

EXHIBIT "A"

Amendments to the 2018 International Fire Code.

The following sections of the 2018 Edition of the International Fire Code, the provisions of which shall be controlling within the limits of the Town of Copper Canyon boundaries, are hereby amended for the purpose of consistency with specific past practices and the recommendations of the North Central Texas Council of Governments (NCTCOG) Fire Advisory Board and the Denton County Emergency Services District No. 1 (DCESD1). Black type is text from the NCTCOG and DCESD1 recommended amendments. Red type is text from local amendments approved by the Town of Copper Canyon with previous fire codes.

General Terms

- (1) Code official or fire code official. The fire chief or designee, Fire Marshal or designee, or member of the fire department, charged with the duties of administration and enforcement of this code, or a duly authorized representative.
- (2) Jurisdiction. All references to "jurisdiction" shall mean the Town of Copper Canyon, Texas.
- (3) Chief. All references to "Chief of the Bureau of Fire Prevention" shall be replaced with Fire Marshal."
- (4) Fire Marshal. All references to "Fire Marshal" shall include the Fire Marshal's designee.

Section 101.1 shall be amended to read as follows:

101.1 Title. These regulations shall be known as the fire code of the Town of Copper Canyon, hereinafter referred to as "this Code."

Section 102.1 shall be amended to read as follows:

102.1 Construction and design provisions is amended by adding 102.1 #3 and 102.1.1 to read as follows:

Section 102.1 #3 Existing structures, facilities, and conditions when required in Chapter 11 or in specific sections of this code.

Section 102.1.1 Reconstruction and Remodel (Commercial Structure). A building that is being altered, remodeled or reconstructed where the cost of construction is equal to or greater than 25% of the appraised value of the structure, shall comply with current fire codes in regards to:

- (1) Panic hardware
- (2) Fire alarms
- (3) Exit lights
- (4) Emergency lighting
- (5) Exits and exit ways
- (6) Fire protection systems

Section 102.7 is amended by deleting and replacing with a new Section 102.7, to read as follows:

Section 102.7 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 80 of the International Fire Code (IFC) and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standards shall be considered to reference the amendments as well. Any reference to NFPA 70 or the ICC Electrical Code shall mean the Electrical Code, as adopted.

102.7.1 Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

102.7.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code and any adopted amendments, the provisions of this code and any adopted amendments, as applicable, shall take precedence over the provisions in the referenced code or standard.

Section 102.7.3 shall be added to read as follows:

102.7.3 The most currently published editions of NFPA shall be the Referenced Codes adopted. Specific reference is made for the adoption of NFPA 3: Standard for Commissioning of Fire Protection Life Safety Systems, and NFPA 17A including all associated appendices, specifically Appendix B and NFPA 96: Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations and Appendix B of NFPA 96.

Section 105.1.1; change to read as follows:

Section 105.1.1 Permits required. Permits required by this code shall be obtained from the fire code official.

Section 105.3.3; change to read as follows:

Section 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.

Section 105.6.51 shall be added to read as follows:

105.6.51 Model Rocketry. An operational permit is required for the demonstration and use of model rockets, in accordance with NFPA 1122.

Section 105.6.7.26 shall be added to read as follows:

Section 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 106.3 shall be amended as follows:

106.3 Work commencing before permit issuance. Any person, firm, partnership, corporation, association, or other entity who commences any work, activity or operation regulated by this code

before obtaining the necessary permits shall be fined a minimum of \$250.00 or double the permit fee, whichever is greater. Each day work continues shall constitute a separate and distinct violation.

Section 110.3; change to read as follows:

Section 110.3 Notice of Violation; citation

Where the fire code official finds a building, premises, vehicle, storage facility or outdoor area that is in violation of this code, the fire code official is authorized to prepare a written notice of violation describing the conditions deemed unsafe and, where compliance is not immediate, specifying a time for re-inspection. The fire code official is authorized to issue citations alleging violations of this code for prosecution in the Municipal Court. Notice under this section is not a prerequisite to prosecution of violations of this code.

Section 110.4 Violation penalties. Shall be amended to read as follows:

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 a certificate, used under provisions of this code, shall be fined a minimum of \$500.00 or double the permit fee, whichever is greater. Each day that a violation continues after due notice has been served, shall be deemed a separate offense.

Section 110.4.2 shall be added to read as follows:

110.4.2 Citations. It is the intent of this division to achieve compliance by the traditional means of inspection, notification, granting of reasonable time to comply and re-inspection. After all reasonable means to gain compliance have failed, or when a condition exists that causes an immediate and/or extreme threat to life, property or safety from fire or explosion, the Fire Chief or his designee, who have the discretionary duty to enforce a code or ordinance may issue a notice to appear (citation) for the violation. Citations shall be issued only by qualified personnel as designated by the Fire Chief.

Notwithstanding any other provision of this code or of the International Fire Code a citation may be issued without prior notice and the opportunity to correct the condition or violation if the violation is determined to be an immediate threat to life safety.

Section 110.4.3 is added to read as follows:

110.4.3 Compliance with codes. Any person or entity that violates, disobeys, omits, neglects, or refuses to comply with, or who resists the enforcement of the provisions of this or other codes as referenced in this ordinance, shall be guilty of a misdemeanor and subject to the penalties as set forth in the Code of Ordinances of the Town. In addition to these penalties the fire code official or his or her designee is authorized to close any business, or shut down any operation when any hazard or condition exists therein that poses a serious and imminent threat to life or property. Any reasonable method may be used to affect closure, including, but not limited to, disconnection of utilities and padlocking of any doors. Any person in control of

or occupying any premises ordered closed, or performing or overseeing any operation ordered discontinued, who refuses an order to leave, or to discontinue is guilty of a misdemeanor and subject to the penalties described herein.

Section 112.4 shall be amended to read as follows:

112.4 Failure to comply. Any person, firm, or corporation who shall continue any work after having been served with a stop work order, except such work as that person, firm, or corporation is directed to perform to remove a violation or unsafe condition, shall be fined not less than Five Hundred Dollars (\$500.00) or more than Two Thousand Dollars (\$2,000.00).

Section 202. Shall be amended by adding new definitions to the existing list of definitions in Section 202 of the 2018 International Fire Code, to read 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.

ANALOG INTELLIGENT 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.

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 not be limited to the following:

- Dialysis centers
- Procedures involving sedation
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

ATRIUM. An opening connecting three or more stories... {Remaining text unchanged}

CHANGE OF OCCUPANCY. A change in the purpose or level of activity within a building that involves a change of ownership, change in occupant, or the change in the designated use-type of the building as described in Chapter 3 of this code, and the application of the requirements of this code. The definition shall also apply to usage of the surrounding site and access to and from the building, structure or site, as necessary to achieve the purpose of this code, and to obtain compliance with other codes and ordinances of this jurisdiction. No building or lease space shall

be allowed to change use, occupant, ownership or classification types without meeting all the requirements of this code.

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

FIRE ALARM SYSTEM. A fire alarm system shall include but not limited to the following:
-Systems installed to monitor a fire sprinkler system shall also be considered a fire alarm system.

FIRE AREA. The aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or horizontal assemblies of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor above. For purposes of determining automatic sprinkler systems required by Section 903, a fire area shall be determined by the aggregate floor area enclosed and bounded by the exterior walls of a building and/or the horizontal projection of the roof.

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.

EMERGENCY ACCESS EASEMENT. An access road or fire lane located on private property dedicated by the owner(s) of the property to provide fire apparatus access.

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, 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: add a second paragraph to read as follows:

Any building classified as a group S Occupancy or Speculative Building exceeding 5,000 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 with an occupied floor located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access.

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.

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

Section 307.2 shall be deleted entirely.

Section 307.4 and 307.4.1 shall be deleted entirely.

Section 307.6 shall be added to read as follows.

Section 307.6 Logging of Open Burning. Persons desiring to kindle a fire for the recognized silvicultural or range or wildlife management practices, prevention of control of disease, pests, open burning, trench burns, shall first contact Denton County Office of Emergency Services (County Fire Marshal) and determine if the day of the burn is an approved burn day. Open fires must be logged with the Denton County Office of Emergency Services prior to kindling. Fires of these types are prohibited on non-burn days. Persons desiring to kindle a bonfire or recreational fire shall also contact Denton County Office of Emergency Services to determine if a burn ban is in effect. Bonfires do require a permit that is usable one time. Campfires, fires restricted to 2'x 2' in size, do not require permits, nor do you have to report them to the County. Fires of these types are prohibited on burn ban days.

Section 308.1.4 shall be amended to read as follows:

Section 308.1.4 Open-flame cooking devices. Open-flame cooking devices, charcoal grills and other similar devices used for cooking shall not be located or used on balconies, decks, or within 10 feet (3048 mm) of any combustible construction.

Exceptions:

1. One- and two-family dwellings, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 pounds (5 containers).
2. Delete
3. LP-gas cooking devices having LP-gas containers with water capacity not greater than 2-½ pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

Section 308.1.6.2, Exception 3 shall be amended to read as follows:

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

Section 308.1.6.3 shall be amended to read as follows.

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

Section 308 Open Flames is amended by adding Section 308.5 and subsections to read as follows:

Section 308.5 Open burning

The use of open flame cooking devices shall be as follows:

Section 308.5.1. Multifamily structure.

It shall be a violation of this code for any person to use, allow or permit the use of a fixed or portable grill or cooking device that uses an open flame or electrical heating element within ten (10) feet of any multi-family structure, under any covered portion of a multi-family structure, under any covered parking structure, on any roof or portion thereof.

Section 308.5.2 Sign.

It shall be a violation of this code for any person to own or manage any multi-family structure without installing and maintaining on each balcony, patio, landing or similar structure of each dwelling unit an approved sign readily visible to the occupants that prohibits the use of any grill, hibachi, smoker, electrical heating element, or similar apparatus within ten (10) feet of all apartment structures. Signs shall be at least thirty (30) square inches with the word "PROHIBITED" in one (1) inch letter, and the remaining message in at least one-fourth (1/4) inch letter, red on white, and provide the following warning:

PROHIBITED- THE USE OF ANY GRILL, HIBACHI, OR SMOKER IN OR WITHIN TEN FEET OF ALL APARTMENT STRUCTURES, PATIOS AND CARPORTS. NORTHLAKE FIRE CODE - FINE UP TO \$2000.00

Section 311.5; change to read as follows:

Section 311.5 Placards. 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, as required by Section 311.5.1 through 311.5.5.

Section 403.5; change Section 403.5 to read as follows:

Section 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.

Section 404.2.2; add Number 4.10 to read as follows:

Section 4.10 Fire extinguishing system controls.

Section 405.4; change Section 405.4 to read as follows:

Section 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.

Section 501.4; change to read as follows:

Section 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 and before vertical construction with combustible material has begun.

Section 503.1.1 shall be amended to add the following paragraph:

Except for one- or two-family dwellings, the path of measurement shall be along a minimum of a ten foot (10') wide unobstructed level pathway around the external walls of the structure.

Section 503.2.1 delete the exception and amended to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7,315 mm), exclusive of shoulders, except for approved security

gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than sixteen (16) feet.

The requirements of Section D105 shall remain unchanged.

Section 503.2.2; change to read as follows:

Section 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.

Section 503.2.3; change Section 503.2.3 to read as follows:

503.2.3 Surface (Commercial only). Construction of all fire lanes shall be in accordance with the Unified Development Code, the Engineering Design Manual, and this section.

Fire lanes shall be constructed of a concrete surface capable of supporting the imposed loads of a 2-axle, 85,000 lb. fire apparatus. The design shall be based on the geotechnical investigation of the site, but shall meet the stated minimums.

Whenever forty percent (40%) of existing, non-conforming fire lanes are replaced within a twelve month period, the entire fire lane shall be replaced according to current standards.

All fire lanes shall be maintained and kept in a good state of repair at all times by the owner. It shall further be the responsibility of the owner to insure that all fire lane markings required by Section 503.3 be kept so that they are easily distinguishable by the public.

Appendix D; Change Appendix D102.1 to read as follows:

D102.1 Access and Loading. Facilities, buildings, or portions of buildings, hereafter, constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete, or other approved driving surface capable of supporting the imposed load of apparatus weighing up to 85,000 pounds. Buildings 5,000 square feet or larger shall have fire apparatus roads on all four sides of the building to allow for adequate firefighting capabilities.

Appendix D Section 103 Minimum Specifications. Change D103.2 to read as follows:

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

Section 503.3 shall be amended to read as follows:

503.3 Marking. Striping, signs, or other markings, when approved by the fire code official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs and other markings shall be maintained in a clean and

legible condition at all times and shall be replaced or repaired when necessary to provide adequate visibility.

1. **Striping** – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6”) in width to show the boundaries of the lane. The words “NO PARKING FIRE LANE- TOW AWAY” or “FIRE LANE NO PARKING – TOW AWAY” shall appear in four inch (4”) white letters at 25 foot (25’) intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on both the horizontal and vertical faces of the curb. The red paint shall meet the Texas Department of Highway and Public Transportation, (TXDOT), specification number TTP-115, chlorinated rubber paint or approved equal.
2. **Signs** – Signs shall read “NO PARKING FIRE LANE – TOW AWAY” or “FIRE LANE NO PARKING TOW AWAY” and shall be twelve inches (12”) wide and eighteen inches (18”) high. Signs shall be painted on a white background with letters and borders in red, using not less than two-inch (2”) lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6’ 6”) above finished grade. Signs shall be spaced not more than fifty feet (50’) apart. Signs may be installed on permanent buildings or walls or as approved by the Fire Code Official.

Section 503.2.4 shall be amended as follows:

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be in accordance with this section.

Any such fire lane shall either connect both ends to a dedicated public street or fire lane or be provided with an approved turnaround having a minimum outer radius of fifty-four feet (54’) and an inside radius of thirty feet (30’).

Fire lane dimensions established by Appendix D, or other sections of this Code, shall be superseded by the criteria established by this section.

Section 503.2.7 shall be amended as follows:

503.2.7 Grade. The grade of the fire apparatus access road shall be within the limits established by the fire code official. In no case shall the grades along a fire apparatus access road exceed the following:

Along the Fire Apparatus Access Road – 6%

Cross Slope – 5%

Exception. The code official shall have the authority to adjust the grade along the fire lane when necessary for fire or rescue operations or based upon the hazard being protected or general topography of the lot. In no case shall the grade exceed nine percent (9%). Written approval from the fire code official shall be required.

Section 503.2.8 shall be amended to read as follows:

503.2.8 Angles of approach and departure. The angles of approach and departure for a fire apparatus access road shall be within the limits established by the fire code official. In no case shall the grades exceed the following:

1. Maximum Angle of Approach – 5%
2. Maximum Angle of Departure – 5%

Exception. The code official shall have the authority to adjust the grade along the fire lane when necessary for fire or rescue operations or based upon the hazard being protected or general topography of the lot. Written approval from the fire code official shall be required.

Section 503.4 shall be amended to read as follows:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking, stopping or standing of vehicles. The minimum widths and clearances established in Section 503.2.1 through 503.2.8 and any area marked as a fire lane as described in Section 503.3 shall be maintained clear of obstructions at all times. Unattended vehicles or other obstructions in the fire lane may be removed or towed at the expense of the registered owner.

Section 503.6 shall be amended to read as follows:

503.6. Security Gates. When mechanically operated gates or barriers are provided, or required, across a fire apparatus access road, an approved emergency vehicle traffic preemption device shall be provided compatible with the fire department's apparatus. The installation of security gates across a fire apparatus access road shall be approved by the Fire Marshal. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the 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. Denton County ESD 1 Fire District recommends giving gate code to Denton County 911 dispatch (940-349-1600).

Section 503.6.1.1 and subsections shall be added to read as follows:

503.6.1.1 Distance from street, sidewalk, roadway or right-of-way. Gates shall be located on private property a minimum of 30 feet from the property line being crossed by the drive or 50 feet from the nearest edge of roadway, whichever is greater.

Provisions shall be made to allow for egress from the property and 100' for stacking of vehicles at the entry, and for turnaround.

Section 503.6.1.2 Electronic operation. All main gates shall be electrically operated. A secondary/emergency power source must be available and brought online automatically upon loss of primary power to the access gates. The secondary/emergency power source shall automatically open the gates. A manual disconnect is required in the event of complete power failure. The manual disconnect shall be placed in a weather tight box, with a piano-type hinge on one side and a Knox Box PL-1 padlock and hasp on the other side.

Section 503.6.1.3 Open with key operated switch. All main gates shall open with the fire department Knox K.S. #2 key operated switch. The Knox key-operated switch shall be provided and installed by the owner. The key-operated switch shall be located 10 feet from the gate, on the left side of the approach, placed on a pedestal with the key switch facing the fire lane or road. The key switch shall be no closer than 4 feet 6 inches, or no farther than 5 feet 5 inches, from the ground.

Section 503.6.1.4 Access codes. It shall be the owner's responsibility to program the security gate and provide Denton County 911 Dispatch with the access code.

Section 503.6.1.5 Medians. Where a security gate is installed with a median, the entry side of the gate shall have a minimum opening of 30 feet (measured back of curb to back of curb).

Section 503.6.1.6 Optically controlled emergency entry devices. All electronic security gates, commercial properties and residential subdivisions, shall be equipped with an optically controlled emergency override device (Opticom) that is compatible with the optical activation device installed on fire apparatus. The devices shall be placed in both directions of travel to provide for the opening of gates as the fire apparatus approaches and exits the property. Permits for installation are required, and the Fire Marshal shall test and approve the installation upon completion, to determine compliance.

Section 505.1; change to read as follows:

Section 505.1 Address Identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. (See Appendix Q)

- 1) Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each building number and letter shall be not less than six (6) inches high with a minimum one (1) inch stroke width. Each suite number and letter shall be not less than four (4) inches

high with a minimum one-half (1/2) inch stroke width. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response.

- 2) Where access is by means of a private road, buildings do not immediately front a street, and/or cannot be viewed from the public way, a monument, pole or other sign with approved 6 inch (152.4 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. Address shall be maintained.

Exception:

R-3 Single Family occupancies shall have approved numerals of a minimum four (4) inches high with a minimum one-half (1/2) inch stroke width and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

Section 507.4; change to read 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 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. 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 waterflow 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.

Section 507.5 Fire hydrant systems is amended and Sections added to read as follows:

Section 507.5 Fire hydrant systems. Fire hydrant systems shall comply with Section 507.5.1 through 507.5.7.

Section 507.5.1 Where required is amended by deleting the Section 507.5.1 Where required and replacing it with Section 507.5.1 Where required and subsections, to read as follows:

Section 507.5.1 Where required. When a portion of the facility or building hereafter constructed or moved into, or within the jurisdiction, is more than 500 feet from a hydrant on the fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the Fire Marshal.

Exception: For Group R-3 and Group U occupancies, the distance requirement shall be 300 feet.

Exception 2 is deleted.

Section 507.5.1.2 Location. The location of fire hydrants on private property or along fire access roads shall be approved by the Fire Marshal.

Section 507.5.1.2 Fire system connections to read as follows:

Section 507.5.1.2 Fire department system connections. Fire hydrants shall be located within a 100 foot hose lay of the Fire Department Connection (FDC). Fire Department Connections when remotely located, shall have a 42" by 42" concrete pad below each connection with impact protection posts.

Section 507.5.1.3 Requirements when not on public street. Fire hydrants not installed on a public street shall be looped to provide a water supply from 2 directions.

Section 507.5.4; change to read as follows:

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 hydrants, fire department inlet connections or protection systems control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernable. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

Section 509.1.2; add new Section 509.1.2 to read as follows:

Section 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 (50.8 mm) when located inside a building and 4 inches (101.6 mm) when located outside, or as approved by the fire code official. The letters shall be of a color that contrasts with the background.

Section 603.3.2 and 603.3.2.1; change to read as follows:

603.3.1 Fuel oil storage in outside, aboveground tanks. In addition to the required Special Use Permit (SUP) 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.

603.3.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 603.3.2.1 through 603.3.2.5 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. 1320 gallons (4996 L) in buildings equipped with an automatic sprinkler system in accordance with Section 903.3.1.1, where stored in a tank with UL 142, or UL 2085 as a double-wall/secondary containment tank.
3. 3000 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.

Section 607.2; change to read as follows:

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:

1. Tents, as provided for in Chapter 31 shall have a flame rating tag sewn into the material which indicates compliance with NFPA 701 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.
2. {No change to existing Exception.}

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.

Section 704.1; now 704.1.1 change to read as follows:

704.1.1 Enclosure. Interior vertical shafts including, but not limited to, stairways, elevator hoist-ways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected in accordance with the codes in effect at the time of construction but, regardless of when constructed, not less than as required in Chapter 11. New floor openings in existing buildings shall comply with the International Building Code.

Section 807.2; change to read as follows:

807.2 Combustible Decorative Materials. 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 807.3 and shall not exceed 10 percent of the specific wall area to which they are attached.

Section 807.5.2.2 and 807.5.2.3; change to read 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 50 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.

807.5.2.3 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.

Section 901 General is amended by changing Section 901.3 and 901.5 as shown in the International Fire Code to read as follows:

Section 901.3.1 Permit required. Permits shall be required as set forth in Section 105.6 and 105.7 and as required by this section. A permit shall be required for the installation, reconsideration, modification, moving or alteration of any life safety system including but not limited to fire sprinkler systems, fire alarm systems, fixed extinguishing systems, access control systems and carbon dioxide sensing and monitoring systems. Work shall not begin on any system without first obtaining a permit. Any person, firm, or corporation who that violates this requirement shall be liable for a fine that is two-times the cost of the Permit or Five Hundred Dollars (\$500.00), whichever is greater.

Exemption: Emergency repairs, due to system malfunctions or discharging, may begin, providing a permit is obtained as soon as possible, but no later than the next business day.

Section 901.3.2 Permit application. The permit application shall be submitted to the office of the Fire Marshal, through the DCESD1 Permitting Department and must have attached to the application detailed construction plans and a copy of the applicant's state license. The following shall be included with the plan submission: a CD, or other media, as approved by the Fire Marshal, containing state license, plan drawings, calculations, and spec sheets, in PDF format.

Section 901.3.3 Permit fee. The permit fee for the construction, repair, alteration, or relocation of a fixed system shall be in accordance with the fee schedule adopted by the Town of Northlake.

Section 901.5 Installation acceptance testing. Fire detection and alarm systems, fire extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains, and all other fire protection systems, and appurtenances thereto, shall be subject to acceptance tests, as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing. No system shall be approved until a complete inspection of materials and a functional test has been completed and witnessed by the Fire Marshal. The installer/technician must be present for all inspections and testing.

Section 901.6.1; add Section 901.6.1.1 to read as follows:

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

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be back flushed or inspected by approved camera when foreign material is present or when caps are missing, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the fire code official.
5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.
6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (fire code official) shall be followed.
7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
9. Contact the fire code official for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting

equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the fire code official.

Section 901.6.4; add Section 901.6.4 to read as follows:

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

Section 901.7; shall be amended to read as follows:

901.7 Systems out of service. Where a required fire protection system is out of service or in the event of an excessive number of activations, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service. Fire Watch is the responsibility of the property owner. The owner shall be required to hire a private security firm to supply two personnel for each of three 8 hour shifts or during the occupied hours of the business, to monitor for fire conditions and have the means necessary for contacting 911 immediately. The fire watch shall remain in effect until the life safety systems are back in service. Should the fire watch option be declined, the entire building shall be evacuated and closed until all repairs have been made, and a re-inspection has been performed the fire code official.

Section 901.8.2; change to read as follows:

901.8.2 Removal of Occupant-use Hose Lines. The fire code official is authorized to permit the removal of occupant-use hose lines and hose valves where all of the following conditions exist:

1. The hose line(s) would not be utilized by trained personnel or the fire department.
2. If the occupant-use hose lines are removed, but the hose valves are required to remain as per the fire code official, such shall be compatible with local fire department fittings.

Add Sections 901.11 Certification, Section 901.12 Failure of system, and Section 901.13 Message alarms. To read as follows:

Section 901.11 Certification. A notarized certification indicating all work has been performed as permitted and that the work meets code requirements must be submitted at final inspection.

Section 901.12 Failure of system. All fire alarm systems shall be designed and constructed so the failure, malfunction, or removal of any single device, or failure of the wiring to a device does not interfere with the operation of other devices in the system.

Section 901.13 Message alarms. Pre-recorded or voice message fire alarms shall not be approved unless accompanied by a fire alarm signal of audio-visual devices that meet the minimum standards of the Americans with Disabilities Act (ADA).

Section 903.1.1; change to read as follows:

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

Section 903 Automatic Sprinkler Systems is amended as follows:

Section 903.1.2 is amended by adding subsection 903.1.2 to read as follows:

903.1.2 Residential sprinklers. Unless specifically allowed by this Code, residential sprinkler systems installed in accordance with NFPA 13D (1-2 family dwelling) or NFPA 13R (multi-family) shall not be granted exemptions or reductions, commonly known as “trade-offs” permitted by other requirements of this Code. CPVC is permitted for 13D as well as 13R.

Section 903.2; add paragraph to read as follows:

Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoist ways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating “ELEVATOR MACHINERY – NO STORAGE ALLOWED.”

Section 903.2 Where required. Replace the exception and amend as follows:

Approved automatic sprinkler systems shall be provided in all new buildings and structures, including residential, where the total fire area under roof is 5,000 square feet or greater and further provided in the locations described in this section. Reference in this code to fire sprinklers being required at 12,000 sq. ft. is changed to 5,000 sq. ft.

This section is also amended by replacing the exception with the following exceptions:

Exceptions:

1. Open parking garages in compliance with Section 406.3 of the International Building Code, provided fire department standpipes and connections are installed in such a way that no portion of the garage is more than 100 feet, unobstructed hose lay from the connection.
2. Single-family residential which is not connected to the municipal water system is exempt from the requirement of an automatic sprinkler system even if the total fire area under roof is 5,000 square feet or greater.

Section 903.2.8 Group R is amended to read as follows:

Section 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area. An automatic sprinkler system shall be provided throughout all buildings with a Group R-2

occupancy where the fire area is 2 stories in height, including basements, or where the building has more than 3 units. Any Group R-2 occupancy two (2) or more stories in height shall be required to have a sprinkler system meeting the requirements of NFPA Standard 13. Single family residences are labeled as R-3 which are seen as the occupants are primarily permanent in nature.

Section 903.2.9.2 Bulk storage of tires, Section is amended by deleting that section and replacing it with a new Section 903.2.9.2, to read as follows:

Section 903.2.9.2 Bulk storage of tires. Buildings and structures where the area for the storage of tires exceeds 10,000 cubic feet shall be equipped throughout with an automatic fire sprinkler system meeting the requirements of NFPA Standard 13.

Section 903.2.9; add Section 903.2.9.3 to read as follows:

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

Section 903.2.11; change 903.2.11.3 and add 903.2.11.7, 903.2.11.8, and 903.2.11.9 as follows:

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

Exceptions:

Delete

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

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

903.2.11.9 Any structure 5,000 square feet or greater, under roof, an automatic sprinkler system shall be installed throughout all buildings and any portion of a building that meets any one of the following criteria listed below:

- (1) A building area 5,000 sq. feet or greater (including single family residences)
- (2) A tenant space 5,000 sq. feet or greater
- (3) An existing building that is enlarged to 5,000 sq. feet or greater
- (4) An tenant space within an existing building that is enlarged to be 5,000 sq. feet or greater

Exception: Existing systems need not comply unless the total building remodel or expansion initiated after the effective date of this code, as adopted, exceeds 50% of the structure. This is a one time exemption per structure.

For the purpose of this provision, firewalls and fire barriers shall not define separate buildings.

Exception: Delete

Section 903.3.1.1.1; change to read as follows:

903.3.1.1.1 Exempt Locations. When approved by the fire code official, automatic sprinklers shall not be required in the following rooms or areas where such ...{text unchanged}... because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. {Delete}
5. Elevator machine rooms, machinery spaces, and hoist ways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
6. {Delete}

Section 903.3.1.2.3; delete section and replace as follows:

Section 903.3.1.2.3 Attached Garages and attics. Sprinkler protection is required in attached garages that meet the 5,000 sq. ft. requirement:

1. Attics that are used, or intended for living purposes, or storage shall be protected by an automatic sprinkler system. Uninhabited attics will not require sprinkler system protection.
2. Where fuel-fired equipment is installed in an Un-sprinklered attic, not less than one quick-response intermediate temperature sprinkler shall be installed above the equipment.
3. Attic spaces of buildings that are two, or more, stories in height above grade plane, or above the lowest level of fire department vehicle access.
4. Group R-4, Condition 2 occupancy attics not required by item 1 or 3 to have sprinklers, shall comply with one of the following:
 - 4.1 Provide automatic sprinkler system protection
 - 4.2 Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.
 - 4.3 Construct the attic using non-combustible materials.

- 4.4 Construct the attic using fire-retardant-treated wood, complying with Section 2303.2 of the International Building Code.
- 4.5 Fill the attic with non-combustible insulation.

Section 903.3.1.3; change to read as follows:

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

Add: 1. Sprinkler protection is required in attached garages if structure meets the 5,000 sq ft. Requirement.

2. Sprinkler protection is required in all media closets.

Section 903.3.1.4; add to read as follows:

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

Section 903.3.1.4.1 Attics. Only dry-pipe, pre-action, 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.

Section 903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

Section 903.3.5; add a second paragraph to read as follows:

Water supply 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 Section 507.4 for additional design requirements.

Section 903.3.7 Fire Department Connections. Is amended by deleting that section and adding the following section, to read as follows:

Section 903.3.7 Fire Department Connections. The location of Fire Department Connections shall be approved by the fire code official. Locking caps, of an approved style or vendor may be required by the fire code official. Locking caps shall be installed as replacements for lost or damaged caps when deemed necessary by the fire code official to address tampering problems at existing facilities. The FDC shall be labeled as “FDC” with a white background and red reflective lettering that is a minimum of 6 inches in height for each letter. If the FDC is remote a six foot pole with a sign affixed to it shall be installed next to the FDC

Section 903.4; Amend Section 903.4 and add a second paragraph after the exceptions to read as follows:

Section 903.4 Sprinkler system supervision and alarms. Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water flow switches on all sprinkler systems, new and existing, shall be electrically supervised by a listed fire alarm control unit.

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

Section 903.4.2; add second paragraph to read as follows:

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

Section 903.4; add a second paragraph after the exceptions to read as follows:

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

Section 903.4.2; add second paragraph to read as follows:

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

Section 903.7 shall be added to read as follows:

Section 903.7 Automatic Sprinkler System Room Access. Sprinkler system risers providing protection for multi-family and commercial buildings must be located in a ground floor room directly accessible from the exterior of the building. The door shall be labeled as “SPRINKLER RISER ROOM” with a white background and red reflective lettering

that is a minimum of 6 inches in height for each letter. The minimum size of the room shall be 36 sq. ft., with the minimum dimension being 6 ft. The outside edge of the Riser stub into the building shall be a minimum of eighteen inches (18") from the wall and riser piping, and once stacked shall be a minimum of eighteen inches (18") from the outside edge of the piping to the inside edge of the finished wall. When approved by the fire code official, smaller rooms may be permitted.

Section 903.8 Installation schedule is amended by adding 903.8 Installation schedule, to read as follows:

Section 903.8 Installation schedule. Approved fire sprinkler systems shall be operational in a building under construction when:

1. The building is sufficiently constructed to the point that the exterior sheathing and roof have been installed; or
2. At the start of combustible interior construction; or
3. When there is an accumulation of combustible material within the building including, but not limited to, building supplies, rubbish, and furniture, or
4. When the building goes under conditioned atmosphere.

Section 905.2; change to read as follows:

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

Section 905.3; add Section 905.3.9 and exception to read as follows:

905.3.9 Buildings. In buildings exceeding 10,000 square feet in area per story 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.

Exceptions:

1. Automatic dry, semi-automatic dry, and manual 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.

Section 905.4, change Item 1, 3, and 5, and add Item 7 to read as follows:

1. In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at every landing, on each story, unless otherwise approved by the fire code official.
2. {No change.}
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from an exit stairway hose connection by a {remainder of text unchanged.}

4. {No change.}

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

6. {No change.}

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 corridors thereafter, or as otherwise approved by the fire code official.

Section 905.9; add a second paragraph after the exceptions to read as follows:

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

Section 907.1; add Section 907.1.4 and 907.1.4.1 to read as follows:

907.1.4 Design Standards. All alarm systems new or replacement shall be addressable. Alarm systems serving more than 20 smoke detectors shall be analog addressable. A system employing a DACT shall employ one telephone land line as the primary. In addition, one of the following transmission means shall be employed as the back-up line:

- One-way private radio alarm system
- Two-way RF multiplex system
- Transmission means complying with NFPA 72

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% of the building. When cumulative building remodel or expansion exceeds 50% of the building must comply within 18 months of permit application.

Section 907.2; change, delete the second paragraph and replace with a paragraph to read as follows:

907.2 Where required in buildings and structures. An approved fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.5, unless other requirements are provided by another section of this code.

An approved fire alarm system shall be installed in existing buildings that are protected by a previously installed automatic sprinkler system in accordance with NFPA 72, 2019 Edition Chapter 1.4.2.

Section 907.2.1; change to read as follows delete exception:

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

Section 907.2.3; change to read as follows:

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

Exceptions:

1. {No change.}

1.1. 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}

Section 907.2.12, Exception 3; change to read as follows:

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 areas.

Section 907.4.2; add Section 907.4.2.7 to read as follows:

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

Section 907.6.1; add Section 907.6.1.1 to read as follows:

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall

be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four (4) feet separation horizontal and one (1) foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device shall be wired Class A, provided the distance from the interface device to the initiating device is ten feet or less. All wiring, SLC, IDC, NAC shall be wired Class A. Minimum fire alarm design shall include a manual pull station at each exit and notification devices throughout.

Section 907.6.3; delete all four Exceptions.

Section 907.6.6; – add sentence at end of paragraph to read as follows:

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

Section 909.22; add to read as follows:

909.22 Stairway or Ramp Pressurization Alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a 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 fire-fighter’s smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the fire department as per Section 105.7.

Section 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.

Section 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.

Section 909.21.1.2 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.

Section 909.22.1.3 Acceptance and Testing.

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

Section 910.2; change Exception 2. and 3. to read as follows:

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

Section 910.2; add subsections 910.2.3 with exceptions to read as follows:

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 5,000 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.

Section 910.3; add section 910.3.4 to read as follows:

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

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

Exception: Manual only systems per Section 910.2.

910.3.4.2 Non-sprinklered 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 (56C) and 220 F (122C) above ambient temperature.

Exception: Listed gravity-operated drop out vents.

Section 910.4.3.1; change to read as follows:

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

Section 912.2; add Section 912.2.3 to read as follows:

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

Section 913.2.1; add second paragraph and exception to read as follows:

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

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

Section 914.3.1.2; change to read as follows:

914.3.1.2 Water Supply to required Fire Pumps. In buildings that are more than 120 feet (128 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located on 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}

Section 1003.6 Means of egress continuity is amended by adding Section 1003.6.1 vehicle parking, to read as follows:

Section 1003.6.1 Vehicle parking. No motor vehicle shall be parked within 10 feet of any patio, stairs, or egress path at any apartment, multi-family building, hotel, motel, educational occupancy or commercial structure, unless in an approved parking space.

Section 1006.2.2.7; add a new Section 1006.2.2.7 as follows:

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

Section 1009.1; add the following Exception 3:

Exceptions:

{Previous exceptions unchanged}

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

Section 1009.8; add the following Exception 7:

Exceptions:

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 1010.1.9.5 Bolt Locks; amend Exceptions 3 and 4 to read as follows:

Exceptions:

3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M or S occupancy. {Remainder unchanged}
4. Where a pair of doors serves a Group A, B, F, M or S occupancy {Remainder unchanged}

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 55 feet (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

Section 1020.1 Construction; add Exception 6 to read as follows:

6. In group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

Section 1024 Exit Passageways is amended by adding Section 1024.1.1 Exit ways – hotels, motels, and multi-family, to read as follows:

Section 1024.1.1 Exit ways – hotels, motels, and multi-family. All public exit ways and balconies shall be constructed of material having a minimum of a class “C” flame spread rating (75 to 200 flame spread). All balconies and landings utilized as exit ways shall have a minimum length of 8 feet and a minimum width of 4 feet.

Section 1029.1.1.1; delete this section. Spaces under Grandstands and Bleachers:

Section 1031.2; change to read as follows:

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

Section 1103.3; add sentence to end of paragraph as follows:

Provide emergency signage as required by Section 606.3.

Section 1103.5.1: add sentence to read as follows:

Fire sprinkler system installation shall be completed within twelve (12) months from date of notification by the fire code official. Grandfathered residences are not subject to the new IFC when there is a change in ownership.

Section 1103.5.3 Group I-2, Condition 2 change last sentence to read as follows:

The automatic sprinkler system shall be installed as established by adopting this ordinance and within twelve (12) months of notification by the fire code official.

Section 1103.5; add Section 1103.5.5 to read as follows:

1103.5.5 Spray Booths and Rooms. Existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404.

Section 1103.7; add Section 1103.7.7 and 1103.7.7.1 to read as follows:

1103.7.7 Fire Alarm System Design Standards. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable.

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 (less than 30% does not have to comply. From 31%-50%, the fire alarm system must comply by job completion. Exceeding 50%, you have 18 months to comply.)

Section 1103.7.7.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements

Section 1203; change and add to read as follows:

1203.1.1 {No change}

1203.1.2 {No change}

1203.1.3 Installation. 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 1203.2.26, or elsewhere identified in this code, or any other referenced code.

1203.2.1 through 1203.2.3 {No change}

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}

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. minimum of ninety (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}

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 detection systems as required by the International Building Code, Section 909.20.6.2.

1203.2.22 Elevator Pressurization. Standby power shall be provided for elevator pressurization system as required by the International Building Code, Section 909.21.5.

1203.2.23 Elimination of Smoke Dampers in Shaft Penetrations. Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with the International Building Code, Section 717.5.3, exception 2.3.

1203.2.24 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 the International Mechanical Code, Section 504.10, Item 7.

1203.2.25 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.

1203.2.26 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.)

1203.3 through 1203.6 {No change}

1203.7 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.

Section 2304.1; change to read as follows:

2304.1 Supervision of Dispensing. The dispensing of fuel at motor fuel-dispensing facilities shall be in accordance with the following:

1. Conducted by a qualified attendant; and/or, 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 Number 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 2401.2; delete this section.

Section 3103.3.1; delete this section.

Table 3206.2, footnote h; change text to read as follows:

h. 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 $50 (m \cdot s)^{1/2}$ or less that are listed to control a fire in the stored commodities with 12 or fewer sprinklers, installed in accordance with NFPA 13, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

Table 3206.2, footnote j; add footnote j to row titled "High Hazard" and Greater than 300,000' to read as follows:

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.

Section 3310.1; add sentence to end of paragraph to read as follows:

When fire apparatus access roads are required to be installed for any structure or development, they shall be approved prior to the time at which construction has progressed beyond completion of the foundation of any structure. Completion of the access road includes striping.

Section 5003.2.2.1 Design and Construction change #3 and #4 and add #6 to read as follows:

3. Automatic fail-safe emergency shutoff valves shall be installed on supply piping and tubing at the following locations:
{remainder of text unchanged}

4. Automatic emergency shutoff valves shall be identified and the location shall be clearly visible, accessible and indicated by means of a sign.

6. Bulk tank installations over 2,000 pounds will require an engineered foundation and construction permit per the 2018 International Building Code. Three complete sets of structural drawings, specifications and analysis (calculations) shall be provided and shall bear the seal of a licensed Texas professional engineer.

Section 5003.3.1.4 Responsibility for cleanup shall be amended by deleting Section 5003.3.1.4 Responsibility for cleanup in the IFC and replacing it with the following:

The person, firm or corporation, responsible for an unauthorized discharge or hazardous condition shall institute and complete all actions necessary to remedy the effects of such unauthorized discharge, whether sudden or gradual, at no cost to the jurisdiction. When deemed necessary, by the fire code official, cleanup may be initiated by the fire department, or by an authorized individual or firm. Costs associated with such cleanup shall be borne by the owner, operator, or other person responsible for the unauthorized discharge. Any costs associated with a fire department response to accomplish control and mitigation of an unauthorized discharge may be charged back to the person, firm, or corporation responsible for the release.

Section 5004.10 Supervision and monitoring. Shall be amended to read as follows:

Emergency alarm, detection and automatic fire-extinguishing systems required by Section 5004 shall be electrically supervised and monitored by an approved supervising station or, where approved, shall initiate an audible and visual signal at a constantly attended location. In buildings with a monitored sprinkler or fire alarm/detection system, the carbon dioxide (CO²) emergency alarm system shall be connected to the building fire alarm control panel. A fire alarm permit is required per the DCESD1 Fire Code.

Section 5601.1.3; change to read as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling, and use of fireworks are prohibited.

Exceptions:

1. Only when approved for fireworks displays, storage, and handling of fireworks as allowed in Section 5604 and 5608.
2. The use of fireworks for approved fireworks displays as allowed in Section 5608.
{Delete remainder of text.}

Section 5703.6; add a sentence to read 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 5704.2.9.5; change Section 5704.2.9.5 and add Section 5704.2.9.5.3 to read as follows:

5704.2.9.5 Above-ground Tanks Inside of Buildings. Above-ground tanks inside of buildings shall comply with Section 5704.2.9.5.1 and 5704.2.9.5.2 through 5704.2.9.5.3.

5704.2.9.5.1 {No change.}

5704.2.9.5.2 {No change.}

Section 5704.2.9.5.3 Combustible Liquid Storage Tanks Inside of Buildings.

1. The maximum aggregate allowable quantity limit shall be 3,000 gallons (11 356 L) of Class II or III combustible liquid for storage in protected aboveground tanks complying with Section 5704.2.9.7 when all of the following conditions are met:

2. The entire 3,000 gallon (11 356 L) quantity shall be stored in protected above-ground tanks;

The 3,000 gallon (11 356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks;

3. The tanks shall be located in a room protected by an automatic sprinkler system complying with Section 903.3.1.1; and

4. Tanks shall be connected to fuel-burning equipment, including generators, utilizing an approved closed piping system.

The quantity of combustible liquid stored in tanks complying with this section shall not be counted towards the maximum allowable quantity set forth in Table 5003.1.1(1), and such tanks shall not be required to be located in a control area. Such tanks shall not be located more than two stories below grade.

Section 5704.2.9.6.1 shall be amended to read as follows:

5704.2.9.6.1 Locations where above ground tanks are prohibited. The storage of Class I and Class II liquids in permanent above ground tanks outside of buildings is prohibited within the Copper Canyon City Limits unless approved by Special Use Permit and with approval of the Fire Marshal.

Section 5704.2.11.4; add a sentence to read as follows:

5704.2.11.4 Leak Prevention. Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 through 5704.2.11.4.3. An approved method of secondary containment shall be provided for underground tank and piping systems.

Section 5704.2.11.4.2; change to read as follows:

5704.2.11.4.2 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.

Section 5704.2.11.4.3; add Section 5704.2.11.4.3 to read as follows:

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 tube 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 towards the dispensers, a minimum of two are required.

Delete Section 5707 Mobile Refueling in its entirety.

Section 6103.2.1; add Section 6103.2.1.8 to read as follows:

6103.2.1.8 Jewelry Repair, Dental Labs and Similar Occupancies. Where natural gas service is not available, portable LP-Gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20-pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 60-pound (27.2 kg) water capacity. Each device shall be separated from other containers by a distance of not less than 20 feet.

Section 6104.2, Exception; add an exception 2 to read as follows:

Exceptions:

1. {existing text unchanged}
2. Except as permitted in Sections 308 and 6104.3.2, LP-gas containers are not permitted in residential areas.

Section 6104.3; add Section 6104.3.3 to read as follows:

6104.3.3 Spas, Pool Heaters, and Other Listed Devices. LP-gas containers are allowed to be used to supply spa and pool heaters or other listed devices. Such container shall not exceed 250-gallon water capacity per lot. See Table 6104.3 for location of containers. Installation shall be in accordance with the Texas Administrative Code Title 16, Part 1, Chapter 9, Subchapter B.

Exception: Lots where LP-gas can be off-loaded wholly on the property where the tank is located may install up to 500 gallon above ground or 1,000 gallon underground approved containers.

Section 6107.4 and 6109.13; change to read as follows:

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 and 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: {Deleted}

Table B105.2; change footnote a. to read as follows:

The reduced fire-flow shall be not less than 1,500 gallons per minute.

Appendix C103.1 Hydrant Spacing; shall be amended to read as follows and C103.2 and C103.3 shall be deleted:

C103 Fire Hydrant Spacing.

1. Commercial and Industrial Areas

- a. Fire hydrants shall be located no more than a five hundred foot (500') truck hose lay distance to all points of any structure or combustible storage area on the lot.
- b. Fire hydrants located on the opposite side of a street, designated as four lanes or larger on the current Master Thoroughfare Plan, shall not be considered acceptable for meeting hydrant coverage requirements.
- c. Fire hydrants shall be positioned to allow truck hose lays to follow normal traffic access to the site.
- d. Fire hydrants shall be spaced at no more than three hundred foot (300') intervals.

2. Residential Areas

- a. Fire hydrants shall be placed on block corners or near the center of the block to place every structure within a five hundred foot (500') truck hose lay distance from fire hydrant coverage.
- b. Fire hydrants located on the opposite side of a street, designated as four lanes or larger on the current City Thoroughfare Plan, shall not be considered acceptable for meeting hydrant coverage requirements.
- c. Fire hydrants shall be positioned to allow truck hose lays to follow normal traffic access to the site.
- d. Fire hydrants shall be spaced at no more than five hundred foot (500') intervals.

Appendix C104 Hydrant Spacing, shall be deleted entirely.

Appendix D103.5 Fire apparatus access road gates shall be amended to read as follows:

1. Where a single gate is provided, the gate width shall be not less than 24 feet. Where a fire apparatus access road consists of a divided roadway, the gate width shall be not less than 16 feet.

Appendix L

A Firefighter Air Replenishment System (FARS) will be required in all buildings/occupancy types that are 5 stories or more in height or 500,000 square feet or greater in area under roof. See Appendix L of 2018 International Fire Code for all requirements.

Fire Department Address Guide for All Properties

Single Family Homes

Minimum 4" high, 5/8" contrasting numbers.

Multi Family Communities (Apartments, condos, townhouses)

Street Address:

Minimum 12" high numbers with a 2" stroke with contrasting background.

- **12" high numbers with a 2" stroke are only acceptable when placed within approximately 75' of the road in which the property is addressed.**

Building Numbers:

Minimum 18" high numbers with a 3" stroke with contrasting background.

- Buildings under 100' long: a minimum of one number per building.
- Buildings over 100' in length require a minimum of two numbers per building.

Apartment Spread Numbers/ Corridor Spread Numbers:

- Apartment spread numbers are to be a minimum 7" high numbers with a 1" stroke with contrasting background.
- Corridor spread numbers are to be a minimum 4" high number with a 5/8" brush stroke with contrasting background.
- Number example format:
301-310 3rd Floor
201-210 2nd Floor
101-110 1st Floor

Apartment Numbers:

Minimum 4" high numbers with a 5/8" stroke with contrasting background and visible from access road.

Large Office and Warehouse Buildings

Minimum 24" high numbers with a 4" stroke with contrasting background.

Address must be visible from all access directions.

- Buildings over 500' long will have two address locations if more than one access point is visible.
- Suite numbers are required for multi tenant complexes and shall be located over the **front door and on the rear door** with a 6" high x 1" brush stroke.

Shopping Centers, High Rise Buildings and Other Applications

Minimum 12" high numbers with a 2" stroke with contrasting background. Be visible from all access directions. Suite numbers are required over the door with a 6" high x 1" brush stroke.

- Buildings beyond 100' from the street and 10,000 square feet or more would need to install 18" x 3" address numbers.

Marquee and Monument

Addresses installed on a marquee or monument located next to the street will require numbers 12" high x 2" brush stroke to be located a minimum of 3 feet above grade. Numbers shall contrast with the background.

APPENDIX P PERMIT FEES

Section P105 General.

P101.1 The Denton County ESD 1 FD shall collect the approved fees for inspections, annual permits, and other related permits as required by this Ordinance.

P101.2 Fire code construction permit fees shall be based on the contracted value of the work being permitted. Fees are as stated in the approved fee schedule and adopted by the Town. When a permit is required, the permit fee shall be doubled when work or construction has occurred without obtaining the appropriate permits.

P101.3 Fire Code operational permit fees shall be annual and due on the anniversary date of the permit issue, unless otherwise indicated on the permit.

P101.4 Payment of annual permit fees shall be the responsibility of the property owner, business owner/manager, contractor, or other responsible individual as applicable.

P101.5 The Fire Marshal may request copies of bid documents or other items to verify the estimated cost of construction when calculating permit fees.

P101.6 A permit application shall be submitted to the Development Services Department and must have detailed construction plans one (1) digital pdf copy and a copy of the applicant's State license as applicable attached to the application.

P101.7 Contractor documentation. Anyone desiring to do work for which a construction permit is required shall be required to provide certain documentation to the Development Services Department. Such documentation shall include, but not be limited to, a copy of all applicable State licenses and contact information.

P101.8 Work shall not begin on any construction requiring a fire code permit before the permit is obtained unless approved by the Fire Marshal.

P101.9 Inspection requests. It shall be the duty of the permit holder or their duly authorized agent to notify the fire code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this Code.

P101.10 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the fire code official. The fire code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this Code. Any

portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the fire code official.

P102 Required construction permits. For any and all new installations, and modifications to existing fire and life safety systems, including but not limited to **Sections P102.1 through P102.16** of this document and, **Section 105 Permits, of the 2018 Edition of the International Fire Code.** A construction permit issued by the Fire Marshal shall be required for work as set forth in the above referenced Sections.

P102.1 Automatic fire-extinguishing systems. The permit fee for the installation of or modification to any residential or commercial automatic fire-extinguishing system required by Section 105.7.1 and Section 903 as amended and adopted, shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.2 Battery Systems. The permit fee for the installation of stationary battery systems required by Section 105.7.2 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.3 Compressed gases. The permit fee to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a compressed gas system required by Section 105.7.4 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.4 Cryogenic fluids. The permit fee for the installation of or alteration to outdoor stationary cryogenic fluid storage systems required by Chapter 55 and Section 105.7.5 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.5 Fire alarm and detection systems and related equipment. The permit fee for the installation of or modification to fire alarm and detection systems and related equipment required by Section 105.7.7 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.6 Fire pumps and related equipment. The permit fee for the installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers, and generators required by Section 105.7.8 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.7 Flammable and combustible liquids. The permit fee for the installation of or repair or modification to a pipeline, tank, or other such items required by Section 105.7.9 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.8 Hazardous materials. The permit fee for the installation, repair, abandonment, removal, closure, or modification to a storage facility or other area regulated by Chapter 50 as required by Section 105.7.13 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Northlake.

P102.9 Industrial ovens. The permit fee for the installation of industrial ovens covered by Chapter 30 as required by Section 105.7.15 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.10 LP-gas. The permit fee for the installation of or modification to an LP-gas system required by Section 105.7.16 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.11 Spraying or dipping. The permit fee for the installation of or modification to a spray room, dip tank or booth required by Section 105.7.23 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.12 Standpipe systems. The permit fee for the installation of, modification to or removal from service of a standpipe system required by Section 105.7.24 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.13 Smoke control or exhaust systems. The permit fee for the installation of or modification to a smoke control or exhaust system required by Section 105.7.20 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.14 Electronic access control systems. The permit fee for the installation of or modification to an electronic access control system as described in Section 105.7.26 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.15 Gates across fire lanes. A permit is required for the installation of controlled access gates across required fire lanes as described in Section 105.7.12. The permit fee

for the installation of or modification to controlled access gates across required fire lanes shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.16 Tent and Membrane Structures. The permit fee for the installation of a tent or membrane structure as described in Section 105.6.45 shall be determined by the cost of construction and the fee shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.

P102.17 Fireworks Displays. A permit is required for the display of Fireworks as described in Section 5601.1.3 and Section 5608. The permit fee for fireworks displays shall be calculated based on the fee schedule as required by the most recent ordinances of the Town of Copper Canyon.