ORDINANCE NO. 5422

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF DENISON, TEXAS AMENDING SECTION 7-89 (INTERNATIONAL FIRE CODE ADOPTED) AND OF ARTICLE III (FIRE PREVENTION CODE) OF CHAPTER 7 (FIRE PREVENTION AND PROTECTION) OF THE DENISON CODE OF ORDINANCES TO PROVIDE FOR THE ADOPTION OF AND LOCAL AMENDMENTS TO THE INTERNATIONAL FIRE CODE, 2024 EDITION; PROVIDING FOR SAVINGS, REPEALING AND SEVERABILITY CLAUSES; PROVIDING A PENALTY CLAUSE; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS ORDINANCE IS ADOPTED TO BE OPEN TO THE PUBLIC AS REQUIRED BY LAW; PROVIDING FOR PUBLICATION AND AN EFFECTIVE DATE.

WHEREAS, the City of Denison, Texas (hereinafter referred to as "City") is a Home Rule Municipality acting under its Charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Texas Local Government Code; and

WHEREAS, the City Council of the City of Denison, Texas ("City Council") previously adopted the 2018 Edition of the International Fire Code by Ordinance No. 5106 on June 17, 2013; and

WHEREAS, the City Council finds that it is advisable to update the International Fire Code to the 2024 Edition to protect the health, safety, and welfare of the City of Denison, Texas and its citizens and that such enactment and enforcement of these updates furthers the health, safety and welfare of the citizens and their environs; and the community; and

WHEREAS, the City Council finds that certain amendments to the International Fire Code, 2024 Edition, are necessary to comply with state law, local standard practices, and/or to improve the protection provided by the Code.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DENISON, THAT:

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

SECTION 2: **Adoption of 2024 International Fire Code**. Section 7-89 (International Fire Code Adopted) of Article III (Fire Prevention Code) of Chapter 7 (Fire Prevention and Protection) of the Denison Code of Ordinances is hereby repealed in its entirety and replaced in its entirety to read as shown in Exhibit A. A copy of the International Fire Code, 2024 Edition, with Local Amendments, shall be on file in the office of the Building Official for inspection during normal business hours.

SECTION 3: Severability. It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs and sections of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this ordinance, since the same would have been enacted by the City Council without the incorporation of this ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 4: Savings/Repealing Clause. All provisions of any ordinance in conflict with this Ordinance are hereby repealed to the extent they are in conflict; but such repeal shall not abate any pending prosecution for violation of the repealed ordinance, nor shall the repeal prevent a prosecution from being commenced for any violation if occurring prior to the repeal of the ordinance. Any remaining portions of said ordinances shall remain in full force and effect.

SECTION 5: Penalty. A violation of this Ordinance is an offense punishable in accordance with Section 1-12 (General Penalty; Continuing Violations) of the Denison Code of Ordinances.

SECTION 6: Open Meetings. That it is hereby found and determined that the meeting at which this Ordinance was passed was open to the public as required by law, and that a public notice of the time, place, and purpose of said meeting was given, all as required by Article 551.041, Texas Government Code.

SECTION 7: Effective Date. This Ordinance shall become effective on January 1, 2026.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF DENISON, TEXAS, on this the 15th day of December, 2025.

ROBERT CRAWLEY, MAYOR

ATTEST:

Christine Wallentine, City Clerk

Exhibit A

Sec. 7-89 – International Fire Code adopted.

(a) The International Fire Code, 2024 Edition, as published by the International Code Council, and the whole thereof, except such portions as may hereinafter be amended, is hereby adopted and incorporated as fully as if set forth at length herein, and from and after the date on which this section shall take effect, the provisions therein shall be controlling within the area of jurisdiction of the city. A copy of the International Fire Code shall be on file in the office of the city clerk for inspection during normal business hours.

(b) The International Fire Code, 2024 Edition is amended as follows:

(1) Section 102.1, item 3 is hereby amended to read as follows:

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

(2) Section 104.2.3 is hereby amended to read in its entirety as follows:

104.2.3 *Alternative materials, design and methods of construction and equipment.* The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

(3) Section 104.6 is hereby amended to read as follows:

104.6 Notices and orders. The fire code official is authorized to issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 113.

(4) Section 105.3.3 is hereby amended to read as follows:

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

(5) Section 105.1 is hereby amended to read as follows:

105.1 General. Permits shall be in accordance with Sections 105.1.1 through 105.6.27.

(6) Section 105.6.26 is hereby added and shall read as follows:

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

(7) Section 105.6.27 is hereby added and shall read as follows:

105.6.27 Electric vehicle (EV) charging stations. Construction permits are required to install or modify an electric vehicle charging station. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

(8) Section 108.3 is hereby deleted in its entirety.

(9) Section 202 is hereby amended to amend the definitions of "Ambulatory Care Facility," Carbon Monoxide Source," "Fire Watch," "Fireworks," "High Piled Combustible Storage," "High Rise Building," and "Repair Garage." and to add the terms and definitions of "Carbon Monoxide Source, Direct," Carbon Monoxide Source, Indirect," "Self-Service Storage Facility," "Standby Personnel," and "Upgraded or Replaced Fire Alarm System" as follows:

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

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

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

CARBON MONOXIDE SOURCE. A combustion process that has the potential to produce carbon monoxide as a product of combustion under normal or abnormal conditions. Carbon monoxide sources include, but are not limited to solid-, liquid-

, or gas-fueled appliances, equipment, devices, or systems, such as fireplaces, furnaces, heaters, boilers, cooking equipment, and vehicles with internal combustion engines.

CARBON MONOXIDE SOURCE, DIRECT. A permanently installed carbon monoxide source that is located in an interior space.

CARBON MONOXIDE SOURCE, INDIRECT. A carbon monoxide source connected to an interior space by a forced air supply duct.

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

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

> Fireworks, 1.3G. Large fireworks devices, which are explosive materials, intended for use in fireworks displays and designed to produce audible or visible effects by combustion, deflagration or detonation. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition and other display pieces which exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as Fireworks, UN 0335 by the DOTn.
>
> Fireworks, 1.4G. Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion or deflagration that complies with the construction, chemical composition and labeling regulations of the DOTn for Fireworks, UN 0336, and the US Consumer Product Safety Commission as set forth in CPSC 16 CFR Parts 1500 and 1507.

HIGH-PILED COMBUSTIBLE STORAGE: Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet (3658 mm) in height. Where required

by the fire code official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet (1829 mm) in height.

Any building classified as a group S Occupancy or Speculative Building exceeding 6,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified (speculative warehouse), a fire protection system and life safety features shall be installed for Class IV commodities, to the maximum pile height.

HIGH-RISE BUILDING. A building with an occupied floor or occupied roof 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.

SELF-SERVICE STORAGE FACILITY. Real property designed and used to rent or lease individual storage spaces to customers to store and remove personal property on a self-service basis.

STANDBY PERSONNEL. Qualified fire service personnel, approved by the Fire Code Official. When utilized, the number required shall be as directed by the Fire Code Official. 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

(10) Section 203.2.3 is hereby amended to read as follows:

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

(11) Section 304.1.1 is hereby amended to read as follows:

304.1.1 Valet trash. Valet trash collection shall be permitted only where approved. The owner and valet trash collection service provider shall comply with the rules and limitations established by the jurisdiction. Refer to Appendix O for further information.

(12) Section 307.1.1 is hereby amended to read as follows:

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

Exception: Prescribed burning for the purpose of reducing the impact of wildland fire when authorized by the fire code official.

(13) Section 307.2 is hereby amended to read as follows:

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

Examples of state or local law, or regulations referenced elsewhere in this section may include but not be limited to the following:

1. Texas Commission on Environmental Quality (TCEQ) guidelines and/or restrictions.

2. State, County, or Local temporary or permanent bans on open burning.

3. Local written policies as established by the fire code official.

(14) Section 307.3 is hereby amended to read as follows:

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

(15) Section 307.4 is hereby amended to read as follows:

307.4 Location. The location for open burning shall not be less than 300 feet (91,440 mm) from any structure, and provisions shall be made to prevent the fire from spreading to within 300 feet (91,440 mm) of any structure.

Exceptions:

1.Fires in approved containers that are not less than 15 feet (4572 mm) from a structure.

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

(16) Section 307.4.1 is hereby amended to read as follows:

307.4.1 Bonfires. A bonfire shall not be conducted within 50 feet (15,240 mm), or greater distance as determined by the fire code official, of a structure or combustible material, unless the fire is contained in a barbecue pit. Conditions that could cause a fire to spread to within the required setback of a structure shall be eliminated prior to ignition.

(17) Section 307.4.3 is hereby amended to add Exception 2 as follows:

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

(18) Sections 307.4.4 and 307.4.5 are hereby added and shall read as follows:

307.4.4 Permanent Outdoor Firepit. Permanently installed outdoor firepits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.
Exception: Permanently installed outdoor fireplaces constructed in accordance with the International Residential Code or International Building Code.

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

(19) Section 307.5 is hereby amended to read as follows:

307.5 Attendance. Open burning, trench burns, bonfires, recreational fires, and use of portable or permanent outdoor fireplaces or firepits shall be constantly attended until the fire is extinguished. Not fewer than one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.

(20) Section 308.1.6, Exception 3 is hereby amended to read as follows:

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

(21) Section 308.1.7 is hereby amended to read as follows:

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

(22) Section 308.1.9 is hereby amended to read as follows:

308.1.9 Aisles and exits. Candles or open flames shall be prohibited in areas where occupants stand, or in an aisle or exit.

(23) Section 308.1.11 is hereby amended to read as follows:>

308.1.11 Open-flame Cooking Devices. Open flame cooking devices shall comply with Section 4104.

(24) Section 311.5 is hereby amended to read as follows:

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 115 of this code relating to structural or interior hazards, as required by Section 311.5.1 through 311.5.5.

(25) Section 314.4 is hereby amended to read as follows:

314.4 Vehicles. Electric, liquid-fueled, or gaseous-fueled vehicles, aircraft, boats, or other motor craft shall not be located indoors except as follows:

1. The engine starting system is made inoperable or ignition batteries are disconnected except where the fire code official requires that the batteries remain connected to maintain safety features.
2. Fuel in fuel tanks does not exceed any of the following:
   - 2.1. Class I, II, and III liquid fuel does not exceed one-quarter tank or 5 gallons (19 L), whichever is less.
   - 2.2. LP gas does not exceed one-quarter tank or 6.6 gallons (25 L), whichever is less.
   - 2.3. CNG does not exceed one-quarter tank or 630 cubic feet (17.8 m3), whichever is less.
   - 2.4. Hydrogen does not exceed one-quarter tank or 2,000 cubic feet (57 m3), whichever is less.
3. Fuel tanks and fill openings are closed and sealed to prevent tampering.
4. Vehicles, aircraft, boats, or other motor craft equipment are not fueled or defueled within the building.
5. Electric vehicles shall not be charged inside buildings or other structures, other than where approved in parking garages, or unless otherwise approved by the fire code official.

(26) Section 313, including Sections 313.1 through 313.3, is hereby added and shall read as follows:

323 Electric Vehicles (EVs).

323.1 Electric Vehicle Charging Stations. Electric vehicle (EV) charging stations shall not be located inside buildings and/or structures, except where approved for parking garage locations as per the National Electrical Code.

323.1.1 *Charging Stations Inside Parking Garage.* EV charging stations located in parking garages shall be located at grade level along the exterior perimeter walls and shall be within 150 feet of fire apparatus access roadway, or shall be located on the top level of the garage with no roof or structure above.

323.1.2 *Charging Stations inside R-3 and R-4 occupancies.* Approved charging stations in the private garage shall have a listed heat alarm installed in the garage and interconnected to the smoke alarms inside the dwelling.

323.2 Disconnect. Locations containing electric vehicle charging stations shall be provided with a clearly identified and readily accessible emergency disconnect installed in an approved location.

The emergency disconnects for exterior electric vehicle charging stations shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from the charging stations, unless otherwise approved by the fire code official.

323.2.1 Height. The height of the emergency disconnect switch shall be not less than 42 inches (1067 mm) and not more than 48 inches (1219 mm) measured vertically, from the floor level to the activating button.

323.2.2 Emergency Disconnect Sign. Emergency disconnect devices shall be distinctly labeled as: "EMERGENCY ELECTRIC VEHICLE CHARGER DISCONNECT." Signs shall be placed in an approved location and shall consist of all of the following:

1. White reflective background with red letters.
2. Weather-resistant durable material.
3. Lettering not less than 2 inches (51 mm) high.
4. Permanently affixed to the building or structure in an approved manner.

323.3 Damaged Electric Vehicle Batteries. Damaged electric vehicle batteries shall not be stored inside any building or structure, unless otherwise approved by the Fire Code Official.

(27) Section 404.2.2 is hereby amended to add Number 4.10, which shall read as follows:

4.10. Fire Protection system controls.

(28) Section 405.5 is hereby amended to read as follows:

405.5 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.

Exceptions:
1. In severe climates, the fire code official shall have the authority to modify the emergency evacuation drill termination points and frequency.
2. In Groups I-1, I-2, I-3 and R-4, where staff-only emergency evacuation drills are conducted after visiting hours or where care recipients are expected to be asleep, a coded announcement shall be an acceptable alternative to audible alarms.
3. Notification of teachers/staff having supervision of light- or sound-sensitive students/occupants, such as those on the autism spectrum, for the protection of those students/occupants, shall be allowed prior to conducting a drill.

(29) Section 501.4 is hereby amended to read as follows:

501.4 Timing of Installation. When fire apparatus access roads or a water supply for fire protection are 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.

(30) Section 503.1.1 is hereby amended to read as follows:

Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. Except for one- or two-family dwellings, the path of measurement shall be along a minimum of a 10 feet (3048 mm) wide unobstructed pathway around the external walls of the structure.

Exceptions:

1. The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where any of the following conditions occur:

1.1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.

1.2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.

1.3. There are not more than two Group R-3 or Group U occupancies.

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

(31) Section 503.2.1 is hereby amended to read as follows:

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

Exception: Vertical clearance may be reduced; provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance when approved.

(32) Section 503.2.2 is hereby amended to read as follows:

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

(33) Section 503.2.3 is hereby amended to read as follows:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support imposed loads of 85,000 Lbs. for fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

(34) Section 503.3 is hereby 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 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" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

(2) Signs – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 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 along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

(35) Section 503.4 is hereby 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 of vehicles. The minimum widths and clearances established in Section 503.2.1 and 503.2.2 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

(36) Section 505.1 is hereby amended to read as follows:

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. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 6 inches (152.4 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code

official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, pole or other sign with approved 6 inch (152.4 mm) height building numerals or addresses and 4 inch (101.6 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. Address identification shall be maintained.

Exception: R-3 Single Family occupancies shall have approved numerals of a minimum 3 ½ inches (88.9 mm) in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

(37) Section 507.4 is hereby amended 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 Section 903.3.5 and the applicable referenced NFPA standard. Reference Section 903.3.5 for additional design requirements.

Exception: This exception is only applicable to the NFPA 291 fire hydrant flow test above. Water supply test information may be provided by the water authority via hydraulic water model where approved by the fire code official. The water model report shall include the exact location of the water model node on the city's water supply piping, elevation, water supply fluctuation information, and all other pertinent water supply test information for fire protection design, as applicable.

(38) Section 507.5.4 is hereby amended 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 fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

(39) Section 509.1.2 is hereby amended to read as follows:

509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of 2 inches (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.

(40) Section 510.6.1 is hereby amended to read as follows:

The owner of the building or owner's authorized agent shall have the in-building emergency responder communications enhancement system inspected and tested annually or where structural changes occur, including additions or remodels that could materially change the original field performance tests. Testing shall consist of the following:

1.In-building coverage test as described in Section 510.5.4.
2.Signal boosters shall be tested to verify that the gain is the same as it was upon initial installation and acceptance or set to optimize the performance of the system.
3.Backup batteries and power supplies shall be tested under load of a period of 1 hour to verify that they will properly operate during an actual power outage. If within the 1-hour test period the battery exhibits symptoms of failure, the test shall be extended for additional 1-hour periods until the integrity of the battery can be determined.
4.All active components shall be checked to verify operation within the manufacturer's specifications.

At the conclusion of the testing, a report, which shall verify compliance with Section 510.5.4, shall be submitted to the fire code official. The inspecting radio contractor shall provide an annual inspection tag/sticker on the ERCES' BDA and any remote annunciator. Tag/sticker shall identify approved inspecting contractor's name, physical address, phone number, and FCC license number, and inspector's

name, as well as the date of inspection. System shall not be tagged until all inspection requirements of this section are conducted. Tag/sticker shall be blue in color for a passing system. If this is not possible for any reason, tag/sticker shall be red in color for a failing system with reasons for failure indicated on the tag if possible. If red tag/sticker is placed, AHJ/Fire Marshal shall be notified within a maximum of 24 hours.

(41) Section 604.7 is hereby amended to read as follows:

Section 604.7 Storage. Storage is prohibited in elevator cars or elevator machine rooms. Signage shall be provided at the entry doors to the elevator machine room indicating "ELEVATOR MACHINERY – NO STORAGE ALLOWED."
Exceptions:
1. Blankets used for protection of elevator cab walls during construction or renovation.
2. Materials necessary for the operation and maintenance of the elevator equipment.

(42) Section 605.4, including subsections 605.4.1 through 605.4.2.2, are hereby amended to read as follows:

605.4 Fuel oil storage systems. Fuel oil storage systems shall be installed and maintained in accordance with this code. Tanks and fuel-oil piping systems shall be installed in accordance with Chapter 13 of the International Mechanical Code and Chapter 57.

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

605.4.1.1 Approval. Outdoor fuel oil storage tanks shall be in accordance with UL 80, UL 142, UL142A or UL 2085, and also listed as double-wall/secondary containment tanks.

605.4.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 605.4.2.12 through 605.4.2.8 or and Chapter 57.

605.4.2.1 Approval. Indoor fuel oil storage tanks shall be in accordance with UL 80, UL 142, UL142A or UL 2085.

605.4.2.2 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, UL 142A or UL 2085, and also listed as a double-wall/secondary containment tank for Class II liquids, and the secondary containment shall be monitored visually or automatically.
2. 1,320 gallons (4996 L) in buildings equipped with an automatic sprinkler system in accordance with Section 903.3.1.1, where stored in a tank complying with UL 142, UL 142A or UL 2085. The tank shall be listed as a secondary containment tank, and the secondary containment shall be monitored visually or automatically.
3. 3,000 gallons (11 356 L) in buildings equipped with an automatic sprinkler system in accordance with Section 903.3.1.1, where stored in protected above-ground tanks complying with UL 2085 and Section 5704.2.9.7. The tank shall be listed as a secondary containment tank, as required by UL 2085, and the secondary containment shall be monitored visually or automatically.

(43) Section 807.5.2.2 is hereby amended 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 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings, and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

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

(44) Section 807.5.2.3 is hereby amended to read as follows:

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.

(45) Section 807.5.5.2 is hereby amended to read as follows:

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

(46) Section 807.5.5.3 is hereby amended to read as follows:

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

(47) Section 901.6.1.1 is hereby added and shall read as follows:

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

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

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

(48) Section 901.6.4 is hereby added and shall 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.

(49) Section 901.7 is hereby 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. Where utilized, fire watches shall be provided with not less than one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

Exception: Facilities with an approved notification and impairment management program. The notification and impairment program for water-based fire protection systems shall comply with NFPA 25.

(50) Section 903.1.1 is hereby amended to read as follows:

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

(51) Section 903.2 is hereby amended to read as follows in its entirety:

903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

(52) Section 903.2.2.1 is hereby amended to read as follows:

903.2.2.1 Ambulatory care facilities. An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation.

2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest level of exit discharge, the level of exit discharge, and all floors below the level of exit discharge.

Exception: Unless otherwise required by this code, floors classified as an open parking garage are not required to be sprinklered.

(53) Section 903.2.4.2 is hereby amended to read as follows:

903.2.4.2 Group F-1 distilled spirits. An automatic sprinkler system shall be provided throughout a Group F-1 fire area used for the manufacture of distilled spirits involving more than 120 gallons of distilled spirits (>20% alcohol) in the fire area at any one time.

(54) Section 903.2.9.3 is hereby amended to read as follows:

903.2.9.3 Group S-1 distilled spirits or wine. An automatic sprinkler system shall be provided throughout a Group S-1 fire area used for the bulk storage of distilled spirits or wine involving more than 120 gallons of distilled spirits or wine (>20% alcohol) in the fire area at any one time.

(55) Section 903.2.9.4 is hereby amended to read in its entirety as follows:

903.2.9.4 Group S-1 upholstered furniture and mattresses. An automatic sprinkler system shall be provided throughout a Group S-1 fire area where the area used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m2).

(56) Section 903.2.9.5 is hereby added and shall read as follows:

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

system design shall be based on an Ordinary Hazard Group II classification, in accordance with NFPA 13 requirements. Physical construction in compliance with open-grid ceilings as per NFPA 13, such as an open metal grid ceiling or chicken wire that does not obstruct the overhead sprinkler protection, shall be installed to prevent storage from exceeding the lower of either 12 feet above finished floor or 18 inches beneath standard sprinkler head deflectors. At least one sprinkler head shall be provided in each storage unit/room (additional sprinklers may be necessary for compliance with NFPA 13 spacing requirements), regardless of wall height or construction type separating such units.

(57) Section 9.2.11.3 is hereby amended to read in its entirety 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 1511 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.

(58) Section 903.2.11.7 is hereby added and shall read as follows:

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

(59) Section 903.2.11.8 is hereby added and shall read as follows:

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.

(60) Section 903.2.11.9 is hereby added and shall read as follows:

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

Exception: Open parking garages complying with 903.2.10

(61) Section 903.1.1.1 is hereby amended 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. A room or space where sprinklers constitute a serious life or fire hazard because of the nature of the contents, where approved by the fire code official.
2. 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.
3. Rooms or areas that are of noncombustible construction with wholly noncombustible contents.
4. Fire service access Elevator machine rooms, and machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

(62) Section 903.3.1.1.4 is hereby added and shall read as follows:

903.3.1.1.4 Dry pipe sprinkler systems. Dry pipe sprinkler systems protecting fire areas of Type V construction shall be required to meet the 60 second water delivery time, per NFPA 13, to the system test connection regardless of the system size, unless more stringent criteria are applicable in NFPA 13, and all dry pipe sprinkler systems shall be trip tested to flow/discharge water to verify compliance with this requirement, unless otherwise approved by the fire code official.

(63) Section 903.3.1.2.2 is hereby amended to read as follows:

903.3.1.2.2 Corridors and balconies. Sprinkler protection shall be provided in all corridors and for all balconies.

(64) Section 903.3.1.2.3 is hereby amended to read in its entirety as follows:

Section 903.3.1.2.3 Attached Garages and Attics. Sprinkler protection is required in attached garages, and in the following attic spaces:

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

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

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

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

4.1. Provide automatic sprinkler system protection.

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

4.3. Construct the attic using noncombustible materials.

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

4.5. Fill the attic with noncombustible insulation.

(65) Section 903.1.3 is hereby amended to read as follows:

903.3.1.3 NFPA 13D Sprinkler Systems. Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3; 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.

(66) Section 903.1.4 with subsections 903.1.4.1 and 903.1.4.2 are hereby added and shall read as follows:

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

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

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and

2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and

3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

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

(67) Section 903.3.5 is hereby amended to read as follows:

Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the International Plumbing Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective NFPA 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.

(68) Section 903.3.9 is hereby amended to read as follows:

903.3.9 Building floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser as indicated below:

1. In High Rise Buildings, floor control assemblies shall be located in protected stairwells, or as otherwise approved by the fire code official.
2. In all other buildings, floor control assemblies shall be located as approved by the fire code official.

(69) Section 903.4.1 is hereby amended to read as follows:

Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all automatic sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Limited area sprinkler systems in accordance with Section 903.3.8, provided that backflow prevention device test valves located in limited area sprinkler system supply piping shall be locked in the open position unless supplying an occupancy required to be equipped with a fire alarm system, in which case the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.
3. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.
8. Underground key or hub gate valves in roadway boxes.

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. Reference Section 903.3.9 for required floor control assemblies. 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.

(70) Section 903.4.3 is hereby amended to read as follows:

An approved audible and visual sprinkler waterflow alarm device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a waterflow switch is required by Section 903.4.1 to be electrically supervised, such sprinkler waterflow alarm devices shall be powered by a fire alarm control unit or, where provided, a fire alarm system.

Where a fire alarm system is provided, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

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

Exception: Automatic sprinkler systems protecting one- and two-family dwellings.

(71) Section 905.3.8 is hereby added and shall read as follows:

905.3.8 Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I standpipes shall be provided.

(72) Section 905.4, items 5 through 7 are hereby amended to read as follows:

5. Where the roof has a slope less than 4 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. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60 960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.
7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

(73) Section 905.8 is hereby amended to read as follows:

905.8 Dry standpipes. Dry standpipes shall not be installed.

Exception: Where subject to freezing and in accordance with NFPA 14. Additionally, 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 Supervisory alarm.

(74) Section 905.9 is hereby amended to read as follows:

Valves controlling water supplies shall be supervised in the open position so that a change in the normal position of the valve will generate a supervisory signal at the supervising station required by Section 903.4.1. Where a fire alarm system is provided, a signal shall be transmitted to the control unit.

Exceptions:

1. Valves to underground key or hub valves in roadway boxes do not require supervision.
2. Valves locked in the normal position and inspected as provided in this code in buildings not equipped with a fire alarm system.

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. Reference Section 903.3.9 for required floor control assemblies. 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.

(75) Section 906.1(1), Exception 3 is hereby deleted.

(76) Section 907.1.4 is hereby added and shall read as follows:

907.1.4 Design Standards. Where a new fire alarm system is installed, the devices shall be addressable.

(77) Section 907.2.1 is hereby amended to read as follows:

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in occupancies having an occupant load of 300 or more persons, or where the Group A 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.

Exceptions:

1. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

2. Manual fire alarm boxes and the associated occupant notification system or emergency voice/alarm communication system are not required for Group A-5 outdoor bleacher-type seating having an occupant load of greater than or equal to 300 and less than 15,000 occupants, provided that all of the following are met:

2.1. A public address system with standby power is provided.

2.2. Enclosed spaces attached to or within 5 feet (1524 mm) of the outdoor bleacher type seating compose, in the aggregate, a maximum of 10 percent of the overall area of the outdoor bleacher-type seating or 1,000 square feet (92.9 m2), whichever is less.

2.3 .Enclosed accessory spaces under or attached to the outdoor bleacher-type seating shall be separated from the bleacher-type seating in accordance with Section 1030.1.1.1.

2.4. All means of egress from the bleacher-type seating are open to the outside.

3. Manual fire alarm boxes and the associated occupant notification system or emergency voice/alarm communication system are not required for temporary Group A-5 outdoor bleacher-type seating, provided that all of the following are met:

3.1. There are no enclosed spaces under or attached to the outdoor bleacher-type seating.

3.2. The bleacher-type seating is erected for a period of less than 180 days.

3.3. Evacuation of the bleacher-type seating is included in an approved fire safety plan.

(78) Section 907.2.3 is hereby amended 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. A manual fire alarm system shall not be required in Group E occupancies with an occupant load of 50 or less.

   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.)

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

3. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:

   3.1. Interior corridors are protected by smoke detectors.

   3.2. Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.

   3.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.

   3.4. Manual activation is provided from a normally occupied location.

4. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:

   4.1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

   4.2. The emergency voice/alarm communication system will activate on sprinkler water flow.

   4.3. Manual activation is provided from a normally occupied location.

(79) Section 907.2.10.1 is hereby amended to read as follows:

907.2.10.1 Public- and Self-Storage Occupancies. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group S public- and self-storage occupancies for interior corridors and interior common areas. Visible notification appliances are not required within storage units.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

(80) Section 907.2.13, Exception 3 is hereby amended 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.

(81) Section 907.4.2.7 is hereby added and shall read as follows:

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

(82) Section 907.6.1.1 is hereby added

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

(83) Section 907.6.3 is hereby amended to read in its entirety as follows:

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

(84) Section 907.6.6 is hereby amended to read as follows:

Fire alarm systems required by this chapter or by the International Building Code shall be monitored by an approved supervising station in accordance with NFPA 72. See 907.6.3 for the required information transmitted to the supervising station.

Exception: Monitoring by a supervising station is not required for:

1.Single- and multiple-station smoke alarms required by Section 907.2.11.
2.Smoke detectors in Group I-3 occupancies.
3.Automatic sprinkler systems in one- and two-family dwellings.

(85) Section 910.2.3 is hereby added and shall 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 15,000 square feet (1394 m2) in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

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

Exception: Buildings of noncombustible construction containing only noncombustible materials.

(86) Section 910.4.3.1 is hereby amended 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 manual or

automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m2 per 0.4719 m3/s) of smoke exhaust.

(87) Section 912.2.3 is hereby added and shall 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.

(88) Section 913.2.1 is hereby amended and shall read as follows:

Rooms where fire pumps are located shall be separated from all other areas of the building in accordance with Section 913.2.1 of the International Building Code.

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

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

(89) Section 914.3.1.2 is hereby amended to read as follows:

914.3.1.2 Water Supply to required Fire Pumps. In all buildings that are more than 120 feet (36.6 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: Two connections to the same main shall be permitted provided that the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through not fewer than one of the connections.

(90) Section 915, along with all its subsections, are hereby deleted in its entirety, as replaced as follows:

915.1 General. New and existing buildings shall be provided with carbon monoxide (CO) detection in accordance with Sections 915.2 through 915.5.

915.2 *Where required.* Carbon monoxide detection shall be provided in interior spaces, other than dwelling units or sleeping units, that are exposed to a carbon monoxide source in accordance with Sections 915.2.1 through 915.2.3. Carbon monoxide detection for dwelling units or sleeping units that are exposed to a carbon monoxide source shall be in accordance with Section 915.2.4.

915.2.1 Interior spaces with direct carbon monoxide sources. In all occupancies, interior spaces with a direct carbon monoxide source shall be provided with carbon monoxide detection located in close proximity to the direct carbon monoxide source and in accordance with Section 915.3.
Exception: Where environmental conditions in an enclosed space are incompatible with carbon monoxide detection devices, carbon monoxide detection shall be provided in an approved adjacent location.

915.2.2 Interior spaces adjacent to a space containing a carbon monoxide source. In Groups A, B, E, I, M and R Occupancies, interior spaces that are separated from and adjacent to an enclosed parking garage or an interior space that contains a direct carbon monoxide source shall be provided with carbon monoxide detection if there are communicating openings between the spaces. Detection devices shall be located in close proximity to communicating openings on the side that is furthest from the carbon monoxide source and in accordance with Section 915.3

Exceptions:

1. Where communicating openings between the space containing a direct carbon monoxide source and the adjacent space are permanently sealed airtight, carbon monoxide detection is not required for the adjacent space.

2. Where the fire code official determines that the volume or configuration of the adjacent interior space is such that dilution or geometry would diminish the effectiveness of carbon monoxide detection devices located in such spaces, detection devices additional to those required by Section 915.2.1 shall be located on the side of communicating openings that is closest to the carbon monoxide source.

915.2.3 Interior spaces with forced-indirect carbon monoxide sources. In all occupancies, interior spaces with a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with either of the following:

1. Detection in each space with a forced-indirect carbon monoxide source, located in accordance with Section 915.3.

2. Detection only in the first space served by the main duct leaving the forced-indirect carbon monoxide source, located in accordance with Section 915.3, with an audible and visual alarm signal provided at an approved location.

915.2.4 Dwelling units and sleeping units. Carbon monoxide detection for dwelling units and sleeping units shall comply with Sections 915.2.4.1 and 915.2.4.2.

915.2.4.1 Direct carbon monoxide sources. Where a direct carbon monoxide source is located in a bedroom or sleeping room, or a bathroom attached to either, carbon monoxide detection shall be installed in the bedroom or sleeping room. Where carbon monoxide detection is not installed in bedrooms or sleeping rooms, carbon monoxide detection shall be installed outside of each separate sleeping area in close proximity to bedrooms or sleeping rooms for either of the following conditions:

1. The dwelling unit or sleeping unit has a communicating opening to an attached, enclosed garage.

2. A direct carbon monoxide source is located in the dwelling unit or sleeping unit outside of bedrooms or sleeping rooms.

915.2.4.2 Forced-indirect carbon monoxide sources. Bedrooms or sleeping rooms in dwelling units or sleeping units that are exposed to a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with Section 915.2.4.1 or Section 915.2.3.

915.3 Location of detection devices. Carbon monoxide detection devices shall be installed in accordance with manufacturer's instructions in a location that avoids dead air spaces, turbulent air spaces, fresh air returns, open windows, and obstructions that would inhibit accumulation of carbon monoxide at the detection location. Carbon monoxide detection in air ducts or plenums shall not be permitted as an alternative to required detection locations.

915.4 Permissible detection devices. Carbon monoxide detection shall be provided by a carbon monoxide detection system complying with Section 915.4.2 unless carbon monoxide alarms are permitted by Sections 915.4.1.

915.4.1 Carbon monoxide alarms. Carbon monoxide alarms complying with Sections 915.4.1.1 through 915.4.1.3 shall be permitted in lieu of a carbon monoxide detection system in both of the following:

1. Dwelling units and sleeping units.
2. Locations other than dwelling units or sleeping units, where approved, provided that the manufacturer's instructions do not prohibit installation in locations other than dwelling units or sleeping units and that the alarm signal for any carbon monoxide alarm installed in a normally unoccupied location is annunciated by an audible and visual signal in an approved location.

915.4.1.1 Power source. In buildings with a wired power source, carbon monoxide alarms shall receive their primary power from a permanent connection to building wiring, with no disconnecting means other than for overcurrent protection, and shall be provided with a battery backup. In buildings without a wired power source, carbon monoxide alarms shall be battery powered.

Exception: For existing buildings not previously required to have carbon monoxide alarms permanently connected to a wired power source, existing battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted to remain in service. When replaced, replacement with battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted.

915.4.1.2 Listings. Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide/smoke alarms shall also be listed in accordance with UL 217.

915.4.1.3 Interconnection. Where more than one carbon monoxide alarm is installed, actuation of any alarm shall cause all of the alarms to signal an alarm condition.

915.4.2 Carbon monoxide detection systems. Carbon monoxide detection systems shall be installed in accordance with NFPA 72.

915.4.2.1 Fire alarm system integration. Where a building fire alarm system or combination fire alarm system, as defined in NFPA 72, is

installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to the fire alarm system. Where a building fire alarm system or a combination fire alarm system is not installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to a carbon monoxide detection system complying with NFPA 72.

915.4.2.2 Listings. Carbon monoxide detectors shall be listed in accordance with UL 2075. Combination carbon monoxide/smoke detectors shall be listed in accordance with UL 268 and UL 2075.

915.4.2.3 Alarm notification. For other than Group E Occupancies, activation of a carbon monoxide detector shall initiate alarm notification in accordance with any of the following:

1. An audible and visible alarm notification throughout the building and at the control unit.
2. Where specified in an approved fire safety plan, an audible and visible alarm in the signaling zone where the carbon monoxide has been detected and other signaling zones specified in the fire safety plan, and at the control unit.
3. Where a sounder base is provided for each detector, an audible alarm at the activated carbon monoxide detector and an audible and visible alarm at the control unit.

For Group E Occupancies having an occupant load of 30 or less, alarm notification shall be provided in an on-site location staffed by school personnel or in accordance with the notification requirements for other occupancies. For Group E occupancies having an occupant load of more than 30, an audible and visible alarm shall be provided in an on-site location staffed by school personnel.

915.5 Maintenance. Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with NFPA 72 and the manufacturer's instructions. Carbon monoxide alarms and carbon monoxide detectors that become inoperable or begin producing end-of-life signals shall be replaced.

(91) Section 1006.2.1 is hereby amended to read as follows:

1006.2.1 Egress based on occupant load and common path of egress travel distance. Two exits or exit doorways from any space shall be provided where the design

occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1. The cumulative occupant load from adjacent rooms, areas or space shall be determined in accordance with Section 1004.2.

Exceptions:

1. The number of exits from foyers, lobbies, vestibules or similar spaces need not be based on cumulative occupant loads for areas discharging through such spaces, but the capacity of the exits from such spaces shall be based on applicable cumulative occupant loads.
2. Care suites in Group I-2 occupancies complying with Section 407.4 of the International Building Code.
3. Unoccupied rooftop mechanical rooms and penthouses are not required to comply with the common path of egress travel distance measurement.

(92) Section 1103.5.3 is hereby amended to read as follows:

In addition to the requirements of Section 1103.5.2, existing buildings of Group I-2, Condition 2 occupancy shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The automatic sprinkler system shall be installed as established by the adopting ordinance. Fire sprinkler system installation shall be completed within 24 months from date of notification by the fire code official.

(93) Section 1103.5.6 is hereby added and shall read as follows:

1103.5.6 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.

(94) Section 1103.7.7 and subsection 1103.7.7.1 are hereby added and shall 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. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the

date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

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

(94) Section 1103.9 is hereby amended to read in its entirety as follows:

1103.9 Carbon monoxide detection. Carbon monoxide detection shall be installed in existing buildings in accordance with Section 915.

(95) Section 1201.4 is hereby added and shall read as follows:

1201.4 Electrical Shutdown. Energy systems including solar photovoltaic power systems, stationary fuel cell power systems, or electrical energy storage systems shall have a remote power shut down box. The location shall be at an approved location. The box shall only be accessible by the fire department and shall be keyed to the fire department Key Box as outlined in Section 506.

(96) Section 1207.2 is hereby added and shall read as follows:

207.2 Commissioning, decommissioning, operation and maintenance. Commissioning, decommissioning, operation and maintenance shall be conducted in accordance with this section. In addition to the ordinary inspection and test requirements that buildings, structures and parts thereof are required to undergo, Energy Storage Systems subject to the provisions of Section 1207 shall undergo special inspections and tests sufficient to verify the proper commissioning of the Energy Storage System in its final installed condition. The design submission accompanying the construction documents shall clearly detail procedures and methods to be used and the items subject to such inspections and tests. Such commissioning shall be in accordance with generally accepted engineering practice and, where possible, based on published standards for the particular testing involved. The special inspections and tests required by this section shall be conducted under the same terms as in Chapter 17 of the International Building Code.

(97) Section 2304.1 is hereby amended 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.

(98) Section 2401.2 is hereby deleted in its entirety.

(99) Section 3301.1 is hereby amended to read as follows:

Section 3307.1 Required access. Approved vehicle access for firefighting and emergency response shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 50 feet (15,240 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available. When fire apparatus access roads are required to be installed for any structure or development, access shall be approved prior to the time which construction has progressed beyond completion of the foundation of any structure. Whenever the connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign.

(100) Section 3307.1.2 is hereby amended to read as follows:

3307.1.2 Stairways required. Where building construction exceeds 40 feet (12,192 mm) in height above the lowest level of fire department vehicle access, a temporary or permanent stairway shall be provided. As construction progresses, such stairways shall be extended to within one floor of the highest point of construction having secured decking or flooring. Whenever the stairways are not visible to approaching fire apparatus, the stairways locations shall be indicated by an approved sign.

(101) Section 3307.5.3 is hereby added and shall read as follows:

3307.5.3 Standpipe Signage. Whenever the standpipes are not visible to approaching fire apparatus, locations shall be indicated by an approved sign.

(102) Section 4104.2 is hereby amended to read as follows:

4104.2 Open-flame Cooking Devices. Charcoal burners and other open-flame cooking devices, charcoal grills and other similar devices used for cooking shall not be operated or located on combustible balconies, decks, or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings where 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). All LP-gas containers shall be stored outside, as per Chapter 61.
2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system, and 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 40 lbs. (2 containers). All LP-gas containers shall be stored outside, as per Chapter 61.
3. LP-gas cooking devices having LP-gas containers with a water capacity not greater than 2-1/2 pounds [nominal 1-pound (0.454 kg) LP-gas capacity].

(103) Section 5601.1.3 is hereby amended to read in its entirety 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, the 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.

(104) Section 5703.6 is hereby amended to read as follows:

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.

(105) Section 5704.2.11.4 is hereby amended 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.

(106) Section 5704.2.11.4.2 is hereby amended 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.

(107) Section 5704.2.11.4.3 is hereby added and shall 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.

(108) Section 5707.4 is hereby amended to read as follows:

5707.4. During fueling, the mobile fueling vehicle and point of connection to the vehicle shall not be located on public streets, public ways or inside buildings. Fueling on the roof level of parking structures or other buildings is prohibited.

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

(109) Appendix B, Table B105.2 is hereby amended to amend footnote "a" to read as follows:

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

(110) Appendix D, Section D103.1 is hereby amended 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 fire apparatus weighing up to 85,000 pounds (38,556 kg).

(111) Appendix D, Section D103.4 is hereby amended to read as follows:

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

TABLE D103.4
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0–150	24	None required
151–500	24	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
501–750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750	Special approval required	

For SI: 1 foot = 304.8 mm.

(112) Appendix D, Section D103.4 is hereby amended to read as follows:

D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the gate width shall be not less than 24 feet (7315.2 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm).
2. Gates shall be of the horizontal swing, horizontal slide, vertical lift or vertical pivot type.
3. Construction of gates shall be of materials that allow manual operation by one person.

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

5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.

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

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

8. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

(113) Appendix D, Section D103.6 is hereby amended to read as follows:

D103.6 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 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" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

(2) Signs – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high (See Figure D103.6). Signs shall have red letters on a white reflective background, using not less than 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 along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

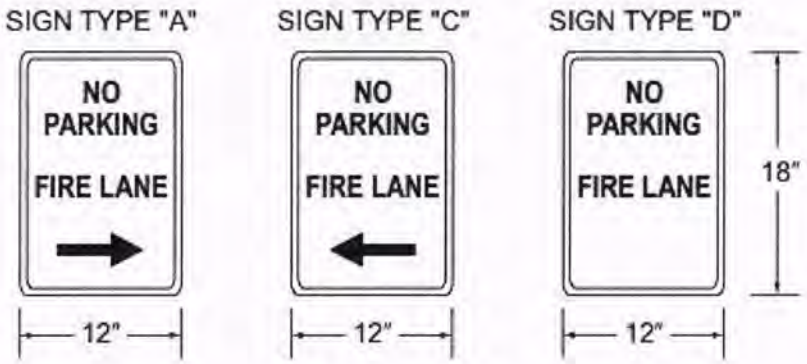

FIGURE D103.6
FIRE LANE SIGNS

(114) Appendix D, Sections D103.6.1 and D103.6.2 are hereby deleted.

(115) Appendix D, Section D104.3 is hereby amended to read as follows:

D104.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses, or as approved by the fire code official.

(116) Appendix D, Section D105.3 is hereby amended to read as follows:

D105.3 Proximity to building. Unless otherwise approved by the fire code official, one or more of the required access routes meeting this condition shall be located not less than 15 feet (4572 mm) and not greater than 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official.

(117) Appendix D, Section D106.3 is hereby amended to read as follows:

D106.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses, or as approved by the fire code official.

(118) Appendix D, Section D107.2 is hereby amended to read as follows:

D107.2 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served,

measured in a straight line between accesses, or as approved by the fire code official.

(119) Appendix L, Section L101.1 is hereby amended to read as follows:

L101.1 Scope. Firefighter air replenishment systems (FARS) shall be provided in accordance with this appendix in new buildings where any of the following conditions are met.

1. Buildings having 6 or more stories above grade plane.
2. Buildings having 2 or more stories below grade plane.

(120) Appendix L, Section L104.13.1 is hereby amended to read as follows:

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

1. In the primary stair, as designated by the fire code official, a fill station shall be installed on the first level and on every odd-numbered floor thereafter.
2. In all other stairs, a fill station shall be installed on the second level and on every even-numbered floor thereafter.

(121) Appendix L, Section L106.1 is hereby amended to read as follows:

A FARS shall be continuously maintained in an operative condition and shall be inspected not less than annually. Not less than quarterly, an air sample shall be taken from the system and tested to verify compliance with NFPA 1989. The laboratory test results shall be maintained on site and readily available for review by the fire code official.

The inspecting FARS contractor shall provide annual inspection tag/sticker on the FARS' interior air monitoring panel. Tag/sticker shall identify approved inspecting contractor's name, physical address, phone number, and certified inspector's name, as well as date of inspection. System shall not be tagged until all inspection requirements of this section are conducted. Tag/sticker shall be blue in color for a passing system. If this is not possible for any reason, tag/sticker shall be red in color for a failing system with reasons for failure indicated on the tag if possible. If red tag/sticker is placed, AHJ/Fire Marshal shall be notified immediately within a maximum of 24 hours.)