shall be issued to any operator who has not
paid outstanding fees or fines owed to Frisco.

5706.3.4.12 No additional permit or filing fees shall be required for
any wells existing and approved by Frisco on the effective date of
this section or any wells in existence or on any wells on which
drilling has commenced on land annexed into Frisco after the
effective date of this section.

5706.3.4.13 By acceptance of any permit issued pursuant to this
section, the operator expressly stipulates and agrees to be bound by
and comply with the provisions of this section. The terms of this
section shall be deemed to be incorporated in any permit issued
pursuant to this section with the same force and effect as if this section was set forth verbatim in such permit.

5706.3.5 Application.

5706.3.5.1 Every application for an oil and gas well permit issued pursuant to this section shall be in writing, signed by the operator, or some person duly authorized to sign on his or her behalf, and filed with the Inspector.

5706.3.5.2 The application shall include the following information about the project. Any expansion or change in operations will require a different permit and shall be considered a different project. An application shall not be filed with Frisco City staff, considered complete or be considered to give Frisco notice of the project to be undertaken by the applicant until all of the following information is provided to Frisco, along with any applicable fees (“complete application”):

1. the date of the application;

2. an accurate legal description of the lease property or property to be used for the oil and/or gas operation, the parcel and the production unit and name of the geologic formation as used by the Commission. Property recorded by plat should reference subdivision, block and lot numbers, as applicable;

3. proposed well name;

4. exact and correct acreage of the proposed drill site;

5. surface property owner name(s), phone number(s), address(es) and, if possible, email address(es);

6. mineral lessee name, phone number, address, and, if possible, email address;

7. mineral owner name, phone number, address and, if possible, email address;

8. operator/applicant name, phone number, address and, if possible, email address. If the operator is a corporation or other entity that is not a partnership, the state of incorporation or formation and the names and addresses of the registered agent shall be provided. If
the operator is a partnership, the state of formation and
the names and addresses of the general partner(s) shall
be provided (if the general partner is an entity, the
information required to be provided for entities shall
also be provided);

9. name, phone number, address and, if possible, email
address of the individual designated to receive notice in
addition to the registered agent or general partner, if
any;

10. name of representative with supervisory authority over
all oil and/or gas operation site activities and a 24-hour
phone number;

11. name, address and 24-hour phone number of the
person to be notified in case of an emergency;

12. location and description of all improvements and
structures within 1000 feet of the proposed drill site;

13. owner’s name and address of each parcel of property
within 1000 feet of the proposed drill site;

14. map identifying all fresh water wells within 1000
feet of the proposed drill site;

15. map showing proposed transportation route and road
for equipment, chemicals or waste products used or
produced by the oil and/or gas operation;

16. a site plan of the proposed operation site showing the
location of all improvements and equipment, including
the location of the proposed well and other facilities,
including, but not limited to, tanks, pipelines,
compressors, separators and storage tanks, as well as,
details to the projected location of the major
components of the drilling site, lease line and property
lines, impacted vegetation, floodplains, topographic
contours, creeks and other topographic features,
adjacent buildings and other structures, temporary and
permanent fencing and landscaping and the measured
distance from the well site to these major components.
In addition, the site plan must conform to all relevant
standards and requirements described in Frisco’s
Comprehensive Zoning Ordinance, as it exists or may
be amended (“CZO”):

17. typical well site schematics showing layout during and upon completion of drilling;

18. a tree survey prepared pursuant to Frisco’s tree preservation ordinances and requirements, including but not limited to, those located in the CZO, as each exists, may be amended, or in the future arising, in any case where trees are present within the drill site;

19. copies of all reports required by the Commission, specifically including a copy of the approved Commission Form W-1 and/or P-4;

20. a copy of the approved Commission permit to drill including attachments and survey plats that are applicable to the drill and/or operation sites;

21. a copy of the storm water pollution prevention plan as required by the Commission, TCEQ and/or the EPA;

22. a copy of the Notice of Intent filed with the EPA shall be submitted to the Inspector within 7 business days prior to the commencement of any onsite activity;

23. a copy of the determination by the TCEQ of the depth of useable quality ground water;

24. a determination, by a qualified environmental scientist qualified to delineate wetlands, of the presence or absence of jurisdictional wetlands and waters of the U.S., and an indication of the location of any jurisdictional wetlands. If waters of the U.S. or jurisdictional wetlands are impacted then a permit must be requested from the Fort Worth District, Army Corp of Engineers;

25. a signed road repair and maintenance agreement supplied by Frisco that provides that the lease holder or operator of the drilling operation shall repair, at his/her/its own expense, any damage to public roads, streets or highways, caused by the use of heavy vehicles for any activity associated with the preparation, drilling, production and operation of oil
and/or gas wells (“road maintenance agreement”); and

26. an erosion control plan that identifies and indicates the proposed methods of erosion control and complies with all local, State and Federal requirements and including the following:

26.1 a restoration plan prepared by a team of restoration professionals, to include, but not limited to, a professional engineer, hydrologist and biologist and submitted to Frisco for approval. Funds for the cost of restoration must be in escrow;

26.2 a copy of the hazardous materials management plan as required by the Fire Marshal’s office. In addition to the hazardous materials management plan, all material safety data sheets (MSDSs) for all hazardous materials stored, transported and/or temporarily used on the drilling site shall be provided to the Inspector;

26.3 a copy of the emergency response plan as required by the Fire Marshal’s office;

26.4 a description of public utilities required during drilling and operation;

26.5 a description of the water source to be used during drilling;

26.7 evidence of insurance and security requirements under this section;

26.8 a statement, under oath, signed by the operator or designated representative, that the information submitted with the application is, to the best knowledge and belief of the operator or designated representative, true and correct; and

26.9 all required application and well permit fees.
The Inspector, within 30 days after receiving a complete application and remittance of all fees, insurance and security pursuant to the requirements of this section, shall review and approve or disapprove the application. Every application that is disapproved shall also be considered expired as of the date of disapproval. If an incomplete application is received by the Inspector, the Inspector shall send a notice to the applicant within 10 days of receipt thereof stating the information needed for the application to be complete and notifying the applicant that the application shall expire 45 days after the date it was filed if the information required to make it complete is not received.

5706.3.6 Amended application. Amended permits may be submitted for with proposed changes with all requirements met to be approved or disapproved within 30 days.

5706.3.7 Fracture stimulation requirements. Any person who intends to re-work a permitted well using a drilling rig to fracture stimulate a permitted well after initial completion shall give written notice to the Inspector no less than 48 hours before the activities begin. The notice must identify where the activities will be conducted and must describe the activities in detail, including whether explosive charges will be used, the duration of the activities and the time the activities will be conducted. The notice must also provide the address and 24-hour phone number of the person conducting the activities. If requested by the Inspector, the person conducting the activities will post a sign on the property giving the public notice of the activities, including the name, address and 24-hour phone number of the person conducting the activities.

5706.3.6 Bond, letters of credit, indemnity, insurance.

5706.3.6.1 General requirements. Every operator shall be required to:

1. comply with the terms and conditions of this section and the permit issued hereunder;

2. promptly clear drill and operation-sites of all litter, trash, waste and other substances used, allowed, or occurring in the operations, and after abandonment or completion grade, level and restore such property to the same surface conditions as nearly as possible as existed before operations;
3. INDEMNIFY AND HOLD HARMLESS FRISCO, ITS CITY COUNCIL MEMBERS OFFICERS, AGENTS REPRESENTATIVES AND EMPLOYEES FROM AND AGAINST ANY AND ALL CLAIMS, LOSSES, DAMAGES, CAUSES OF ACTION, SUITS AND LIABILITY OF EVERY KIND, INCLUDING ALL EXPENSES OF LITIGATION, COURT COSTS, AND ATTORNEY’S FEES, (INCLUDING ATTORNEY’S FEES INCURRED IN ENFORCING THIS INDEMNITY) FOR INJURY TO OR DEATH OF ANY PERSON OR FOR DAMAGE TO ANY PROPERTY ARISING OUT OF, IN WHOLE OR IN PART, OR IN CONNECTION WITH THE WORK DONE BY THE OPERATOR UNDER A PERMIT:

3.1 WHERE SUCH INJURIES, DEATH OR DAMAGES ARE CAUSED BY OPERATOR’S SOLE NEGLIGENCE AND/OR THE JOINT NEGLIGENCE OF OPERATOR AND ANY OTHER PERSON OR ENTITY, OPERATOR’S STRICT LIABILITY, TORT OR ACT OR OMISSION; AND

3.2 REGARDLESS OF WHETHER SUCH INJURIES, DEATH OR DAMAGES ARE CAUSED IN WHOLE OR IN PART, DIRECTLY OR INDIRECTLY, BY THE NEGLIGENCE OR WILLFUL ACT OR OMISSION OF OPERATOR, AND/OR THE JOINT NEGLIGENCE OR WILLFUL ACT OR OMISSION OF OPERATOR AND ANY OTHER PERSON OR ENTITY.

4. promptly pay all fines, penalties and other assessments imposed due to breach of any terms of the permit; and

5. promptly restore to its former condition any public property or right-of-way damaged by the oil and/or gas operation.

5706.3.6.2 Bond, irrevocable letter of credit. Prior to the issuance of a permit the operator shall provide the Inspector with a security instrument in the form of a bond or an irrevocable letter of credit as
follows:

1. Bond. A bond shall be executed by a reliable bonding or insurance institution authorized to do business in Texas, acceptable to Frisco. The bond shall become effective on or before the date the permit is issued and shall remain in force and effect for at least a period of 6 months after the expiration of the permit term or until the well is plugged and abandoned and the site is restored, whichever occurs first. The operator shall be listed as principal and the instrument shall run to Frisco, as obligee, and shall be conditioned that the operator will comply with the terms and regulations of this section and Frisco. The original bond shall be submitted to the Inspector with a copy of the same provided to Frisco’s City Secretary.

2. Letter of credit. A letter of credit shall be issued by a reputable bank authorized to do business in Texas and shall become effective on or before the date the permit is issued. The letter of credit shall remain in force and effect for at least a period of 6 months after the expiration of the permit term. If the letter of credit is for a time period less than the life of the well as required by this section, the operator must renew the letter of credit or replace the letter of credit with a bond, in the amount required by this section, on or before 45 days prior to the expiration date of the letter of credit. If the operator fails to deliver to Frisco either the renewal letter of credit or replacement bond in the appropriate amount on or before 45 days prior to the expiration date of the letter of credit, Frisco may draw the entire face amount of the letter of credit to be held by Frisco as security for operator’s performance of its obligations under this section. Frisco shall be authorized to draw upon such letter of credit to recover any fines or penalties assessed under this section. Evidence of the execution of a letter of credit shall be submitted to the Inspector by submitting an original signed letter of credit from the banking institution, with a copy of the same provided to Frisco’s City Secretary.

3. The principal amount of any security instrument shall be $50,000.00 for any single well. If, after completion of a well, the applicant/operator, who initially posted a
$50,000.00 bond or letter of credit, has, complied with all of the provisions of this section and whose well in the producing stage and all drilling operations have ceased, may submit a request to the Inspector to reduce the existing security instrument to $10,000.00 for the remainder of the time the well produces without reworking. During reworking operations, the amount of the bond or letter of credit shall be maintained at $50,000.00.

4. If, at any time after no less than a 15-day written notice to the operator and a public hearing, the Frisco City Council shall deem any operator’s bond or letter of credit to be insufficient, it may require the operator to increase the amount of the bond or letter of credit up to a maximum of $300,000.00 per well.

5. Whenever the Inspector finds that a default has occurred in the performance of any requirement or condition imposed by this section, written notice shall be given to the operator. Such notice shall specify the work to be done, the estimated cost and the period of time deemed by the Inspector to be reasonably necessary for the completion of such work. After receipt of such notice, the operator shall, within the time therein specified, either cause or require the work to be performed. If the operator fails to do so, it shall be required to pay to Frisco 125% of the estimated cost of doing the work as set forth in the notice. In no event, however, shall the failure present a risk of imminent destruction of property or injury to persons or involve the operator’s failure to provide periodic reports as required by this section. Frisco shall be authorized to draw against any irrevocable letter of credit or bond to recover such amount due from the operator. Upon receipt of such monies, Frisco shall proceed by such mode, as it solely deems convenient, to cause the required work to be performed and completed, but no liability shall be incurred other than for the expenditure of said sum in hand. In the event that a well has not been properly abandoned under the regulations of the Commission, such additional money may be required from the operator as is necessary to properly plug and abandon the well and restore the drill site in conformity with the regulations of this section.
6. In the event the operator does not cause the work to be performed and fails or refuses to pay to Frisco the estimated cost of the work to be done as set forth in the notice, or the issuer of the security instrument refuses to honor any draft by Frisco against the applicable irrevocable letter of credit or bond Frisco may proceed to obtain compliance and abate the default by, among other means available, way of civil action against the operator, criminal action against the operator and/or by both such methods.

7. When a well or wells covered by a irrevocable letter of credit or bond required herein have been properly abandoned in conformity with all regulations of this section and all regulations of the Commission and notice to that effect has been received by Frisco, or upon receipt of a satisfactory substitute, the irrevocable letter of credit or bond issued in compliance with these regulations shall be terminated and canceled.

5706.3.6.3 Insurance. In addition to the bond or letter of credit required pursuant to this section, the operator shall carry a policy or policies of insurance for each of the types of insurance listed below issued by an insurance company or companies authorized to do business in Texas. In the event such insurance policy or policies are canceled, the permit shall be suspended on such date of cancellation and the operator’s right to operate under such permit shall immediately cease until the operator files additional insurance as provided herein.

1. General requirements applicable to all policies.

1.1 Frisco, its City Council Members, officials, employees, agents, representatives and officers shall be listed as additional insureds, except employer’s liability coverage under the operator’s workers compensation policy.

1.2 All policies shall be written on an occurrence basis except for environmental pollution liability (seepage and pollution coverage) and excess or umbrella liability, which may be on a claims-made basis.

1.3 All policies shall be written by an insurer rated at least “A” A. M. Best Key Rating
1.4 Deductibles shall be listed on the certificate of insurance and shall be on a “per occurrence” basis unless otherwise stipulated herein.

1.5 Certificates of insurance shall be delivered to Frisco evidencing all the requirements listed herein, prior to the issuance of a Permit.

1.6 All policies shall be endorsed with a waiver of subrogation providing rights of recovery in favor of Frisco.

1.7 Any failure on part of Frisco to request required insurance documentation shall not constitute a waiver of the insurance requirement specified herein.

1.8 Each policy shall be endorsed to provide Frisco with a minimum 30-day written notice of cancellation, non-renewal or material change or modification in policy terms or coverage, evidenced by return receipt or United States Mail. A 10-day notice shall be acceptable in the event of non-payment of premium. The words “endeavor to” and “but failure” (to end of sentence) are to be eliminated from the Notice of Cancellation provision on standard ACORD Certificates.

1.9 During the term of the Permit, the operator shall report, in a timely manner, to the Inspector any known loss occurrence which could give rise to a liability claim or lawsuit or which could result in a property loss.

1.10 Upon request, certified copies of all insurance policies shall be furnished to Frisco.

2. Standard commercial general liability policy. This coverage must include premises, operations, blowout or explosion, products, completed operations, sudden and accidental pollution, blanket contractual liability.
underground resources damage, broad form property damage, independent contractor’s protective liability and personal injury. This coverage shall be a minimum combined single limit of $1,000,000.00 per occurrence location for bodily injury and property damage.

3. Excess or umbrella liability. $5,000,000.00 excess, if the operator has a stand-alone environmental pollution liability (EPL) policy. $10,000,000.0 excess, if the operator does not have a stand-alone EPL policy. Coverage must include an endorsement for sudden or accidental pollution. If seepage and pollution coverage is written on a “claims made” basis, the operator must maintain continuous coverage and purchase extended coverage period insurance when necessary.

4. Environmental pollution liability coverage.

4.1 Operator shall purchase and maintain in force for the duration of the permit, insurance for environmental pollution liability applicable to bodily injury, property damage, including loss of use of damaged property or of property that has not been physically injured or destroyed; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense or settlement of claims; all in connection with any loss arising from the insured site. Coverage shall be maintained in an amount of at least $1,000,000.00 per loss, with an annual aggregate of at least $10,000,000.00.

4.2 Coverage shall apply to sudden and accidental pollution conditions resulting from the escape or release of smoke, vapors, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste material or other irritants, contaminants or pollutants.

4.3 The operator shall maintain continuous coverage and shall purchase extended coverage period insurance when necessary. The extended coverage period insurance must provide that any retroactive date applicable to coverage under the policy precedes the effective date of the issuance of the permit by Frisco.
5. Control of well. The policy should cover the cost of controlling a well that is out of control or experiences a blowout, re-drilling or restoration expenses, seepage and pollution damage as first party recovery for the operator and related expenses, including, but not limited to, loss of equipment, experts and evacuation of residents.

5.1 $5,000,000.00 per occurrence/no aggregate, if available, otherwise an aggregate of $10,000,000.00.

5.2 $500,000.00 sub-limit endorsement may be added for damage to property for which the operator has care, custody and control.

6. Workers compensation and employers liability insurance.

6.1 Workers compensation benefits shall be Texas Statutory Limits.

6.2 Employers liability shall be a minimum of $500,000.00 per accident.

6.3 Such coverage shall include a waiver of subrogation in favor of Frisco and provide coverage in accordance with applicable state and federal laws.

7. Automobile liability insurance.

7.1 Combined single limit of $1,000,000.00 per occurrence for bodily injury and property damage.

7.2 Coverage must include all owned, hired and not-owned automobiles.

8. Certificates of insurance.

8.1 The insurance company must be admitted or approved to do business in the State of Texas, unless the coverage is written by a surplus lines insurer.
8.2 The insurance set forth by the insurance company must be underwritten on forms that have been approved by the Texas State Board of Insurance or ISO, or an equivalent policy form acceptable to Frisco, with the exception of environmental pollution liability and control of well coverage.

8.3 Sets forth all endorsements and insurance coverage according to requirements and instructions contained herein.

8.4 Shall specifically set non-renewal forth the notice of cancellation, termination or change or medication in coverage provisions to Frisco. All policies shall be endorsed to read:

“This policy will not be canceled or non-renewed, nor any material change or modification in the policy terms or coverage shall be made without at least 30 days advanced written notice to the owner and the City of Frisco, Texas, evidenced by return receipt or United States mail, except when this policy is being canceled for nonpayment of premium, in which case 10 days advance written notice is required” or equivalent.

8.5 Original endorsements affecting coverage required by this section shall be furnished with the certificates of insurance.

5706.3.6.4 Indemnification and express negligence provisions.

1. Each permit issued by the Inspector shall include the following language: OPERATOR DOES HEREBY EXPRESSLY RELEASE AND DISCHARGE, ALL CLAIMS, DEMANDS, ACTIONS, JUDGMENTS, AND EXECUTIONS WHICH IT EVER HAD, OR NOW HAS OR MAY HAVE, OR ASSIGNS MAY HAVE, OR CLAIM TO HAVE, AGAINST FRISCO.
AND/OR ITS DEPARTMENTS, CITY COUNCIL MEMBERS, OFFICIALS, AGENTS, REPRESENTATIVES, OFFICERS, SERVANTS, SUCCESSORS, ASSIGNS, SPONSORS, VOLUNTEERS, AND/OR EMPLOYEES, CREATED BY OR ARISING OUT OF, IN WHOLE OR IN PART, DIRECTLY OR INDIRECTLY, PERSONAL INJURIES, WHETHER KNOWN OR UNKNOWN, AND INJURIES TO PROPERTY, REAL OR PERSONAL, OR IN ANY WAY INCIDENTAL TO OR IN CONNECTION WITH THE PERFORMANCE OF THE WORK PERFORMED BY THE OPERATOR UNDER A PERMIT. THE OPERATOR SHALL FULLY DEFEND, PROTECT, INDEMNIFY AND HOLD HARMLESS FRISCO, ITS DEPARTMENTS, OFFICIALS, AGENTS, REPRESENTATIVES, OFFICERS, SERVANTS, EMPLOYEES, SUCCESSORS, ASSIGNS, SPONSORS AND VOLUNTEERS FROM AND AGAINST EACH AND EVERY CLAIM, DEMAND OR CAUSE OF ACTION AND ANY AND ALL LIABILITY, DAMAGES, OBLIGATIONS, JUDGMENTS, LOSSES, FINES, PENALTIES, COSTS, EXPENSES, FEES (INCLUDING ATTORNEY'S FEES AND ATTORNEY'S FEES INCURRED IN ENFORCING THIS INDEMNITY) INCURRED IN DEFENSE OF FRISCO, ITS DEPARTMENTS, CITY COUNCIL MEMBERS, OFFICIALS, AGENTS, REPRESENTATIVES, OFFICERS, SERVANTS AND EMPLOYEES, INCLUDING, WITHOUT LIMITATION, PERSONAL INJURIES AND DEATH IN CONNECTION THEREWITH WHICH MAY BE MADE OR ASSERTED BY OPERATOR, ITS EMPLOYEES, CONTRACTORS, REPRESENTATIVES, SUPPLIERS, AGENTS, ASSIGNS OR ANY THIRD PARTIES ON ACCOUNT OF, ARISING OUT OF OR IN ANY WAY INCIDENTAL TO OR IN CONNECTION WITH, IN WHOLE OR IN PART, DIRECTLY OR INDIRECTLY, THE PERFORMANCE OF THE WORK PERFORMED BY THE OPERATOR UNDER A PERMIT. THE OPERATOR AGREES TO INDEMNIFY AND HOLD HARMLESS FRISCO, ITS DEPARTMENTS, CITY COUNCIL MEMBERS,
OFFICIALS, OFFICERS, AGENTS, REPRESENTATIVES, SERVANTS, EMPLOYEES, SUCCESSORS, ASSIGNS, SPONSORS AND VOLUNTEERS FROM ANY LIABILITIES OR DAMAGES SUFFERED AS A RESULT OF CLAIMS, DEMANDS, COSTS OR JUDGMENTS AGAINST FRISCO, ITS DEPARTMENTS, OFFICIALS, OFFICERS, AGENTS, CITY COUNCIL MEMBERS, SERVANTS, REPRESENTATIVES OR EMPLOYEES, CREATED BY OR ARISING OUT OF THE ACTS OR OMISSIONS OF FRISCO, IN WHOLE OR IN PART, DIRECTLY OR INDIRECTLY, OCCURRING ON THE DRILL SITE OR OPERATION SITE IN THE COURSE AND SCOPE OF INSPECTING AND PERMITTING THE OIL OR GAS WELLS INCLUDING, BUT NOT LIMITED TO, CLAIMS AND DAMAGES ARISING IN WHOLE OR IN PART FROM THE NEGLIGENCE OF FRISCO OCCURRING ON THE DRILL SITE OR OPERATION SITE IN THE COURSE AND SCOPE OF INSPECTING AND PERMITTING THE OIL OR GAS WELLS. IT IS UNDERSTOOD AND AGREED THAT THE INDEMNITY PROVIDED FOR IN THIS SECTION IS AN INDEMNITY EXTENDED BY THE OPERATOR TO INDEMNIFY AND PROTECT FRISCO AND ITS DEPARTMENTS, AGENTS, REPRESENTATIVES, OFFICERS, CITY COUNCIL MEMBERS, SERVANTS EMPLOYEES AND VOLUNTEERS FROM THE CONSEQUENCES OF THE NEGLIGENCE OF FRISCO, ITS DEPARTMENTS, AGENTS, REPRESENTATIVE, OFFICERS, CITY COUNCIL MEMBERS, SERVANTS EMPLOYEES AND/OR VOLUNTEERS, WHETHER THAT NEGLIGENCE IS THE SOLE OR CONTRIBUTING CAUSE OF THE RESULTANT INJURY, DEATH AND/OR DAMAGE.

5706.3.6.5 Notice. The individual designated to receive notice shall be a resident of Texas upon whom all orders and notices provided in this section may be served in person or by registered or certified mail. Every operator shall, within 10 days, notify the Inspector in writing of any change in such agent or mailing address unless operations in Frisco are discontinued and abandonment is complete.
5706.3.6.6 Acceptance and indemnity agreement. The operator who has a net worth of not less than $25,000,000.00, as shown in such owner’s or operator’s most recent audited financial statements, may substitute an acceptance and indemnity agreement in lieu of the bond or irrevocable letter of credit and insurance requirements set forth in this section, provided that such acceptance and indemnity agreement shall be in a form acceptable to, and approved by, the City Attorney and the Director of Administrative Services or his/her designee of Frisco. The Inspector may request an annual review of the operator’s most recent audited financial statements to assure compliance with this section.

5706.3.7 Buffering and setbacks.

5706.3.7.1 No gas well permit shall be issued for any well to be drilled within any of the right-of-way, streets or alleys of Frisco and/or projected right-of-way, streets or alleys shown by the current comprehensive plan of Frisco, and no right-of-way, street or alley shall be blocked, encumbered or closed due to any exploration, drilling or production operations unless prior consent is obtained from the Inspector. The Inspector may grant permission for a right-of-way, street or alley to be blocked, encumbered or closed that is temporary and states the hour(s) and day(s) that any right-of-way, street or alley may be blocked, encumbered or closed.

5706.3.7.2 No permit shall be issued for any well, the center of which at the surface of the ground is located within 500 feet to the closest point, calculated in a straight line, without regard to intervening structures or objects of the following:

- any building used, or designed and intended to be used, for human occupancy or for any building used, or designed and intended to be used, for human occupancy for which a building permit has been issued on or before the date the application for a drilling permit is filed with the Inspector;
- any type of surface water conveyance, including, but not limited to, creeks, streams, drainage ditches or other constructed storm water conveyance systems, calculating distance in a straight line from the conveyance centerline;
- any lease line as indicated on Commission Form W-1, or recorded property, lot or tract line;
• any existing storage tank or source of potential ignition;

• any existing or projected public street, road, highway, or right-of-way line; and

• any fresh water well.

5706.3.7.3 No permit shall be issued for any well, the center of which at the surface of the ground is located within 500 feet of public land or within public land without the prior written consent of the Frisco City Council. The Frisco City Council shall review, among other factors reasonably deemed appropriate by the Frisco City Council, the insurance and security requirements, potential environmental impacts and threats to public health and safety, on an individual basis prior to issuing the permit.

5706.3.7.4 No permit shall be issued for any well to be drilled within 500 feet of the 100-year floodplain or within the 100-year floodplain without the following:

• use of a closed-loop drilling fluid system;

• complete restoration of the entire lease or operator owned property associated with the drilling site within the 100-year floodplain, which would include an evaluation and a restoration plan prepared by a team of restoration professionals, to include but not limited to a professional engineer, hydrologist and biologist; and submitted to Frisco for approval. This report would include a list of the exotic/invasive vegetation species observed along with a map showing their locations. It would also incorporate stabilization recommendations where needed for channel or slope stabilization. The report would include a planting plan along with species recommendations for both herbaceous and woody species. The planting plan would be tailored to provide necessary erosion control and to increase the quality of the riparian habitat; and

• all land within the lease or operator owned property associated with the drilling site that is located within the 100-year floodplain shall be placed under a conservation easement following restoration.

5706.3.7.5 All tanks shall be set back pursuant to the standards of
the Commission and the National Fire Protection Association, but in all cases, shall be at least 500 feet from the following:

- any building used, or designed and intended to be used, for human occupancy or for any building used, or designed and intended to be used, for human occupancy for which a building permit has been issued on or before the date the application for a drilling permit is filed with the Inspector;

- any type of surface water conveyance, including, but not limited to, creeks, streams, drainage ditches or other constructed storm water conveyance systems, calculating distance in a straight line from the conveyance centerline;

- any lease line as indicated on Commission Form W-1, or recorded property, lot or tract line;

- any existing storage tank or source of potential ignition;

- any existing or projected public street, road, highway, or right-of-way line; and

- any fresh water well.

5706.3.7.6 No development shall take place within 500 feet of the well bore prior to the completion of all abandonment procedures.

5706.3.7.7 All buffering and setbacks may be reduced at the discretion of the Board. All distance reductions shall be documented as variances to the requested permit prior to issuance.

5706.3.8 Fences and gates.

5706.3.8.1 A temporary fence and a secured entrance gate to the drill site shall be required on drill sites during initial drilling, completion or re-working operations except on those drill sites where 24-hour human supervision is present on the drill site. All gates are to be kept locked when the operator or his/her employees are not within the enclosure. So long as stability of the fence is maintained, temporary fence posts shall not be required to be set in concrete.

5706.3.8.2 Within 30 days (i) after production has been established, or (ii) after the well has been completed as a producing well but no actual production commences, all operation sites shall be
completely enclosed by a permanent chain link fence or other approved fencing material according to the requirements of the requested permit as follows:

- the fence fabric shall be at least 8 feet in height, but no more than 10 feet;
- support posts shall be set in concrete and shall be imbedded into the ground to a depth sufficient to maintain the stability of the fence;
- the chain link fabric shall be galvanized steel wire with a minimum plating of one and two-tenths (1.2) ounces of zinc per square foot of surface area or shall be coated with vinyl or plastic material approved by the Inspector;
- the chain link fence fabric shall have a minimum thickness of 11 gauge;
- the chain link fabric shall be 2 inch mesh; provided, however, 3½ inch mesh may be used on any fence where the fabric is interwoven with artificial screening materials approved by the Inspector;
- posts and rails shall be standard galvanized, welded pipe, schedule 40 or thicker; provided, however, that nongalvanized drill pipe may be used if it exceeds schedule 40 in thickness;
- all pipe and other ferrous parts, except chain link fabric and drill pipe, shall be galvanized inside and outside with a plating which contains a minimum of one and two-tenths (1.2) ounces of zinc per square foot of surface area; and
- tension rods shall be 3/8 inch round steel bolt stock. Adjustable tighteners shall be turnbuckle or equivalent having a 6 inch minimum take-up. Tension bars shall have minimum thickness of 1/4 by 3/4 inch.

5706.3.8.3 All chain link fences shall be equipped with at least 1 gate. The gate shall meet the following specifications:

- each gate shall be not less than 12 feet wide and be composed of 2 gates, each of which is not less than 6 feet wide, or 1 sliding gate not less than 12 feet wide. If 2
gates are used, gates shall latch and lock in the center of the span;

- the gates shall be of chain link construction that meets the applicable specifications, or of other approved material that, for safety reasons, shall be at least as secure as chain link fence;

- the gates shall be provided with a combination catch and locking attachment device for a padlock, and shall be kept locked except when being used for access to the site; and

- operator must provide the Inspector with a “Knox Padlock” or “knox box with a key” to access the well site to be used only in case of an emergency.

5706.3.9 Landscaping.

5706.3.9.1 Screening shrubs shall be installed completely around the well site within 30 days of the start of production or within 30 days after the well has been completed as a producing well if no actual production commences, whichever is earlier, and shall be sufficient to screen from view the structures sought to be screened. Screening shrubs shall be a minimum of 3 feet in height planted 8 feet on center.

5706.3.9.2 An additional living screen shall be planted within 30 days of the start of production and must mask all chain link fencing from view within 6 months of the start of production.

5706.3.9.3 Landscaping must utilize native drought tolerant species listed in the “Recommended Plant Materials” section of the CZO and, if determined to be necessary by Frisco, must have an installed irrigation system that provides total water coverage to all plant materials. The vegetation or berms shall be kept in an attractive state and in good condition at all times by the applicant or operator. All landscape and irrigation plans shall be submitted to Frisco for approval.

5706.3.10 Vehicle routing and access.

5706.3.10.1 Vehicles associated with drilling and/or production in excess of 3 tons shall be restricted to state arterials whenever capable of being used. Such vehicles shall be operated on Frisco arterials, collectors and local commercial only when it is not possible to use
a state arterial to fulfill the purpose for which such vehicle is then being operated. Truck routes and access points must be identified on the map showing transportation routes and roads for equipment, chemicals or waste products used or produced by the oil and/or gas operation.

5706.3.10.2 Design, location and arrangement of driveways and parking shall provide safe and convenient movement of vehicular and pedestrian traffic without adversely affecting the public or adjacent development.

5706.3.10.3 Prior to the commencement of any drilling operations, all private roads used for access to the drill site and the operation site itself shall be at least 12 feet wide, have an overhead clearance of 14 feet and shall be surfaced with crushed rock, gravel or ore and maintained to prevent dust and mud. A concrete apron shall be required at the entrance from the street that has a driveway curb radius of a minimum of 20 feet and a maximum of 30 feet. Brine water, sulphur water or water in mixture with any type of hydrocarbon, may not be used for dust suppression. In particular cases these requirements governing surfacing of private roads may be altered at the discretion of the Inspector after consideration of all circumstances including, but not limited to, the following: distances from public streets and highways; distances from adjoining and nearby property owners whose surface rights are not leased by the operation; the purpose for which the property of such owners is or may be used; topographical features; nature of the soil; and exposure to wind. No aspect of this section shall be construed to supersede any permitting, review, standards, and regulations set forth in Frisco engineering design standards or other ordinances, as they exist, may be amended or in the future arising.

5706.3.10.4 Operators shall repair, at his/her/its own expense, any damage to public roads, streets or highways caused by the use of heavy vehicles for any activity associated with the preparation, drilling, production and operation of oil and gas wells, as determined by Frisco in accordance with the road maintenance agreement.

5706.3.11 Work hours. Site development and activities, other than drilling, completion and emergencies, shall be conducted only between 7:00 a.m. and 8:00 p.m., Monday through Saturday.

5706.3.12 Noise.

5706.3.12.1 No drilling, producing, formation fracturing or completion shall produce a sound level greater than 85 dB(a) when
measured at a distance of 500 feet from the production equipment in question. The noise level shall be the average of sound level meter readings taken consecutively at any given time from 4 or more diametrically opposite positions, 4 feet above ground level, when measured at a distance of 500 feet from the production equipment.

5706.3.12.2 No person or entity shall operate, or allow or cause operation, in connection with the operation of a producing well any engine, compressor or motor-driven machinery of any type which creates a sound level greater than 75 dB(a) when measured at a distance of 500 feet from the well site. The noise level shall be the average of sound level meter readings taken consecutively at any given time from 4 or more diametrically opposite positions, 4 feet above ground level, when measured at a distance of 500 feet from the production equipment.

5706.3.12.3 Frisco may require noise monitoring, at the operator’s expense, if a complaint is made or the Inspector suspects the sound level to be greater than those standards listed above.

5706.3.12.4 Sound level measurements shall be made with a sound level meter conforming, at a minimum, to the requirements of the American National Standards Institute.

5706.3.12.5 If sound levels exceed the dB(a) levels referenced above, the Inspector may require sound reducing mufflers or other appropriate methods of noise reduction.

5706.3.13 Site upkeep.

5706.3.13.1 The property on which a well site is located shall, at all times, be kept free of all debris, litter, trash, waste, pools of water or other liquids, contaminated soil, high grass, brush or weeds.

5706.3.13.2 Vegetation and berms shall be maintained and kept in an attractive state at all times.

5706.3.13.3 Site and/or structures shall not become dilapidated, unsightly or unsafe.

5706.3.13.4 Damage resulting from sedimentation or erosion shall be repaired immediately.

5706.3.13.5 After any spill, leak or malfunction, the operator shall remove or cause to be removed to the satisfaction of the Inspector all waste materials from any public or private property affected by
such spill, leak or malfunction. Clean-up operations must begin immediately. If the owner fails to begin site clean-up within 24 hours Frisco shall have the right to contact the Commission in order to facilitate the removal of all waste materials from the property affected by such spill, leak or malfunction.

5706.3.13.6 All production equipment shall be painted and maintained at all time, including wellheads, pumping units, tanks, and buildings or structures. When requiring painting of such facilities, the Inspector shall consider the deterioration of the quality of the material of which such facility or structure is constructed, the degree of rust, and its appearance. Paint shall be of the neutral color, compatible with surrounding uses. Neutral colors shall include sand, gray and unobtrusive shades of green, blue and brown or other neutral colors approved by the Inspector.

5706.3.13.7 In the event of the loss of control of any well, operator shall immediately take all reasonable steps to regain control regardless of any other provision of this section and shall notify the Inspector as soon as practicable. If the Inspector, in his or her opinion, believes that danger to persons and property exists because of such loss of well control and that the operator is not taking or is unable to take all reasonable and necessary steps to regain control of such well, the Inspector may then employ any well control expert or experts or other contractors or suppliers of special services, or may incur any other expenses for labor and material which the Inspector deems necessary to regain control of such well. Frisco shall then have a valid lien against the interest in the well of all working interest owners to secure payment of any expenditure made by Frisco pursuant to such action of the Inspector in gaining control of said well.

5706.3.14 Abandonment and site restoration.

5706.3.14.1 All wells shall be abandoned in accordance with the rules of the Commission; however, all well casings shall be cut and removed to a depth of at least 3 feet below the surface. No structures shall be built over an abandoned well.

5706.3.14.2 After the well has been completed or plugged and abandoned, the operator shall clean the drill site or operation site, complete restoration activities and repair all damage to public property caused by such operations within 60 days.

5706.3.14.3 Whenever abandonment occurs pursuant to the requirement of the Commission, the operator so abandoning shall be
responsible for the restoration of the well site to its original condition, as nearly as practicable, except where in the 100-year floodplain, in which case alternate requirements are listed below.

5706.3.14.4 Abandonment shall be approved by the Inspector after restoration of the drill site has been accomplished. The derrick and all appurtenant equipment thereto shall be removed from drill site. All tanks, towers and other surface installations shall be removed from the drill site. All concrete foundations, piping, wood, guy anchors and other foreign materials regardless of depth, except surface casing and identification monument, shall be removed from the site, unless otherwise directed by the Commission. All holes and depressions shall be filled with clean, compactable soil. All waste, refuse or waste material shall be removed from the drill site.

5706.3.14.5 The operator shall furnish a copy of the approval of the Commission confirming compliance with all abandonment proceedings under state law and a notice of intention to abandon under the provisions of this section, stating the date such work will be commenced. Abandonment may then be commenced on or subsequent to the date so stated.

5706.3.14.6 The Inspector shall photograph the abandoned drilling site, leased property and adjacent roads, alleys, public utilities and right-of-ways to assess any damage to said property and/or facilities that need to be repaired by the operator.

5706.3.14.7 All abandoned or deserted wells or drill sites shall meet the most current abandonment requirements of the Commission prior to the issuance of any building permit for development of the property.

5706.3.14.8 An area of at least 50 feet by 50 feet, with the surface casing located at center and a 25-foot service access, shall be restored with native vegetation and shall not be developed. A monument shall be placed above the surface casing identifying the abandoned well and including the latitudinal and longitudinal position.

5706.3.14.9 A complete restoration and placement in a conservation easement shall take place in any area of a drilling lease, drill site or operation site that is located within the 100-year floodplain and such restoration shall include an evaluation and a restoration plan prepared by a team of restoration professionals, to include but not limited to, a professional engineer, hydrologist and biologist; and submitted to Frisco for approval by the Director of Planning and
Development Services and Director of Engineering, or their designees. The evaluation shall include a list of the exotic/invasive vegetation species observed along with a map showing their locations. The restoration plan shall incorporate stabilization recommendations (bio-engineering), where needed for channel or slope stabilization, and include a planting plan along with species recommendations for both herbaceous and woody species. The planting plan shall be tailored to provide necessary erosion control, as well as, increase the quality of the riparian habitat.

5706.3.14.10 After completion of the restoration plan and Frisco approval, the area within the floodplain may not be developed. The complete restoration of the property in accordance with the approved restoration plan shall be completed within 120 days of the plan being approved by Frisco.

5706.3.15 Technical requirements.

5706.3.15.1 All technical requirements of this section, including but not limited to, abandonment of wells, shall be in accordance with the rules of the Commission, American Petroleum Institute and other federal, state and local requirements.

5706.3.15.2 No refining processes are allowed onsite except a dehydrator and separator for separation of liquids from gas, with the approval of the Inspector.

5706.3.15.3 In all cases, blowout prevention equipment shall be used on all wells being drilled, worked-over or in which tubing is being changed. Protection shall be provided to prevent blowout during gas operations as required by and in conformance with the requirements of the Commission and the recommendations of the American Petroleum Institute. The operator must equip all drilling wells with adequate blowout preventers, flow lines and valves commensurate with the working pressures involved as required by the Commission.

5706.3.15.4 All chemicals and/or hazardous materials shall be stored in such a manner as to prevent, contain and facilitate rapid remediation and cleanup of any accidental spill, leak or discharge of a hazardous material. Operator shall have all material safety data sheets (MSDSs) for all hazardous materials on site. All applicable federal and state regulatory requirements for the proper labeling of containers shall be followed. Appropriate pollution prevention actions shall be required and include, but are not limited to, chemical and materials raised from the ground (e.g., wooden pallets), bulk
storage, installations and maintenance of secondary containment systems and protection from storm water and weather elements.

5706.3.15.5 No person or entity shall place, deposit, discharge or cause or permit to be placed, deposited or discharged, any oil, naphtha, petroleum, asphalt, tar, hydrocarbon substances or any refuse including wastewater or brine from any gas operation or the contents of any container used in connection with any gas operation in, into or upon any public right-of-way, alleys, streets, lots, storm drain, ditch or sewer, sanitary drain or any body of water or any private property in Frisco or its ETJ.

5706.3.15.6 Low toxicity glycols, synthetic hydrocarbons, polymers and esters shall be substituted for conventional oil-based drilling fluids.

5706.3.15.7 No drilling fluid storage shall be located within Frisco or its ETJ.

5706.3.15.8 Closed-loop drilling fluid systems shall be used instead of lined reserve pits.

5706.3.15.9 Drip pans and other containment devices shall be placed or installed underneath all tanks, containers, pumps, lubricating oil systems, engines, fuel and chemical storage tanks, system valves, connections and any other areas or structures that could potentially leak, discharge or spill hazardous liquids, semi-liquids or solid waste materials, including hazardous waste inseparable by simple mechanical removal processes, and is made up primarily of natural material.

5706.3.15.10 All drilling and production operations shall be conducted in such a manner as to minimize, as far as practicable, dust, vibration or noxious odors and shall be in accordance with the best accepted practices incident to drilling for the production of gas and other hydrocarbon substances in urban areas. All equipment used shall be so constructed and operated so that vibrations, dust, odor or other harmful or annoying substances or effect will be minimized by the operations carried on at any drilling or production site or from anything incident thereto, to the injury or annoyance of persons living in the vicinity; nor shall the site or structures thereon be permitted to become dilapidated, unsightly or unsafe. Proven technological improvements in industry standards of drilling and production in this area shall be adopted as they become available if capable of reducing factors of dust, vibration, noise and odor.
5706.3.15.11 All electrical installations and equipment shall conform to Frisco ordinances and the appropriate national or international codes.

5706.3.15.12 All electric lines to production facilities shall be located in a manner compatible to those already installed in the surrounding area or subdivision.

5706.3.15.13 Exhaust from any internal combustion engine, stationary or mounted on wheels, used in connection with the drilling of any well or for use on any production equipment shall not be discharged into the open air unless it is equipped with an exhaust muffler, or mufflers, or an exhaust muffler box constructed of noncombustible materials sufficient to suppress noise and prevent the escape of obnoxious gases, fumes or ignited carbon or soot.

5706.3.15.14 Wells shall not be allowed to flow or vent directly to the atmosphere without first directing the flow through separation equipment or into a portable tank.

5706.3.15.15 No venting of gas or open flames are allowed other than those expressly allowed by the Commission or approved by the Inspector.

5706.3.15.16 A sign shall be immediately and prominently displayed at the gate on the temporary and permanent site fencing. Such sign shall be durable material, maintained in good condition and, unless otherwise required by the Commission, shall have a surface area of not less than 2 square feet nor more than 4 square feet and shall be lettered with the following:

1. well name and Commission permit/ID number;
2. name of operator and phone number;
3. the emergency 911 number; and
4. telephone numbers of 2 persons responsible for the well who may be contacted 24 hours in case of emergency.

5706.3.15.17 Permanent weatherproof signs reading “DANGER NO SMOKING ALLOWED” shall be posted immediately upon completion of the well site fencing at the entrance of each well site and tank battery or in any other location approved or designated by the Inspector. Sign lettering shall be 4 inches in height and shall be
red on a white background or white on a red background. Each sign shall include the emergency notification numbers of the fire department and the operator, and well and lease designations required by the Commission.

5706.3.15.18 The sign requirements herein are in addition to, and not instead of, any signs required by the Commission. If these sign regulations are duplicative of Commission sign regulations, the more restrictive regulations shall apply.

5406.3.15.19 Onsite storage is prohibited on the operation site. No equipment shall be stored on the drilling or production operation site, unless it is necessary to the everyday operation of the well. Lumber, pipes, tubing and casing shall not be left on the operation site except when drilling or well servicing operations are being conducted on the site.

5706.3.15.20 No vehicle or item of machinery shall be parked or stored on any street, right-of-way or in any driveway, alley or upon any operation site which constitutes a fire hazard or an obstruction to or interference with fighting or controlling fires except that equipment which is necessary for drilling or production operations on the site. The fire code official shall be the entity that determines whether equipment on the site shall constitute a fire hazard. No refinery, processing, treating, dehydrating or absorption plant of any kind shall be constructed, established or maintained on the premises. This paragraph shall not be deemed to exclude a conventional gas separator or dehydrator.

5706.3.15.21 Any and all stationary diesel power plants located on the drilling site and are associated with the exploration, development, operation, and production of oil, natural gas or associated minerals shall have a lube oil purification unit installed, maintained and functional at all times while the diesel plant is in operation.

5706.3.15.22 Surface casing shall be run and set in full compliance with the applicable rules and regulations of the Commission.

5706.3.15.23 No person shall permit any lights located on any drill or operation site to be directed in such a manner so that they shine directly on public roads, adjacent property or property in the general vicinity of the operation site and, in addition, all lights must comply with the “Lighting and Glare Requirements” section of the CZO. To the extent practicable, and taking into account safety considerations, site lighting shall be directed downward and internally so as to avoid
glare on public roads and adjacent dwellings and buildings within 500 feet. To the extent of any conflict between this paragraph and the CZO, the more restrictive regulation shall control.

**5706.3.15.24** Only light sand fracture technology or technologies approved by the Inspector shall be used to fracture stimulate a well. Air, gas or pneumatic drilling shall not be permitted.

**5706.3.15.25** No salt water disposal wells shall be located within Frisco or area to which this ordinance applies.

**5706.3.15.26** Firefighting apparatus and supplies as approved by the fire department and required by any applicable federal, state or local law shall be provided by the operator, at the operator’s cost, and shall be maintained on the drilling site at all times during drilling and production operations. The operator shall be responsible for the maintenance and upkeep of such equipment.

**5706.3.15.27** Each well shall be equipped with an automated valve that closes the well in the event of an abnormal change in operating pressure. All well heads shall contain an emergency shut off valve to the well distribution line. The fire department shall have access to the well site to enable it to close the shut-off valve in an emergency.

**5706.3.15.28** Vehicles, equipment and machinery must not interfere with fighting or controlling fires.

**5706.3.15.29** All tanks and permanent structures shall conform to the American Petroleum Institute and National Fire Protection Association specifications unless other specifications are approved by the Inspector. All tanks shall be no higher than 8 feet above the terrain.

**5706.3.15.29.1** Each storage tank shall be equipped with a level control device that will automatically activate a valve to close the well in the event of excess liquid accumulation in the tank.

**5706.3.15.29.2** Tank battery facilities shall be equipped with a remote foam line and a lightning arrestor system.

**5706.3.15.29.3** Tanks must be equipped with a secondary containment system including lining with and impervious material, a minimum of 3 feet and 1½ the contents of the largest tank and 1 foot below surface level.
5706.3.15.29.4   Tanks must be anchored.

5706.3.15.30 The operator shall apply to Frisco for a franchise agreement on, over, under, along or across city streets, sidewalks, rights-of-way, alleys and other Frisco property for the purpose of constructing, laying, maintaining, operating, repairing, replacing and removing pipelines in accordance with any applicable Frisco ordinances and regulations so long as production or operations may be continued under any permit issued pursuant to this section. Operator shall:

1. not interfere with or damage water, sewer or gas lines or the facilities of public utilities located on, under or across the course of such rights-of-way;

2. furnish the Inspector a plat showing the location of such pipelines;

3. construct such lines out of pipe in accordance with Frisco codes and regulations and insure that lines are properly cased and vented if under a street; and

4. grade, level and restore such property to substantially the same surface condition as existed when operations for the drilling of the well were first commenced.

5706.3.15.31 Operator must follow erosion control practices, such as compost berms, at least 1 foot high and 2 feet wide used to contain drainage. No aspect of this section shall be construed to supersede any permitting, review, standards and/or regulations set forth in Frisco engineering design standards or other ordinances, as they exist, may be amended or in the future arising.

5706.3.15.32 Each gas well must be equipped with a cathodic protection system or alternative approved by the Inspector to protect the production casing from corrosion.

5706.3.15.33 Only freshwater mud systems are permitted.

5706.3.15.34 No metal additive shall be used in drilling fluid.

Section 5707 On-Demand Mobile Fueling Operations of the 2018 International Fire Code is amended as follows:
5707.1 General. On demand mobile fueling operations that dispense Class I, II, and III liquids into the fuel tanks of motor vehicles shall comply with 5707.1 through 5707.6.3

**Exception:** [Exception unchanged]

5707.3.2 Training Records. Mobile fueling vehicles shall be operated only by designated personnel who are trained on proper fueling procedures and the safety and emergency response plan. Training records of operators shall be maintained. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the dispensing company and shall be made available to the fire code official upon request.

Section 5707.3.3 add the following after existing paragraph:

The fire code official is authorized to impose limits upon the times and/or days during which mobile fueling operations are allowed to take place and specific locations on a site where fueling is permitted.

5707.4 Mobile Fueling Areas. Mobile fueling shall not take place on public streets, public ways or inside buildings. Fueling on the roof level of parking structures or other buildings is prohibited. The tank vehicle shall be positioned with respect to vehicles being fueled so as to preclude traffic from driving over the delivery hose and between the tank vehicle and the motor vehicle being fueled. Motor vehicle fuel tanks shall not be topped off. Dispensing of Class I, II and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles located at commercial, industrial, governmental or manufacturing establishments is allowed where permitted, provided such dispensing operations are conducted in accordance with Sections 570.5.4.5.1 through 5706.5.4.5.3.

Mobile fueling sites shall be restricted to commercial, industrial, governmental or manufacturing where the parking area having such operations is primary intended for employee vehicles. Mobile fueling shall be conducted for fleet fueling or employee vehicles, not the general public. Commercial sites shall be restricted to office-type or similar occupancies that not primarily intended for the use by the public.

5707.4.1 Separation. Mobile fueling shall not take place within 15 feet (4.572 m) of buildings, property lines or combustible storage.

**Exception:** [Exception unchanged]

5707.6.2 Drip control. Operators shall place a drip pan or an absorbent pillow under the nozzle and each fuel fill opening prior to and during
dispensing operations to catch drips. Absorbent materials, non-water absorbent pads, a 10 foot (3.048 m) long containment boom, an approved container with lid and a non-metallic shovel shall be provided to mitigate a minimum 5-gallon fuel spill. Operators shall place a drip pan or an absorbent pillow under each fuel fill opening prior to and during dispensing operations. Drip pans shall be liquid-tight. The pan or absorbent pillow shall have a capacity of not less than 3 gallons (11.36 L). Spills retained in the drip pan or absorbent pillow need not be reported. Operators, when fueling, shall have on their person an absorbent pad capable of capturing diesel fuel overfills. Except during fueling, the nozzle shall face upward and an absorbent pad shall be kept under the nozzle to catch drips. Contaminated absorbent pads or pillows shall be disposed of regularly in accordance with local, state and federal requirements.

5707.6.3 Spill reporting. Spills shall be reported in accordance with Section 5003.3.1. Operators of tank vehicles used for mobile fueling operations shall have in their possession at all times an emergency communications device to notify the proper authorities in the event of an emergency. The fire code official and other appropriate authorities shall be notified when a reportable spill or unauthorized discharge occurs.

5706.6.4. Operational requirements. The tank vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels. Prior to beginning dispensing operations, precautions shall be taken to assure ignition sources are not present.

5706.6.5 Lighting. Night time fueling operations shall only take place in adequately lighted areas.

5706.6.6 Chock Blocks. During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.

Chapter 61: Liquefied Petroleum Gases of the 2018 International Fire Code is amended as follows:

Section 6103 Installation of Equipment of the 2018 International Fire Code is amended as follows:

6103.2.1.8 Maximum capacity within established limits. Within the limits established by law restricting the storage of LP-gas for the protection of heavily populated or congested commercial areas, the aggregate capacity of any one (1) installation shall not exceed a 2,000-gallon water capacity.
Section 6104 Location of LP-Gas Containers of the 2018 International Fire Code is amended as follows:

6104.2 Maximum capacity within established limits.—Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 (L)) (Jurisdiction to Specify). The storage of LP-gas is restricted for the protection of heavily populated or congested areas to Industrial Zoning Districts within Frisco and as required by the fire code official.

Exception: [Exception remains unchanged.]

6107.4 Protecting Containers from Vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with NFPA-58 Section 312.

6109.13 Protection of Containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

Exception: Vehicle impact protection shall not be required for protection of LP-gas containers where the containers are kept in lockable, ventilated cabinets of metal construction.

Chapter 80: Referenced Standards of the 2018 International Fire Code is amended as follows:

<table>
<thead>
<tr>
<th>NFPA</th>
<th>National Fire Protection Association</th>
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<tbody>
<tr>
<td>1 Batterymarch Park</td>
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<tbody>
<tr>
<td>43-10</td>
<td>[Deleted in its entirety.]</td>
</tr>
<tr>
<td>13-19</td>
<td>Installation of Sprinkler Systems (regulated by separate ordinance adopted by Frisco, as amended).</td>
</tr>
<tr>
<td>13D-19</td>
<td>Installation of Sprinkler Systems in One- and Two-Family Dwellings (regulated as set forth in the definition of Automatic Sprinkler System contained in this code) and Manufactured Homes</td>
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</tbody>
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Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height (regulated by separate ordinance adopted by Frisco, as amended)

Appendix C – Fire Hydrant Locations and Distribution of the 2018 International Fire Code is amended as follows:

Section C103 Distribution of Fire Hydrants of the 2018 International Fire Code is amended as follows:

C103.1 Fire Hydrant spacing – Fire apparatus access roads and public streets providing required access to buildings in accordance with Section 503 of the International Fire Code shall be provided with one or more hydrants, as determined by Section C102.1. The average spacing between fire hydrants shall not exceed 500 feet for one- and two-family residential subdivisions and 300 feet within all other uses. Hydrants will be located at each point of intersecting public streets and fire apparatus access roads. Table C102.1 may be used as a guideline at the discretion of the fire code official, that listed in Table C105.1.

C103.2 Average Spacing: [Paragraph deleted.]

Appendix D – Fire Apparatus Access Roads of the 2018 International Fire Code is amended as follows:

Section D103 Minimum Specifications of the 2018 International Fire Code is amended as follows:

D103.2 Grade. Fire apparatus access roads shall not exceed 40-6 percent in grade.

Exception: Grades steeper than 40-6 percent as approved by the fire code official.

D103.3 Turning radius. The minimum inside turning radius shall be no less than 20 feet unless otherwise approved by the fire code official.

D103.4 Dead-ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Frisco cul-de-sac thoroughfare standards or as determined by the fire code official Table D103.4.

| TABLE D103.4 |
| REQUIREMENTS FOR DEAD DEAD-END FIRE APPARATUS ACCESS ROADS |
| [Table deleted.] |
D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. The minimum Gate width shall be 20 feet (6096 mm) - 24 feet with a minimum overhead clearance of 14 feet maintained. Where a fire apparatus access road consists of a divided roadway, the gate width shall be not less than 24 feet.

2. Gates shall be of the swinging or sliding type. Alternative types may be considered by the fire code official as long as they meet the minimum opening requirements and do not constitute a significant delay in emergency response.

3. Construction of gates shall be of materials that allow manual operation by one person.

4. Gate components shall be maintained in an operative condition at all times and replaced or repaired expeditiously when defective.

5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access (See Chapter 5, Section 503.6). Emergency opening devices shall be approved by the fire code official.

6. Methods of locking shall be submitted for approval by the fire code official.

7. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are approved by the fire code official and are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location. Gate and locking device specifications shall be submitted for approval by the fire code official. A permit is required pursuant to Section 503.6.1 and Section 503.6

8. Electric gate operators, where provided, shall be listed in accordance with UL 325.

9. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING --- FIRE LANE signs complying with figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have a minimum of 2 inch red letters on a white reflective background. Signs shall be posted on both sides of the fire apparatus access road as to be read in both directions of travel and as required by Section D103.6.1 or D103.6.2.

D103.6.2 Roads more than 26 feet in width. [Paragraph deleted.]

Section D104 Commercial and Industrial Developments of the 2018 International Fire Code is amended as follows:
D104.2 Buildings exceeding 62,000 square feet in area. [Paragraph remains unchanged.]

Exception: [Exception deleted.]

Section D106 Multiple-Family Residential Developments of the 2018 International Fire Code is amended as follows:

D106.1 Projects having more than 50 dwelling units. Multiple-family residential projects having more than 400 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads.

Exception: [Exception deleted.]

Section D107 One- or Two-Family Residential Developments of the 2018 International Fire Code is amended as follows:

D107.1 One- or two-family dwelling residential developments. [Paragraph remains unchanged.]

Exceptions:

1. Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Sections 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the Code, access from two directions shall not be required will be at the discretion of the fire code official.

2. The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.

Appendix H - Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) Instructions of the 2018 International Fire Code is amended as follows:

Section H100 Requirements.

H100.1 General. Appendix H shall be used as the minimum required information and format provided to the fire department to meet the requirements of providing a Hazardous Materials Management Plan (HMMP) and/or Hazardous Materials Inventory Statement (HMIS).
**H100.2 Submission form.** Unless otherwise approved by the fire code official, HMMP and/or HMIS submissions will be provided in electronic form, in formats in use by Frisco at the time of the submission. The fire code official can provide the formats required.

**Exception:** If, in the opinion of the fire code official, it is a burden on the applicant to provide electronic submissions, the fire code official is authorized to accept the submission in another approved form.

Appendix L- **Firefighter Air Replenishment Systems** of the 2018 International Fire Code is amended as follows:

**Section L101.2 Required Installations.**

**L101.2 Required Installations.** A firefighter air replenishment system shall be required in new buildings where one of the following criteria is met:

a. **Buildings exceeding 5 stories in height or a normally occupied level greater than 55 feet above the fire apparatus access road.**

b. **Building 2 stories or greater or more than 30 feet below grade.**

**L104.13.1 Location.** Fill stations for refilling breathing air cylinders shall be located as follows:

3. **Fill stations must be externally identified as required by the Fire Code Official.** A fire department connection panel on the external of the building must be externally identified as required by the Fire Code Official.