

## **SECTION 6-100. 2024 INTERNATIONAL FIRE CODE ADOPTED.**

The 2024 edition of the International Fire Code is hereby adopted as the official fire code of the City of Keller and is fully incorporated by reference as though copied into this chapter in its entirety. The material contained in such code, and any local amendments thereto, shall not be included in the formal municipal codification of ordinances but shall be maintained as a public record in the office of the town secretary and will be available for public inspection and copying during regular business hours.

## **SECTION 6-110. 2024 INTERNATIONAL FIRE CODE AMENDMENTS ADOPTED.**

### **CHAPTER 1 – ADMINISTRATION**

#### **SECTION 101 SCOPE AND GENERAL REQUIREMENTS**

**101.1 TITLE** These regulations shall be known as the Fire Code of the City of Keller, referred to as "this code."

#### **SECTION 102 APPLICABILITY**

**Section 102.1; change #3 to read as follows:**

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

**Section 102.3; delete the exception:**

**102.3 CHANGE OF USE OR OCCUPANCY** A change of occupancy shall not be made unless the use or occupancy is made to comply with the requirements of this code and the *International Existing Building Code*.

#### **SECTION 103 CODE COMPLIANCE AGENCY**

**Section 103.1; change to read as follows:**

**103.1 CREATION OF AGENCY.** The Fire Prevention Division, also known as the Fire Marshal's Office (FMO), is part of the Fire Department for the City of Keller, Texas. Its primary responsibility is to enforce the Fire Code within its jurisdiction. The division operates under the Fire Marshal, who is also referred to as the "fire code official," "Fire Official," or simply "Fire Marshal." The primary function of this division is to implement, administer, and enforce the provisions of the Fire Code.

**Section 103.3; change to read as follows:**

**103.3 DEPUTIES** Under the regulations of the City of Keller, the Fire Marshal has the authority to assign officers, technical officers, inspectors, and other employees and delegate certain powers to these employees. The Fire Marshal's Office officers who are duly sworn Peace Officers for the State of Texas under Texas Occupations Code 1701 are authorized to exercise the powers and rights of a peace officer when performing their duties.

#### **SECTION 104 GENERAL AUTHORITY AND RESPONSIBILITIES**

**Section 104.1; change to read as follows:**

**104.1 GENERAL.** The *fire code official* is authorized to enforce the provisions of this code and other related ordinances, codes, or standards referenced by the code or assigned to the Fire Marshal's Office. They have the power to interpret this code and establish policies, procedures, rules, and regulations that clarify the application of its provisions. However, any interpretation, policy, procedure, rule, or regulation must comply with the intent and purpose of this code.

**Section 104.1.1; add to read as follows:**

**104.1.1 AUTHORITY OF THE FIRE MARSHAL AND THE FIRE MARSHAL'S OFFICE.** The Fire Marshal is authorized to take necessary actions to protect people and property from fire hazards. This authority includes issuing Notices of Violation, Fire Marshal's Orders, and Citations to ensure compliance with Fire and Building Codes. The Fire Marshal may delegate this authority to other Fire Marshal's Office members.

**Section 104.2.3; change to read 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 this code does not explicitly prohibit such alternatives and they have been *approved*.

**Section 104.4.1; change to read as follows:**

**104.4.1 WARRANT.** Where the *fire code official* has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent, or occupant or person having charge, care, or control of the structure or premises shall not fail or neglect, after a proper request is made as herein provided, to permit entry therein by the *fire code official* for inspection and examination under this code. The *fire code official* or an authorized representative can obtain a warrant for inspecting a building or premises under Article 18.05 of the Texas Code of Criminal Procedure, as amended.

**Section 104.7.7; add to read as follows:**

**104.7.7 PHOTOGRAPHIC DOCUMENTATION.** Authorized Fire Marshal's Office members can conduct examinations and inspections to document annual fire inspections and study fire hazards. During these examinations, inspections, and assessments, they can take photographs, audio recordings, or video recordings as evidence and records for the Fire Marshal's Office. The authorized members will present proper credentials to carry out their duties effectively.

**Section 104.12; add to read as follows:**

**104.12 REMOVAL OF DEBRIS AND WASTE AFTER A FIRE.** Upon extinguishment of a fire, the property owner or their authorized agent shall be responsible for removing all fire-related debris and waste from the property in a safe and timely manner. This includes, but is not limited to, charred materials, ash, damaged structural components, and any other waste generated from the fire. The *fire code official* is authorized to order the immediate abatement of any fire-related debris and waste that poses a hazard to public safety or the environment. Failure to comply with these orders may result in enforcement actions, including fines and penalties.

## SECTION 105 PERMITS/WORK AUTHORIZATIONS

**Section 105.2.5; add to read as follows:**

**105.2.5 WORKING WITHOUT A PERMIT** All work requiring a permit must not begin until the permit or approval has been obtained through the *fire code official*. Additionally, approved plans must be available

at the exact location for reference. Violations shall be subject to enforcement and penalties in accordance with section 113.

**Section 105.3.3; change to read as follows:**

**105.3.3 OCCUPANCY PROHIBITED BEFORE APPROVAL.** The building or structure shall not be occupied or used for any purpose other than the permitted and approved construction or alteration activities until the building official issues a Certificate of Occupancy. This certification is only granted after all required inspections are completed, confirming that the relevant provisions of this code and other codes of the building or structure have been met.

**Section 105.5; change to read as follows:**

**105.5. REQUIRED OPERATIONAL PERMITS.** The *fire code official* is authorized to issue operational permits for the operations outlined in Sections 105.5.1 through 105.5.58.

**Section 105.5.30; change to read as follows:**

**105.5.30 LP-GAS.** An operational permit is required for:

1. Storage and use of LP-Gas.

**Exception:** A permit is not required for individual containers with a water capacity of 20 gallons (9.0 kg) or less serving occupancies in Group R-3.

2. Operation of cargo tankers that transport LP gas.

**Section 105.5.51; change to read as follows and remove exceptions 2 and 3:**

**105.5.51 TEMPORARY MEMBRANE STRUCTURES, SPECIAL EVENT STRUCTURES, AND TENTS**  
An operational permit is required to operate an air-supported temporary membrane structure, a temporary special event structure, or a tent having an area of 400 square feet or greater.

**Exception:**

1. Tents used exclusively for recreational camping purposes.

**Section 105.5.58; add to read as follows:**

**105.5.58 BOARDING HOMES AND RESIDENTIAL CARE FACILITIES.** An operational permit is required to operate a boarding home or residential care facility.

**EXCEPTION:** Care facilities as defined by Texas Health and Safety Code Chapter 769.002.

**105.6 REQUIRED CONSTRUCTION PERMITS.** The *fire code official* is authorized to issue construction permits for work outlined in Sections 105.6.1 through 105.6.29.

**Section 105.6.6; change to read as follows:**

**105.6.6 ENERGY SYSTEMS** A construction permit is required to install energy systems regulated by Chapter 12.

**Section 105.6.26; add to 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 connected to an access control system. Maintenance following this code is not considered a modification and does not require a permit.

**Section 105.6.27; add to read as follows:**

**105.6.27 FIREFIGHTER AIR REPLENISHMENT SYSTEM (FARS).** A construction permit is required to install or modify FARS. The construction permit application shall include documentation of an acceptance and testing plan specified in Section L105.

**Section 105.6.28; add to read as follows:**

**105.6.28 ELECTRIC VEHICLE (EV) CHARGING STATIONS.** Construction permits are required to install or modify an electric vehicle charging station. Maintenance following this code is not considered a modification and does not require a permit.

**Section 105.6.29; add to read as follows:**

**105.6.29 WORK WITHIN A FIRE LANE.** Construction permits are required to repair, modify, or close a fire lane.

## SECTION 108 FEES

**Section 108.2; change to read as follows:**

**108.2 SCHEDULE OF PERMIT FEES.** Where a permit is required, a fee shall be paid as required, in accordance with Chapter 6-160 Fire Marshal's Office Schedule of Fees.

**Section 108.3; delete this section in its entirety.**

**Section 108.4; change to read as follows:**

**108.4 WORK COMMENCING BEFORE PERMIT ISSUANCE.** Violations shall be subject to enforcement and penalties in accordance with Section 113

## SECTION 109 INSPECTIONS

**Section 109.2.3; add to read as follows:**

**109.2.3 INSPECTION FEES APPLICABILITY.** The *fire code official* or his designated representative shall inspect all buildings, premises, or portions as often as necessary. A fee shall be charged if the *fire code official* or their designee must conduct follow-up inspections after the initial inspection and re-inspection to determine whether any observed violations from the previous inspection have been corrected. Fees shall be paid within thirty (30) days of being billed as a condition for continued lawful occupancy.

## SECTION 113 VIOLATIONS

**Section 113.3; change to read as follows:**

**113.3 NOTICE OF VIOLATION, FIRE MARSHAL ORDER, OR CITATION.** Except where an immediate threat to life, property, or public safety exists, violations shall be addressed through a written Notice of Violation, Fire Marshal Order, or Citation, specifying:

1. The nature of the violation.
2. Required corrective actions.
3. A reasonable compliance period.
4. Consequences of noncompliance.

**Section 113.4; change to read as follows:**

**113.4 VIOLATION PENALTIES.** Any person or entity who violates this code shall be guilty of a misdemeanor and, upon conviction, shall be punished by a fine as provided by state law and the City's general penalty ordinance, not to exceed **\$2,000.00 per violation per day**. Each day a violation continues shall constitute a separate offense. Violations of State or Federal law are subject to their respective penalties.

**Section 113.4.2; change to read as follows:**

**113.4.2 APPLICABILITY.** If a person, firm, partnership, corporation, association, or any other entity is the owner or occupant of a property, exercises actual or apparent control over it, or is listed as the water customer of the City for that property, they shall be presumed to be the violator.

**Section 113.4.3; change to read as follows:**

**113.4.3 VIOLATION REMEDIES.** In addition to criminal prosecution, the City may pursue civil injunctions, administrative citations, cost recovery for emergency response, recovery of abatement expenses, and revocation or suspension of permits. These remedies are cumulative and not exclusive.

**Section 113.5; add to read as follows:**

**113.5 PERMIT VIOLATIONS.** Work commenced without the required permits may be subject to doubled permit fees, administrative penalties, and enforcement under this section.

**Section 113.6 – 113.6.3; add to read as follows:**

**113.6 REBUTTABLE PRESUMPTION OF RESPONSIBILITY.** When a violation of this code occurs, the following persons or entities shall be presumed responsible, subject to rebuttal, for purposes of enforcement.

**113.6.1 RESPONSIBLE PARTIES.** The owner of the property on which the violation occurs; The occupant, tenant, or lessee in control of the premises; The operator, manager, or agent responsible for daily operations; The permit holder associated with the regulated activity; The registered owner of any vehicle or equipment involved.

**113.6.2 REBUTTAL.** The presumption of responsibility may be rebutted by competent evidence demonstrating that the person or entity did not cause, authorize, permit, or knowingly allow the violation; and exercised reasonable care and diligence to prevent the violation; or lacked legal authority or practical ability to control the condition or activity.

**113.6.3 MULTIPLE RESPONSIBLE PARTIES.** More than one person or entity may be held responsible for the same violation, where supported by evidence. Responsibility shall be determined based on control, participation, and knowledge. Nothing in this section shall be construed to impose strict liability or eliminate applicable defenses.

## CHAPTER 2 – DEFINITIONS

### SECTION 202 GENERAL DEFINITIONS

**Section 202: Change and add definitions to read as follows:**

**AMBULATORY CARE FACILITY.** Buildings or portions used to provide medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to persons rendered incapable of self-preservation by the services offered, or staff have 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

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

**ASSISTED LIVING FACILITIES.** A building or part thereof, housing persons, on a 24-hour basis, who, due to age, mental disability, or other reasons, reside in a supervised residential environment that provides personal care services. The occupants can respond to an emergency without physical assistance from staff. This definition is equal to a Type A Assisted Living Facility as defined by Texas Health and Human Services.

**ATRIUM.** An opening connecting three or more stories, other than enclosed *stairways*, elevators, hoistways, escalators, plumbing, electrical, air-conditioning, or other equipment, is closed at the top and not defined as a mall. Stories, as used in this definition, do not include balconies within assembly groups or mezzanines that comply with Section 505 of the *International Building Code*.

**AUTHORIZED EMERGENCY VEHICLE** shall have the meaning as defined in the Texas Transportation Code §541.201.

**BOARDING HOUSE.** Assigned the meaning of “boarding home facility” as defined by Texas Health and Safety Code Section 260.001.

**BONFIRE** is a large outdoor fire utilized for recreational or ceremonial purposes.

**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, FORCED-INDIRECT.** A forced-air supply duct connects a carbon monoxide source to an interior space.

**CARE FACILITY WITHIN A DWELLING.** A Group R-3 occupancy with the assigned meaning of “assisted living facility” as defined in Texas Health and Safety Code 247.002.

**COOKING TENT.** A structure, enclosure, or shelter—whether or not it has sidewalls—made of fabric or flexible material, supported in any way other than by air or the contents it protects. This structure contains cooking equipment that uses open flames or produces smoke or grease-laden vapors to prepare and serve food to the public. Cooking tents must comply with NFPA 701 standards.

**DEFEND IN PLACE.** A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both without evacuating the building.

**ELECTRIC VEHICLE (EV).** An EV is powered by an electric motor that draws electricity from a battery and can be charged from an external source. An EV is a vehicle that can only be powered by an electric motor that draws electricity from a battery. A plug-in hybrid electric vehicle (PHEV) is a vehicle that can be powered by an electric motor that draws electricity from a battery and by an internal combustion engine.

**ELECTRIC VEHICLE CHARGING STATION,** also known as a charge point or electric vehicle supply equipment, is a power supply device that supplies electrical power for recharging plug-in electric vehicles (including battery electric vehicles, electric trucks, electric buses, neighborhood electric vehicles, and plug-in hybrid vehicles). “Charging Station” shall mean all electrical and mechanical equipment, hardware, and software installed by the contractor, including electrical cabling, equipment infrastructure, the contractor’s signage, and all supporting equipment, such as concrete pads, disconnects, and cord reels.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** Electric Vehicle Supply Equipment (EVSE) is the hardware that connects an electric vehicle (EV) to a power source, allowing it to charge its battery. EVSEs are also called charging stations, EV chargers, or charge points.

**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*, as required by the *fire code official*, to identify and control fire hazards, detect early signs of unwanted fire, raise an alarm in the event of a fire, and notify the fire department.

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

**HIGH-PILED COMBUSTIBLE STORAGE.** Storage of combustible materials in closely packed piles or on pallets, racks, or shelves where the top of the storage is greater than 12 feet (3658 mm) in height. When required by the *fire code official*, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets, and similar commodities, where the top of the storage is greater than 6 feet (1829 mm) in height.

Any building exceeding 6,000 sq. ft. with a clear height of over 14 feet, allowing for more than 12 feet of storage, shall be considered a high-piled storage facility. When a specific product cannot be identified, a fire protection system and life safety features shall be installed for Class IV commodities with the maximum storage height.

**HIGH-RISE BUILDING.** A Building with an occupied floor or a roof over 55 feet above the lowest fire department vehicle access level.

**INCINERATOR BURNING.** shall be defined as burning natural materials within an enclosed combustion chamber constructed of brick, concrete, hollow tile, metal, or other fire-resistive material. It shall be equipped with a spark arrestor.

**JURISDICTION.** It is the City of Keller.

**OCCUPANT.** means any person, agent, firm, or corporation that occupies a building or part thereof as an owner or tenant.

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

**SELF-SERVICE STORAGE FACILITY.** Real property is designed and used to rent or lease individual storage spaces to customers, allowing them to store and retrieve personal property on a self-service basis.

**SENIOR RETIREMENT COMMUNITY.** means a residential community or a portion of a residential community:

- (A) described by Section 301.043, Texas Property Code;
- (B) that contains no fewer than 20 residential units in one or more multiunit buildings that are available to own, rent, or lease; and
- (C) that provides common amenities.

**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*. The jurisdiction shall, as is normal, calculate charges for utilization.

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

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

The following are not considered an upgrade or replacement:

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

**UNATTENDED MOTOR VEHICLES.** Any vehicle left unattended and obstructing traffic flow, or any vehicle found to be stopped, standing, loading, or unloading in fire lanes, or abandoned due to the driver's arrest.

**WORK AREA.** As indicated on the construction documents, the portion or portions of a building consist of all reconfigured spaces. The work area excludes other portions of the building where incidental work, entailed by the intended work, must be performed, and portions where this or other codes specifically require work not initially intended by the owner.

## SECTION 203 - OCCUPANCY CLASSIFICATION AND USE

**Section 203.2.3; change to read as follows:**

**203.2.3 ASSOCIATED WITH GROUP E OCCUPANCIES.** A room or space used for assembly purposes associated with a Group E occupancy is not considered a separate occupancy except when applying the assembly requirements of Chapters 10 and 11.

## CHAPTER 3 – GENERAL REQUIREMENTS

### SECTION 304 - COMBUSTIBLE WASTE MATERIAL

**Section 304.1.1; change 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.

### SECTION 305 - IGNITION SOURCES

**Section 305.6; add to read as follows:**

**305.6 OUTDOOR WELDING.** All welding processes shall require an operational permit as established in Section 105.5.12. A 30-foot radius free of all combustible materials shall be established. A fire watch shall be established. At least one portable fire extinguisher complying with Section 906 and having a minimum 4-A rating or other approved on-site fire extinguishing equipment, such as a water barrel, garden hose, or water truck with a ready water supply, shall be available immediately.

**Section 305.6.1; add to read as follows:**

**305.6.1. WEATHER CONDITIONS.** Outdoor welding shall not be performed when wind speeds exceed 15 miles per hour (mph). The relative humidity at the time of work must be 25 percent or higher.

### SECTION 307 - OPEN-BURNING, RECREATIONAL FIRES, AND PORTABLE OUTDOOR FIREPLACES

**Section 307.1; add to read as follows:**

**307.1 GENERAL.** A person shall not kindle, maintain, or authorize to be kindled or maintained any open burning unless conducted and approved under Sections 307.1.1 through 307.5 of this code.

**Section 307.1.1; add to read as follows:**

**307.1.1 PROHIBITED OPEN BURNING.** Open burning shall be prohibited when atmospheric conditions or local circumstances make such a fire hazardous. Open burning that is offensive or objectionable due to smoke emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

**Exception:** Prescribed burning to reduce the impact of wildland fire when authorized by the *fire code official*.

**Section 307.2; change to read as follows:**

**307.2 PERMIT REQUIRED.** A permit shall be obtained from the *fire code official*, as outlined in Section 105.6, before kindling a fire for recognized silvicultural, range, or wildlife management practices. Application for such approval shall only be presented by the landowner upon whom the fire is to be kindled, and permits shall be issued to the landowner upon which the fire is to be kindled.

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

1. Texas Commission on Environmental Quality (TCEQ) guidelines and regulations.
2. State, County, or Local temporary or permanent bans on open burning.
3. Local written policies as established by the *fire code official*, provided in Chapter 6 of the Code of Ordinances.

**Section 307.3; change to read as follows:**

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

**Section 307.4.1; change to read as follows:**

**307.4.1 BONFIRES.** A bonfire shall not be conducted within the City's corporate limits.

**Section 307.4.4; add to read as follows:**

**307.4.4 PERMANENT OUTDOOR FIREPIT.** All permanent fire pits shall be constructed consistently using sound engineering and construction practices. The fire pit shall not be installed within 10 feet of adjoining property lines, 15 feet from a residence, and 10 feet from other combustible materials. The maximum diameter of a fire pit shall be 3 feet unless approved by the *fire code official*.

**Exceptions:**

1. If approved by the *fire code official*, natural gas-fueled fire pits may be installed closer than 15 feet from the residence.
2. Permanently installed outdoor fireplaces constructed in accordance with the International Residential or International Building Code.

**Section 307.4.5; change to read as follows:**

**307.4.5 TRENCH BURNS.** Trench burns shall not be conducted within the City of Keller.

**Section 307.5; change to read as follows:**

**307.5. ATTENDANCE.** Approved burning, recreational fires, portable outdoor fireplaces, and fire pits shall be constantly attended to until the fire is completely extinguished. At least one portable fire extinguisher that complies with Section 906 and has a minimum 4-A rating, or other approved on-site fire-extinguishing equipment, such as dirt, sand, water, a barrel, a garden hose, or a water truck, shall be available immediately.

**Section 307.6; add to read as follows:**

**307.6. BURN BAN:** In the case of unfavorable atmospheric conditions, such as ozone action days, extended drought, or any other factors that may necessitate limiting outdoor activities that could

potentially start a fire, a burn ban may be enforced. The County Commissioners Court, the Fire Chief, or a designated representative will issue an executive order declaring a state of emergency and implementing a burn ban for all properties within the City of Keller. This ban will prohibit all outdoor activities and processes that could start a fire. Such outdoor activities include, but are not limited to, open burning, recreational burning, outdoor welding, torches or other cutting devices that emit sparks, charcoal grills, fireworks, and outdoor fireplaces or fire pits.

## SECTION 308 - OPEN FLAMES

### ***Section 308.1.4.1; add to read as follows:***

**308.1.4.1 FIRE HAZARD PROHIBITED.** In Group R-1, R-2, and R-4 occupancies, it is strictly prohibited to construct, erect, install, maintain, or use any barbecue pit, grill, or chiminea, unless in an approved area. Under no circumstances should any of these devices be used or burned under the following conditions: (1) within ten (10) linear feet of any combustible surface, including, but not limited to, decks, porches, balconies, walls, or verandas; (2) beneath any balcony, porch, roof overhang, deck, or veranda. Burning combustible material that could potentially endanger the life or property of any person is also prohibited.

**308.1.5 LOCATIONS NEAR COMBUSTIBLES.** Open flames such as candles, lanterns, kerosene heaters, and gas-fired heaters shall not be located on or near decorative or similar combustible materials. Luminaria Bags with candles are prohibited.

### ***Section 308.1.6, Exception #3; change to read as follows:***

3. Torches or flame-producing devices following Sections 308.4 or 308.1.3.

### ***Section 308.1.7; change to read as follows:***

**308.1.7 SKY LANTERNS.** A person shall not release or cause to be released an-unmanned free-floating device containing an open flame or other heat sources, such as but not limited to a *sky lantern*.

### ***Section 308.1.9; change to read as follows:***

**308.1.9 AISLES AND EXITS.** Candles or open flames shall be prohibited in areas where occupants stand, in aisles, or in exits.

### ***Section 308.1.11: Add a section to read as follows***

**308.1.11 OPEN-FLAME COOKING DEVICES.** Open flame cooking devices shall comply with Section 4104.

## SECTION 311 - VACANT PREMISES

### ***Section 311.5; change to read as follows:***

**311.5 PLACARDS.** The *fire code official* is authorized to require marking any vacant or abandoned buildings or structures determined to be unsafe according to Section 115 of this code relating to structural or interior hazards, as required by Section 311.5.1 through 311.5.5.

## SECTION 314 - INDOOR DISPLAYS

### ***Section 314.4; change to read as follows:***

**314.4 VEHICLES.** Electric, liquid-fueled, or gaseous-fueled vehicles, aircraft, boats, or other motorcraft shall not be located indoors except as follows:

1. The engine starting system is made inoperable, or the 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 m<sup>3</sup>), whichever is less.
  - 2.4. Hydrogen does not exceed one-quarter tank or 2,000 cubic feet (57 m<sup>3</sup>), whichever is less.
3. Fuel tanks and fill openings are closed and sealed to prevent tampering.
4. Vehicles, aircraft, boats, or other motorcraft equipment may not be fueled or defueled within the building.
5. Batteries in electric vehicles shall be rendered inoperable by removing fuses or other *approved* methods, but shall not be required to be disconnected. Electric vehicles shall not be charged inside buildings other than where approved in parking garages or unless approved by the fire code official.

## SECTION 322 - POWERED MICROMOBILITY DEVICES

**Section 322.1.1 Prohibited Locations; change to read as follows:**

**322.1.1.1 PROHIBITED CHARGING, STORAGE, AND PARKING.** The charging, storage, or parking of a powered micromobility device is prohibited indoors in Group E occupancies, all City of Keller buildings, and common areas of Group R-1, R-2, and R-4 occupancies without the approval of the *fire code official*.

## SECTION 323 - ELECTRIC VEHICLES (EVs)

**Section 323: add new sections to read as follows:**

**323.1 ELECTRIC VEHICLE CHARGING STATIONS.** Electric vehicle (EV) charging stations shall not be located inside buildings and/or structures, except in parking garage locations where approved, 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 the fire apparatus access roadway.

**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 be interconnected to 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 of, but not less than 20 feet 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 and not more than 48 inches 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.

## CHAPTER 4 - EMERGENCY PLANNING AND PREPAREDNESS

### SECTION 403 - EMERGENCY PREPAREDNESS

**Section 403.1; change to read as follows:**

**403.1 GROUP A OCCUPANCIES.** An approved fire safety and evacuation plan per Section 404 shall be prepared and maintained for Group A occupancies, other than Group A occupancies used exclusively for purposes of religious worship with an *occupant load* less than 2,000, and for buildings containing both a Group A occupancy and an atrium. Places of Assembly shall have written emergency evacuation plans approved by the *fire code official* or his designee. Group A occupancies shall comply with Sections 403.2 through 403.2.6.1.

**Section 403.2.6.1; add to read as follows:**

**403.2.6.1 OBSTRUCTING REQUIRED MEANS OF EGRESS.** The owner, operator, or occupant of premises used as a place of assembly shall prevent the placement of any item that obstructs any portion of the required width of the Means of Egress System, including:

- a. Common path of travel.
- b. Exit access.
- c. Exit, to include locking, blocking, chaining, or otherwise rendering the exit inoperable; or
- d. Exit discharge.

**Section 403.4; change to read as follows:**

**403.4 GROUP E OCCUPANCIES.** An approved fire safety and evacuation plan per Section 404 shall be prepared and maintained for Group E occupancies and buildings containing both Group E occupancies and an atrium. A diagram depicting two evacuation routes shall be posted in a conspicuous location in each classroom. Group E occupancies shall also comply with Sections 403.4.1 through 403.4.3.

**Section 403.11.1; change to read as follows:**

**403.11.1 FIRE WATCH PERSONNEL.** When, in the opinion of the *fire code official*, it is essential for public safety in a place of assembly or any other place where people congregate because of the number of persons or the nature of the performance, exhibition, display, contest, or activity, the owner, agent, lessee or other person in responsible control of the building shall provide one or more fire watch personnel, as required and approved, to remain on duty during the times such places are open to the public, or when such activity is being conducted. Fire watch personnel shall comply with Section 403.12.1.1 through 403.12.1.4.

**Section 403.11.1.1; change to read as follows:**

**403.11.1.1 DUTY TIMES.** Fire watch personnel shall remain on duty while places requiring a fire watch

are open to the public or when an activity requiring a fire watch is conducted.

**Section 403.11.1.2; change to read as follows:**

**403.11.1.2 DUTIES.** Fire watch personnel shall have the following responsibilities:

1. When the place is open to the public, or an activity is being conducted, keep diligent watch for fires, obstructions to means of egress, and other hazards.
2. Take prompt measures for the remediation of hazards and the extinguishing of fires.
3. Take prompt measures to assist in evacuating the public from the structures.
4. In an emergency, after the facility is evacuated, the fire watch shall take appropriate actions to secure the facility until the arrival of a proper emergency response agency capable of managing the incident.

**Section 403.11.1.4; add to read as follows:**

**403.11.1.4 WHERE REQUIRED.** Where necessary, fire watches must be equipped with at least one approved method for notifying the fire department. Their sole duty is to monitor for fires, ensure that means of egress are clear, and identify other hazards. Obtaining a qualified fire watch shall be the responsibility of the business owner.

**Section 403.12; add to read as follows:**

**403.12 SENIOR RETIREMENT COMMUNITIES.** An approved written emergency response plan must be prepared, maintained, and annually updated per Section 404. The emergency response plan must also include fall prevention plans. The emergency response plan shall be made available to all residents.

## SECTION 404 - FIRE SAFETY, EVACUATION, AND LOCKDOWN PLANS

**Section 404.2.2; add Number 4.10. to read as follows:**

- 4.10. Fire Protection System Controls.

## SECTION 405 - EMERGENCY EVACUATION DRILLS

**Section 405.5; change 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 in case of fire.

**Exceptions:**

1. {No change.}
2. {No change.}
3. Notification of teachers/staff supervising light- or sound-sensitive students/occupants, such as those on the autism spectrum, for the protection of those students/occupants shall be allowed before conducting a drill.

## CHAPTER 5 - FIRE SERVICE FEATURES

## SECTION 501 - GENERAL

### **Section 501.4; change 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 before construction has progressed beyond the completion of the foundation of any structure.

## SECTION 503 - FIRE APPARATUS ACCESS ROADS

### **Section 503.1.1; add a paragraph to read as follows:**

#### **503.1.1. BUILDINGS AND FACILITIES.** *(Existing text remains unchanged)*

Except for one- or two-family dwellings, the measurement path shall be a minimum of a ten-foot (10') wide unobstructed level pathway around the external walls of the structure and all barriers. The path shall be a level and traversable surface, not exceeding 3% grade. A continuous parking row between the fire lane and the structure shall be considered a barrier. Landscaping and screening may also be considered a barrier based on the location and type. Fire apparatus access roads must not pass under or through covered structures, such as awnings, canopies, carports, or porte-cochere. The provisions of this section notwithstanding, fire lanes may be required to be located within thirty feet (30') of a building if deemed reasonably necessary by the fire code official to enable proper building protection.

### **Section 503.1.1.1; add to read as follows:**

**503.1.1.1 HOSE LAY/REACH DETERMINATION.** The measurements shall be taken from the point on the fire lane where a fire apparatus is parked. The hose lay or reach is measured from the center of the fire lane. For design purposes, measurements should not include arterial, thoroughfare, or collector/distributor roads as designated fire lanes.

### **Section 503.1.2; change to read as follows:**

**503.1.2 ADDITIONAL ACCESS.** The *fire code official* is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, terrain conditions, climatic conditions, or other factors that could limit access. The *fire code official* is also authorized and empowered to designate fire lanes for proper ingress and egress for emergency vehicles. Any fire lane designated by the *fire code official* shall be effective as of the selected date.

### **Section 503.1.4; add to read as follows:**

**503.1.4. EXISTING FIRE LANES.** Any fire lane established before the passage of the ordinance from which this article is derived and designated by the *fire code official* or established by a separate ordinance shall be a fire lane for all intents and purposes and shall be maintained as required by this code.

### **Section 503.1.5; add to read as follows:**

**503.1.5 RESIDENTIAL SUBDIVISIONS.** The maximum dead-end cul-de-sac length shall not exceed seven hundred and fifty feet (750') as measured from the centerline of the intersecting street to the center of the radius.

#### **Exceptions:**

1. Where an approved automatic fire suppression system, installed per Section 903, is provided throughout the subdivision.
2. Intermediate turnaround points are provided.

**Section 503.2.1; change to read as follows:**

**503.2.1 DIMENSIONS.** All construction of fire apparatus access roads must comply with the current Keller UDC and the guidelines outlined in this section. Fire apparatus access roads must have an unobstructed width of at least twenty-four (24) feet, excluding shoulders. If a fire hydrant is located on or near a fire apparatus access road, the minimum unobstructed width of that road must be twenty-six (26) feet.

With the Fire Code Official's approval, designated fire lanes shall be established for every commercial property or property requiring dedicated fire access. In all cases, a fire lane must be at least twenty-four (24) feet wide. Both fire apparatus access roads and designated fire lanes must maintain a vertical clearance of at least sixteen (16) feet and adhere to the specified unobstructed width, except where approved security gates are installed in accordance with Section 503.6.

- a. Fire lane dimensions established by Appendix D or other sections of this Code shall be superseded by the criteria established by this section.
- b. Unless explicitly amended, the requirements outlined in Section D105 will remain unchanged.

**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.

**Section 503.2.2; change 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.

**Section 503.2.3; change to read as follows:**

**503.2.3 SURFACE.** Construction of all fire lanes shall be per the current Keller UDC and this section. Fire lanes shall be constructed of a surface capable of supporting the imposed loads of an 85,000 lb. fire apparatus to provide all-weather driving capabilities. The design shall be based on a geotechnical investigation of the site and shall meet the stated minimum requirements.

**Section 503.2.3.1; add to read as follows:**

**503.2.3.1 MAINTENANCE GENERALLY.** The owner shall maintain all fire lanes in good repair, and the City of Keller shall not be responsible for maintenance. It shall further be the owner's responsibility to ensure that all fire lane markings required by Section 503.3 are kept so that they are easily distinguishable by the public.

**Section 503.2.4; change to read as follows:**

**503.2.4. TURNING RADIUS.** The minimum required turning radius for a fire apparatus access road shall be 30 feet for the inner radius and 54 feet for the outer radius, as determined by the Fire Code Official.

**Section 503.2.5; change to read as follows:**

**503.2.5 DEAD ENDS.** All dead-end fire apparatus access roads shall have an approved fire apparatus turnaround per Appendix D of the currently adopted fire code.

**Section 503.2.5.1 add to read as follows:**

**503.2.5.1 DEAD-END MEASUREMENT.** The maximum length of a dead-end fire apparatus access road shall be measured along the centerline of the driving surface and not in a straight line (“as the crow flies”).

1. Starting Point: Measurement shall begin at the location along the roadway where the road ceases to provide two directions of travel for fire apparatus. Beyond this point, the road shall be considered a dead end.
2. Path of Measurement: All curves, bends, offsets, and changes in grade along the centerline of the roadway shall be included in the measured length.
3. Ending Point: Measurement shall terminate at the center of the approved turnaround, including:
  - a. The center of a cul-de-sac bulb, or
  - b. The functional turning point of a hammerhead, T-turn, or other approved turnaround configuration.
4. Excluded Segments: Partial loops, spurs, driveways beyond the turnaround, or areas not intended for fire apparatus access shall not reduce the measured dead-end length.

**Section 503.2.7; change to read as follows:**

**503.2.7. GRADE.** The grade of the fire apparatus access road shall not exceed 6%, and cross slope grades shall not exceed 5%.

**Section 503.2.8; change to read as follows:**

**503.2.8. ANGLES OF APPROACH AND DEPARTURE.** The angles of approach and departure for fire apparatus access roads shall not exceed 5%.

**Section 503.2.9; add to read as follows:**

**503.2.9. CONTINUOUS ACCESS REQUIRED.**

Where two or more commercial, multi-family, mixed-use, or public developments are located on adjacent parcels, fire apparatus access roads shall be interconnected to provide continuous vehicular access between sites.

**Section 503.2.9.1; add to read as follows:**

**503.2.9.1 ACCESS FROM ADJACENT LOT** Where fire apparatus access roads for a building or buildings are provided from an adjacent lot, a fire lane easement or ingress/egress easement is required to be recorded on the adjacent lot's plat that is providing the common access. The adjacent lot's plat is to clearly show the easement graphically.

**Exception:** In lieu of the graphical easement, a note may be placed on the plat that, at a minimum, states the following: "Ingress and egress shall be provided between all adjacent lots for adequate fire department vehicle access per the City of Keller Fire Code. The cross access shall not be blocked, nor may this note be removed from the plat without written permission from the City of Keller Director of Development Services and *fire code official*."

**Section 503.3; change to read as follows:**

**503.3 MARKING.** When approved by the *fire code official*, striping signs or other markings shall be provided for fire apparatus access roads to identify such roads or prohibit their obstruction. Striping, signs, and other markings shall be maintained clean and legible and 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-foot 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 white with letters and red borders, 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 the 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 approved by the Fire Code Official.

**Section 503.4; change to read as follows:**

**503.4. OBSTRUCTION OF FIRE APPARATUS ACCESS ROADS.** Fire apparatus access roads shall not be obstructed in any manner, including the parking, stopping, or standing by any non-emergency vehicle, attended or unattended. Minimum widths and clearances specified in Section 503.2.1 and any areas designated as fire lanes in Section 503.3 must always be maintained.

**Section 503.4.1; change to read as follows:**

**503.4.1 TRAFFIC CALMING DEVICES.** Speed bumps or other similar obstacles that can slow or impede the response of fire apparatus shall be approved by the *fire code official* before installation.

**Sections 503.6.1 – 503.6.6; add to read as follows:**

**503.6.1 GENERAL REQUIREMENTS** All limited-access drives from public streets must be designed to accommodate emergency service vehicles, including fire, police, and medical units. As determined by the *fire code official*, these limited-access drives will be designated primary or secondary emergency routes.

The primary means of gate operation shall utilize an approved bidirectional light-attenuated opening device, compatible with the City of Keller specifications. Gates shall be equipped with a mechanical means of opening as specified in the Keller Fire Marshal's Office Development Guide. 104

Where numeric keypads are installed, the *fire code official* shall determine the entry code numbers for public safety use. These numbers may not be changed unless ordered by the *fire code official*, either verbally or in writing.

**503.6.1.1. ELECTRONIC OPERATION.** Gates crossing fire lanes shall be electrically operated, unless approved by the *fire code official*. In the event of a power failure, the gate shall fail open.

**503.6.2 DIMENSIONS.** The minimum clear opening width shall be at least 20 feet, and a minimum unobstructed height of 16 feet shall be maintained.

**503.6.3 PEDESTRIAN ACCESS GATES** Pedestrian gates shall open fully with a minimum clear span of 48 inches and be provided with a latch or other means of securing them in the open position. Automated pedestrian gates shall open freely upon loss of power. Where required by the *fire code official*, a Knox Lock or a key switch assembly, mounted in an approved box, shall release one or multiple pedestrian gates.

**503.6.4 PERFORMANCE TESTS.** Gates and gate systems shall be tested upon installation or when required by the fire department. The Fire Marshal's Office shall observe all necessary tests. Failure of a gate or gate system test will require all affected gates to be chained and locked in the open position until repaired and retested.

**503.6.5 APPLICABILITY** All security gates and barricades that do not comply with this code as of the

adoption date will have eighteen (18) months to achieve compliance after receiving notice from the *fire code official*.

## SECTION 505 - PREMISES IDENTIFICATION

### **Section 505.1; change to read as follows:**

**505.1. ADDRESS IDENTIFICATION.** New and existing buildings shall have approved address numbers, building numbers, or approved building identification placed in a legible position and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the Fire Code Official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 6 inches (152.4 mm) high with a minimum stroke width of 0.5 inches (12.7 mm). Where access is through a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, 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 numbers shall be maintained.

**Exception:** R-3 Single Family occupancies shall have approved numerals of a minimum of 3-1/2 inches (88.9 mm) in height and color contrasting with the background visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

## SECTION 506 - KEY BOXES

### **Section 506.1; add a sentence that reads as follows:**

Each occupancy with a fire alarm, fire sprinkler system, or any other life safety system that triggers an automatic fire department response must have a Knox key box. The key box shall include keys for every locked doorway within the building, and each key must be clearly labeled to indicate the corresponding lock. The key box shall be of the Knox Box brand, with specifications for the City of Keller.

### **Section 506.1.3; add to read as follows:**

**506.1.3 KEY BOX LOCATIONS.** A key box should be installed at the entrances of the fire sprinkler riser room, fire pump room, and, if applicable, the fire command center. Additionally, the *fire code official* is authorized to require the placement of additional key boxes at the main entrance and other locations within larger buildings.

## SECTION 507 - FIRE PROTECTION WATER SUPPLIES

### **Section 507.4; change to read as follows:**

**507.4 WATER SUPPLY TEST DATE AND INFORMATION.** The water supply test used for hydraulic calculation of fire protection systems shall follow NFPA 291, "Recommended Practice for Fire Flow Testing and Marking of Hydrants," within one year of sprinkler plan submittal. Flow tests shall be scheduled through Public Works (SCADA). Water supply tests shall be conducted by the requesting party, and all water valves will be operated by City of Keller water department personnel. The flow test shall be conducted in the presence of City of Keller Water Department personnel, and the Flow Data Sheet shall be signed by a Water Department staff member as a witness to the test. 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 tank's maximum and minimum operating levels, as well as identify applicable water supply fluctuation. The licensed contractor must design the fire protection system based on this fluctuation information, per Section 903.3.5 and the appropriate NFPA standard - reference Section 903.3.5 for additional design requirements.

**Exception:** This exception applies to the above NFPA 291 fire hydrant flow test. The authority may provide water supply test information via a hydraulic water model 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.

**Section 507.5.1; change to read as follows:**

**507.5.1 WHERE REQUIRED.** Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 300 feet from a hydrant on a fire apparatus access road, as measured by an *approved* route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the *fire code official*.

All fire hydrants shall be accessible to the fire department apparatus by roadways and fire lanes, meeting the requirements of Section 503. All fire hydrants shall meet the specifications of the City of Keller UDC or as approved by the *fire code official*. Fire hydrants shall be installed according to the following criteria:

1. Hydrants shall be located at least two (2) feet and a maximum of six (6) feet behind the curb line.
2. All fire hydrants must be installed so that the center of the main outlet on the front of the hydrant is at least eighteen (18) inches and no more than forty-eight (48) inches above grade level.
3. Fire hydrants in residential areas shall be positioned so that there is one every five hundred (500) feet, measured along an approved unobstructed route as the fire hose lays.
4. A hydrant in a cul-de-sac should be placed at the radius and the radius return, regardless of the required spacing.
5. Fire hydrants in commercial areas shall be positioned so that there is one every three hundred (300) feet, measured along an approved unobstructed route as the fire hose lays.
6. Fire hydrants must not be placed within the turning radius of fire lanes.
7. Fire hydrants on fire lanes must be positioned no more than five (5) feet from the edge of the lane.
8. A fire hydrant shall be no more than 50 feet from the fire department connection (FDC) and on the same side of the roadway as the facility or building.

**Exceptions:**

1. For Group R-3 and Group U occupancies, the distance requirement shall be 500 feet (183 m).

**Section 507.5.1.1; change to read as follows:**

**507.5.1.1 HYDRANT FOR STANDPIPE SYSTEMS.** Buildings with a standpipe system installed under Section 905 shall have a fire hydrant within 50 feet of the fire department connections.

**Section 507.5.4; change to read as follows:**

**507.5.4 OBSTRUCTION.** A 3-foot clear and unobstructed access to fire hydrants shall always be maintained. 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 from gaining immediate access to fire protection equipment or fire hydrants.

## SECTION 509 - FIRE PROTECTION AND UTILITY EQUIPMENT IDENTIFICATION AND ACCESS

### **Section 509.1.2; add 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.

### **Section 509.3; add to read as follows:**

**509.3 REMOTE POWER BOX.** Buildings or structures required to have a Knox Remote Power Box shall follow these guidelines. The box should be installed in a location approved by the *fire code official*, positioned 6 feet (1676 mm) above grade, measured to the top of the box. A reflective sign with a red background and 2-inch white lettering that reads "FD EMERGENCY SHUTOFF" must be installed at each disconnect location. Buildings or structures required to install this feature are as follows:

1. All new commercial buildings or structures that are 6,000 square feet or larger and meet the jurisdiction's sprinkler requirements.
2. Buildings or structures equipped with Solar/Photovoltaic systems
3. Buildings or structures containing battery energy storage systems
4. Generator facilities
5. Commercial developments with high electrical loads

## SECTION 510 - EMERGENCY RESPONDER COMMUNICATIONS ENHANCEMENT SYSTEMS

### **Section 510.6.1: add a paragraph to read as follows:**

The inspecting radio contractor shall provide an annual inspection tag/sticker on the ERCES' BDA and any remote annunciator. The tag/sticker shall identify the approved inspecting contractor's name, physical address, phone number, FCC license number, inspector's name, and inspection date. The system shall not be tagged until all inspection requirements of this section are conducted. The tag/sticker shall be blue for a passing system. If this is not possible, the tag/sticker shall be red for a failing system, with reasons for failure indicated on the tag if possible. If a red tag/sticker is placed, the *fire code official* shall be notified within 24 hours.

## CHAPTER 6 - BUILDING SERVICES AND SYSTEMS

### SECTION 604 - ELEVATOR OPERATION, MAINTENANCE, AND FIRE SERVICE KEYS

#### **Section 604.6.1; change to read as follows:**

**604.6.1 ELEVATOR KEY LOCATION.** Keys for the elevator car doors and fire-fighter service keys shall be stored in a Knox Elevator Key Box. The Knox Elevator Key Box (Model Series 1400) shall be mounted at each elevator bank in the lobby nearest to the lowest level of fire department access. The key box shall be mounted 5 feet 6 inches above the finished floor to the right side of the elevator bank. Where elevator banks are separated by more than 30 feet, additional elevator key boxes may be required.

#### **Section 604.7; change to read as follows:**

**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.”

*Exception: remains unchanged*

## SECTION 605 - FUEL – FIRED APPLIANCES

**Section 605.4 through 605.4.2.2; change to read as follows:**

**605.4 FUEL OIL STORAGE SYSTEMS.** Fuel oil storage systems shall be installed and maintained under this code. Tanks and fuel-oil piping systems shall be installed following 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 fuel oil storage allowed outside, above ground, without additional protection shall be 660 gallons (2498 L). Fuel oil storage 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 follow UL 80, UL 142, UL 142A, or UL 2085 and be 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 and Chapter 57.

**605.4.2.1 APPROVAL.** Indoor fuel oil storage tanks shall comply with UL 80, UL 142, UL 142A, or UL 2085.

**605.4.2.2 QUANTITY LIMITS.** One or more fuel oil storage tanks containing Class II or III *combustible liquids* 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, 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, the secondary containment shall be monitored visually or automatically.
2. 1,320 gallons (4996 L) in buildings equipped with an *automatic sprinkler* system per Section 903.3.1.1, 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 per Section 903.3.1.1, 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.

## CHAPTER 8 - INTERIOR FINISH, DECORATIVE MATERIALS, AND FURNISHINGS

### SECTION 807 - DECORATIVE MATERIALS AND ARTIFICIAL DECORATIVE VEGETATION IN NEW AND EXISTING BUILDINGS

**Section 807.5.2.2, 807.5.2.3, 807.5.5.2, and 807.5.5.3; change to read as follows:**

**807.5.2.2 ARTWORK IN CORRIDORS.** Artwork and teaching materials shall be limited on the walls of corridors to at most 20 percent of the wall area in corridors. 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 per Section 807 or be non-combustible.

**Exception:** Corridors protected by an approved automatic sprinkler system installed following Section 903.3.1.1 shall be limited to 50 percent (50%) of the wall area.

**807.5.2.3 ARTWORK IN CLASSROOMS.** Artwork and teaching materials shall be limited on walls of classrooms to at most 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 per Section 807 or be non-combustible.

**807.5.5.2 ARTWORK IN CORRIDORS.** Artwork and teaching materials shall be limited on the walls of corridors to at most 20 percent of the wall area in corridors. 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 per Section 807 or be non-combustible.

**Exception:** Corridors protected by an approved automatic sprinkler system installed following Section 903.3.1.1 shall be limited to 50 percent (50%) of the wall area.

**807.5.5.3 ARTWORK IN CLASSROOMS.** Artwork and teaching materials shall be limited on walls of classrooms to at most 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 per Section 807 or be non-combustible.

## CHAPTER 9 - FIRE PROTECTION AND LIFE SAFETY SYSTEMS

### SECTION 901 - GENERAL

**Section 901.4.7; change to read as follows:**

**901.4.7 PUMP AND RISER ROOM SIZE.** Where provided, fire pump rooms and *automatic sprinkler system* riser rooms shall be designed with adequate space for all equipment necessary for the installation, as defined by the manufacturer, and sufficient working space around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances, shall be enough to allow inspection, service, repair, or replacement without removing such elements of permanent construction or disabling the function of a required *fire-resistance-rated* assembly. Fire pump and *automatic sprinkler system* riser rooms shall be provided with doors and unobstructed passageways large enough to remove the largest piece of equipment. The minimum riser room size shall be 36 sq. ft., with the minimum dimension being 6 ft.

**Section 901.4.7.1; change to read as follows:**

**901.4.7.1 ACCESS.** Fire pump and automatic sprinkler system riser rooms shall be directly accessible from the structure's exterior. Access doors shall be a minimum of 3 feet (3') in width and six feet eight inches (6'8") in height. A key box shall be provided at this door, as required by Section 506.1.

**Exception:** When the fire pump room must be located on other levels or not on 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.

**Section 901.4.7.3; change to read as follows:**

**901.4.7.3 ENVIRONMENT** Automatic sprinkler system riser rooms, fire pump rooms, and aboveground fire vaults must be kept at a temperature that does not fall below 40°F (4°C). For this purpose, heating elements should be installed permanently, and a thermostat should be used to regulate the heat-producing device's operation. The use of portable space heaters in this space is prohibited.

**Section 901.4.7.4; change to read as follows:**

**901.4.7.4 LIGHTING.** Permanently installed artificial illumination with a minimum 90-minute battery backup shall be provided in the automatic sprinkler system riser room and fire pump rooms.

**Section 901.4.7.5; add to read as follows:**

**901.4.7.5 FIRE PROTECTION EQUIPMENT ONLY.** Fire pump rooms, automatic sprinkler system riser rooms, and all other rooms designated for fire protection equipment shall be used only for fire protection and operational equipment.

**Section 901.5; change to read as follows:**

**901.5 ADMINISTRATION AND INSTALLATION ACCEPTANCE TESTING.** Fire protection and life safety systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and approved by the Fire Code Official. The *fire code official* shall be notified before any required acceptance testing.

**Section 901.6.1.1; add to read as follows:**

**901.6.1.1 STANDPIPE TESTING.** Building owners/managers must maintain and test standpipe systems 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 an approved camera when foreign material is present or when caps are missing and hydrostatically tested for all FDCs on any standpipe system. Hydrostatic testing shall also follow 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 a 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 correctly. Confirm that there are no open hose valves before introducing water into a dry standpipe. There are no required pressure criteria at the outlet. Verify that check valves function correctly and that there are no closed control valves in the system.
3. Any pressure relief, reducing, or control valves shall be tested per 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 FDCs as required by the *fire code official*.
5. Upon completing the 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 the 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 the Texas Administrative Code Fire Sprinkler Rules regarding 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. The owner and contractor shall maintain testing records, if applicable, as required by the State Rules mentioned above and NFPA 25.
8. Standpipe system tests where water will flow externally to the building shall not be conducted during freezing or the day before expected nighttime freezing conditions.

9. Contact the *fire code official* for requests to remove existing fire hoses from Class II and III standpipe systems where employees are not trained to utilize this firefighting equipment. When the *fire code official* approves the removal of the hose, all standpipe hose valves must remain in place and be provided with an approved cap and chain.

**Section 901.6.3.2; add to read as follows:**

**901.6.3.2 REPORTS.** Inspection, test, and maintenance records shall be submitted to the *fire code official* using a process promulgated by the *fire code official*.

**Section 901.6.4; add to read as follows:**

**901.6.4 FALSE ALARMS AND NUISANCE ALARMS.** False and nuisance alarms shall not be given, signaled, transmitted, or caused or permitted to be given, signaled, or transmitted in any manner.

**Section 901.7; change 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. ... {Remainder of section unchanged}

**Section 901.9; change to read as follows:**

**901.9. TERMINATION OF MONITORING SERVICE.** The building owner and monitoring service provider shall notify the *fire code official* in writing whenever contracted alarm services for monitoring any fire alarm system are terminated for any reason or a change in alarm monitoring provider occurs.

## SECTION 903 - AUTOMATIC SPRINKLER SYSTEMS

**Section 903.1.1; change to read as follows:**

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

**Section 903.2; add a paragraph to read as follows and delete the Exception:**

**903.2 WHERE REQUIRED.** Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in sections 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 require shunt trip requirements. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating "ELEVATOR MACHINERY - NO STORAGE ALLOWED."

**Section 903.2.1.2; change to read as follows:**

**903.2.1.2 GROUP A-2.** An *automatic sprinkler system* shall be provided throughout buildings and stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy, where one of the following conditions exists:

1. The fire area exceeds 6,000 square feet.
2. The fire area has an occupant load of 100 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

**Section 903.2.2.1; change exception 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 exists at any time:

1. Four or more care recipients are incapable of self-preservation.
2. One or more care recipients incapable of self-preservation are located at a facility 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.

**Section 903.2.4.2; amend 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 to manufacture distilled spirits involving more than 120 gallons of distilled spirits (>20% alcohol) in the fire area at any time.

**Section 903.2.6; change to read as follows:**

**903.2.6 GROUP I.** An *automatic sprinkler system* shall be provided throughout buildings with a Group I fire area.

**Exceptions:**

1. An *automatic sprinkler system* installed following Section 903.3.1.2 shall be permitted in a Group I-1, condition 1 facility.
2. An automatic sprinkler system is not required where in-home residential Group I-4 daycare facilities are at the exit discharge level. Every room where care is provided has at least one exterior exit door.
3. In buildings where Group I-4 daycare is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* following Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the *level of exit discharge* and all floors below the *level of exit discharge* other than areas classified as an open parking garage.

**Section 903.2.8; change to read as follows:**

**903.2.8 GROUP R.** An automatic sprinkler system following Section 903.3 shall be installed throughout all buildings with a Group R fire area, including single-family attached dwellings with three or more units.

**Section 903.2.8.4; add to read as follows:**

**903.2.8.4 STORAGE ROOMS.** Within Group R occupancies, storage areas that are leased or rented shall comply with Section 903.2.9.5.

**Section 903.2.9.3; change 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.

**Section 903.2.9.4; delete Exception:**

**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 to store upholstered furniture or mattresses exceeds 2,500 square feet.

**Section 903.2.9.5; add to 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 following 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 the 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.

**Section 903.2.10; change to read as follows:**

**903.2.10 GROUP S-2 PARKING GARAGES.** An automatic fire sprinkler system shall be provided throughout buildings classified as parking garages, whether open or enclosed.

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

**903.2.11.3 BUILDINGS MORE THAN 35 FEET IN HEIGHT.** An automatic sprinkler system shall be installed throughout buildings with one or more stories, other than penthouses, in compliance with Section 1511 of the International Building Code, located 35 feet or above the lowest fire department vehicle access measured to the finished floor.

**903.2.11.7 HIGH-PILED COMBUSTIBLE STORAGE.** For any building with a clear height exceeding 12 feet, see Chapter 32 to determine if those provisions apply.

**903.2.11.8 SPRAY BOOTHS AND ROOMS.** An approved automatic extinguishing system shall protect New and existing spray booths and spraying rooms.

**903.2.11.9. BUILDINGS 6,000 SQ. FT. OR MORE.** An automatic sprinkler system must be installed throughout all buildings with an area of 6,000 square feet or greater. This requirement also applies to existing buildings or structures that are expanded to reach 6,000 square feet or more. For this provision, firewalls shall not define separate buildings.

**Exception:** Open parking garages in compliance with Section 903.2.10

**Section 903.3.1; change to read as follows:**

**903.3.1 STANDARDS.** Sprinkler systems shall be designed and installed following Section 903.3.1.1 unless otherwise permitted by Sections 903.3.1.2 and 903.3.1.3 and other chapters of this code, as applicable. For any structure or building for which a specific use, lease, or tenant cannot be identified, such as a speculative retail or office building, the sprinkler system shall be designed to Ordinary Hazard Group II or as permitted by the *fire code official*.

For any structure or building with a clear height over 12 feet, the sprinkler system shall be designed to provide a minimum of Ordinary Hazard Group II. For any structure or building with a clear height over 12 feet and with the primary use of storage or warehouse, the sprinkler system shall be designed to protect Class IV Commodities to the maximum storage height. All buildings two or more stories in height shall be

provided with floor control valves.

**Exception:** If a commodity type and storage height can be determined, the sprinkler system shall be designed according to the approved commodity class and storage height.

**Section 903.3.1.1.1; change to read as follows:**

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

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

**Section 903.3.1.1.4; add the following Section:**

**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. 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.

**Section 903.3.1.2.2; change to read as follows:**

**903.3.1.2.2 CORRIDORS AND BALCONIES.** Sprinkler protection shall be provided in all corridors and balconies.

**Section 903.3.1.2.3; delete the section and replace as follows:**

**SECTION 903.3.1.2.3 ATTACHED GARAGES AND ATTICS.** Sprinkler protection is required in attached garages and the following attic spaces:

1. Attics used or intended for living or storage purposes shall be protected by an automatic sprinkler system.
2. Where fuel-fired equipment is installed in an unsprinklered attic, at least one quick-response intermediate temperature sprinkler shall be installed above the equipment.
3. Attic spaces of buildings two or more stories above the grade plane or above the lowest fire department vehicle access level.
4. Group R-4, Condition 2 occupancy attics not required by Items 1 or 3 to have sprinklers shall comply with one of the following:
  - 4.1. Provide automatic sprinkler system protection.
  - 4.2. Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.
  - 4.3. Construct the attic using non-combustible materials.
  - 4.4. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the International Building Code.
  - 4.5. Fill the attic with noncombustible insulation.

**Section 903.3.1.3; amend to read as follows:**

**903.3.1.3 NFPA 13D SPRINKLER SYSTEMS.** Automatic fire sprinklers shall be installed in all Group R buildings 6,000 square feet or greater. Group R-3; Group R-4, Condition 1; and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or State law.

**Section 903.3.1.3.1; add to read as follows:**

**903.3.1.3.1 WHERE REQUIRED.** An automatic sprinkler system is required in one or two-family dwellings located in a residential development described by Section 301.043 of the Texas Property Code, or that is subject to the 1995 Housing for Older Persons Act (HOPA).

**Section 903.3.1.3.2; change to read as follows:**

**903.3.1.3.2 DESIGN CRITERIA.** In addition to design criteria, 13D systems shall be designed as follows:

1. Piping shall be run vertically inside interior walls and horizontally between floors and unheated garages.
2. Garages shall be protected when a living space or portion thereof is provided above.

**Section 903.3.1.4; add to read as follows:**

**903.3.1.4 FREEZE PROTECTION.** Freeze protection systems for automatic fire sprinkler systems shall follow the requirements of the applicable referenced NFPA standard and this section.

**Section 903.3.1.4.1; add to read as follows:**

**903.3.1.4.1 ATTICS.** Only dry-pipe, pre-action, 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. A separate floor control valve assembly supplies the attic sprinklers 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 part of the building's thermal envelope, so insulation is provided at the roof deck rather than at the ceiling level.

**Section 903.3.1.4.2; add to read as follows:**

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

**Section 903.3.5; change to read as follows:**

**903.3.5 WATER SUPPLIES.** Water supplies for *automatic sprinkler systems* shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow following the requirements of this section and the *International Plumbing Code*. All fire sprinkler and fire standpipe system backflow prevention assemblies, including double check detector assemblies (DCDA) and reduced pressure principle assemblies (RPDA), shall be installed in an approved, aboveground location. Backflow preventers shall be installed at the point of service in an approved exterior enclosure or vault unless otherwise approved. Backflow preventers shall be readily accessible for inspection, testing, and maintenance; Clearly visible and identifiable, and protected from freezing, mechanical damage, and vehicular impact.

For connections to public waterworks systems, the water supply test used to design *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 standards; however, every fire protection system shall be designed with a 10-psi safety factor—reference Section 507.4 for additional design requirements.

**Section 903.3.7; change to read as follows:**

**903.3.7. FIRE DEPARTMENT CONNECTIONS.** The fire department connections for automatic sprinkler systems shall be installed per Section 912 and located within five (5) feet of the fire lane, within 50 feet of a fire hydrant, and on the same side of the roadway. All fire department connections shall be remotely located away from the building. The FDC height shall be between 18" and 36" above ground level. Unless otherwise approved, the FDC shall have a Knox brand 5" Storz Connection, a 30-degree down angle, and a locking Knox cap. The *fire code official* shall approve the FDC location.

**Section 903.3.9; change 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.

**Section 903.4.1; add a second paragraph after the Exceptions to read as follows:**

*(Existing text remains unchanged)*

**903.4.1 ELECTRONIC SUPERVISION.** All valves controlling water supplies in the sprinkler and standpipe systems, including accessible backflow preventers, shall be electrically supervised to initiate a supervisory signal at the central station upon tampering. Fire department hose connections are exempt from electronic supervision.

**Section 903.4.3; change to read as follows:**

**903.4.3 ALARMS.** *[existing text to remain]* The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela rating, installed at the exterior of the riser room, and as close as practicable to the fire department connection (FDC). For remote FDC's, the strobe shall be pole-mounted at most 5 feet from the FDC if needed.

Exception: *Unchanged*

**Section 903.6; change to read as follows:**

**903.6 WHERE REQUIRED IN EXISTING BUILDINGS AND STRUCTURES.** *An automatic sprinkler system* shall be provided in existing buildings and structures where required in Chapter 11. The provisions of this section are intended to provide a reasonable degree of safety in existing buildings and structures not complying with the minimum requirements of the *International Building Code* by requiring the installation of an automatic fire-extinguishing system where one of the following applies:

1. Existing structures that are being substantially improved as defined in Chapter 11 of this code or any other requirements outlined in the International Fire Code (IFC), the International Building Code (IBC), or the International Residential Code (IRC), all as adopted by the City of Keller.

2. Existing structures are being remodeled, and the common path of exit travel, exit access, or exit(s) of the building are being modified.
3. Existing structures built before adopting the 2024 International Fire Code, which did not obtain Permit/Work Authorizations as required by Chapter 105 of this code or did not meet the minimum code requirements at the time of construction.
4. The occupancy classification, the nature of the building use, and/or the occupant load of the structure are changing from the original certificate of occupancy requirements at the time of construction.
5. The code official believes the structure's occupancy classification and occupant load require a sprinkler system for occupants and means of egress safety.

**Section 903.7; add to read as follows:**

**903.7 SEPARATION FROM NON-SPRINKLERED AREAS.** Unless otherwise exempted by the International Building Code (IBC) or International Fire Code (IFC), as adopted by the City of Keller, or required to be of a higher fire resistance construction by the IBC or IFC, a minimum of one (1) hour fire barrier construction following the 2024 IBC shall be provided between sprinklered and unsprinklered areas within a building.

**SECTION 904 - ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS**

**Section 903.13.2; change to read as follows:**

**904.13.2 MANUAL SYSTEM OPERATION DEVICE COLOR.** The manual actuation device for an alternative fire-extinguishing system shall be silver or white and not resemble a fire alarm system actuation device. The color of the manual actuation device for an alternative fire-extinguishing system shall apply to commercial and residential fire-extinguishing systems.

**Section 903.13.3; add to read as follows:**

**904.13.3 MULTIPLE MANUAL SYSTEM OPERATION DEVICES.** Where there are multiple manual actuation devices for an alternative fire-extinguishing system, each actuation device and the corresponding fire-extinguishing system shall be provided with an identification plate that indicates which system the device operates.

**SECTION 905 - STANDPIPE SYSTEMS**

**Section 905.3.8; add to 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.

**Section 905.4; change Item 5, and add Item 7 to read as follows:**

1. Where the roof slopes less than four units vertically in 12 units horizontally (33.3 percent slope), each standpipe shall be provided with a two-way hose connection. A-hose connection shall be located to serve the roof or at the highest landing of an exit stairway with stair access to the roof provided per Section 1011.12.
2. {No change.}
3. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter or as otherwise approved by the fire code official.

**Section 905.8; change to read as follows:**

**905.8 DRY STANDPIPES.** Manual dry standpipes shall not be installed.

**Exception:** Where subject to freezing and following 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.

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

(Existing text remains unchanged)

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon water flow detection 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 fire department hose connection valves, shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

## SECTION 906 - PORTABLE FIRE EXTINGUISHERS

**\*\*Section 906.1(1); delete Exception 3 .**

## SECTION 907 - FIRE ALARM AND DETECTION SYSTEMS

**Section 907.1.4; add to read as follows:**

**907.1.4 DESIGN STANDARDS.** The devices shall be addressable when a new or replacement fire alarm system is installed. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

**Exception:** Existing systems need only comply if the total building, fire alarm system, remodel, or expansion exceeds 30% of the building. When a cumulative building or fire alarm system remodel, or expansion is initiated after the original fire alarm panel installation and exceeds 50% of the building or fire alarm system, the fire alarm system must comply within 12 months of notification by the *fire code official*.

**Section 907.2; amended to read as follows:**

**907.2 WHERE REQUIRED.** An approved fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in all new construction for commercial buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide the occupant notification in accordance with Section 907.5 unless another section of this code provides other requirements. If a remodel creates conditions where a fire alarm would be required for new construction, a fire alarm system will be required.

Manual fire alarm boxes shall be located at every exit to the building/structure, provided in an approved location, and installed per Section 907.4.2. The manual fire alarm boxes shall initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or waterflow detection devices. Where other sections of this code allow for the elimination of the fire alarm boxes due to sprinkler installation, the requirements of this section shall supersede all other exceptions.

**Section 907.2.1; change to read as follows:**

**907.2.1 GROUP A.** A manual fire alarm system that activates the occupant notification system per Section 907.5 shall be installed in Group A occupancies with an occupant load of 300 or more persons, or with a Group A occupant load more than 100 persons above or below the *lowest level of exit discharge*. Group A occupancies not separated from one another following Section 707.3.10 of the *International Building Code* shall be considered as a single occupancy to apply 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.

1. Cause illumination of the means of egress with light of not less than one foot-candle (11 lux) at the walking surface level and
2. Stop any conflicting or confusing sounds and visual distractions.
3. Upon sprinkler water flow, the occupant notification appliances will activate throughout the notification zones.

**Exceptions:** {No change.}

**Section 907.2.1.1; change to read as follows:**

**907.2.1.1 SYSTEM INITIATION IN GROUP A OCCUPANCIES WITH AN OCCUPANT LOAD OF 500 OR MORE.** Activation of the fire alarm in Group A occupancies with an *occupant load* of 500 or more shall initiate a signal using an emergency voice/alarm communications system in accordance with Section 907.5.2.2.

**Exception:** Where *approved*, the prerecorded announcement can be manually deactivated for a period, not to exceed 3 minutes, for the sole purpose of allowing a live voice announcement from an *approved*, constantly attended location.

**Section 907.2.3; change to read as follows:**

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

**Exceptions:**

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

{No change to the remainder of the exceptions.}

**Section 907.2.10.1; change 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.

**Section 907.2.13, Exception #3; change to read as follows:**

**907.2.13 HIGH-RISE BUILDINGS.** High-rise buildings shall have an automatic smoke detection system per Section 907.2.13.1, a fire department communication system per Section 907.2.13.2, and an emergency voice/alarm communication system per Section 907.5.2.2.

**Exceptions:**

1. Airport traffic control towers in accordance with Section 907.2.22 of this code and Section 412 of the *International Building Code*.
2. Open parking garages in accordance with Section 406.5 of the *International Building Code*.
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.
4. Low-hazard special occupancies in accordance with Section 503.1.1 of the *International Building Code*.
5. Buildings with an occupancy in Group H-1, H-2, or H-3 in accordance with Section 415 of the *International Building Code*.
6. In Group I-1 and I-2 occupancies, the alarm shall sound at a constantly attended location, and the emergency voice/alarm communication system shall broadcast occupant notification.

**907.2.13.1 AUTOMATIC SMOKE DETECTION.** Automatic smoke detection in high-rise buildings shall be in accordance with Sections 907.2.12.4, 907.2.13.1.1, and 8907.2.13.1.2.

**Section 907.4.2.1; add to read as follows:**

**907.4.2.1 LOCATION.** Manual fire alarm boxes shall be located at every exit of the building; this placement also includes manual fire alarm boxes at the top of the stairs as the exit from stories other than the ground level of the building. Manual fire alarm boxes shall be no more than 5 feet from each exit. In accordance with Section 903.3.1.1 or 903.3.1.2, additional manual fire alarm boxes shall be located so that the distance of travel to the nearest box does not exceed 200 feet.

**Section 907.4.2.7; add to read as follows:**

**907.4.2.7 TYPE.** Manual alarm-actuating devices shall be an approved double-action type. Each occupancy shall have manual actuating devices installed in a building or strip of buildings consisting of multiple suites or businesses.

**Section 907.5.2.3.1.1; add to read as follows:**

**907.5.2.3.1.1 PRIVATE OFFICES.** Visible alarm notification or audible/visual alarm notification appliances shall be provided in private offices in Group B and E occupancies when the occupant capacity of the office is three or greater; the office is provided with a conference table with seating for three or more; or the square footage of the office exceeds 200 sq. ft.

**Section 907.5.3; add to read as follows:**

**907.5.3 OCCUPANT NOTIFICATION.** Occupant notification following this section and 907.5 shall be required for all new construction or existing construction complying with the *International Building Code*, for renovations to existing buildings, tenant spaces, changes in occupancy, replacement, or modification of the existing fire alarm system, or as required by the Fire Code Official, for all buildings or spaces provided with an approved automatic sprinkler system.

**Section 907.6.1.1; add to read as follows:**

**907.6.1.1 WIRING INSTALLATION.** All fire alarm systems shall be installed so 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 so that a single open will not

interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed per NFPA 72 requirements for Class A circuits. It shall have a minimum of four feet of horizontal separation and one foot of vertical separation 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.

**Section 907.6.3; delete all four Exceptions.**

**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. Alarms shall not be permitted to be transmitted as general alarms or in zone conditions.

**Section 907.6.7; add to read as follows:**

**907.6.7 WATERFLOW NOTIFICATION.** When required by Section 903.4.2, an external audible and visible notification device shall be provided on the exterior of the building at the riser room. The notification device shall continuously operate as long as the waterflow switch is engaged, be non-silenceable, and continue to operate after the panel is silenced. The notification device shall be wired from the fire alarm control panel as a dedicated latching circuit. The minimum candela rating for the notification device shall be 75 (cd) candelas.

**Section 907.11; add to read as follows:**

**907.11 FIRE EXTINGUISHING SYSTEMS.** Automatic fire-extinguishing systems shall be connected to the building fire alarm system where another section of this code requires a fire alarm system or is otherwise installed.

**907.12; add to read as follows:**

**907.12 INTERCONNECTION.** Fire alarm systems installed in multi-building developments that share a standard address shall be interconnected. Each building shall have a fire alarm panel that reports to a common location for signal transmission to the monitoring station. Each building shall be provided with full command and control of its system without resetting from the standard signal transmitting location. All alarms shall be announced at a customarily occupied location per 907.6.3.

## SECTION 910 - SMOKE AND HEAT REMOVAL

**Section 910.2; change to read as follows:**

**910.2 WHERE REQUIRED.** Smoke and heat vents or a mechanical smoke removal system shall be installed as required by Sections 910.2.1 and 910.2.2.

**Exceptions:**

1. An approved automatic sprinkler system protects frozen food warehouses solely for storing Class I and II commodities.
2. Only manual smoke and heat removal shall be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.
3. Only manual smoke and heat removal shall be required in areas of buildings equipped with control mode special application sprinklers with a response time index of  $50(m^*S)^{1/2}$  or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

**Section 910.2.3; add to read as follows:**

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

1. In occupancies classified as Group H-2 or H-3, any of which is more than 15,000 square feet (1,394 m<sup>2</sup>) in a single floor area.

**Exception:** Buildings of noncombustible construction containing only noncombustible materials.

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

**Exception:** Buildings of noncombustible construction containing only noncombustible materials.

**Section 910.3.4; change to read as follows:**

**910.3.4 VENT OPERATION.** Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.4.1 through 910.3.4.2.

**Section 910.3.4.1; change to read as follows:**

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

**Exception:** Manual-only systems per Section 910.2.

**Section 910.3.4.2; change to read as follows:**

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

**Exception:** Listed gravity-operated drop-out vents.

**Section 910.4.3.1; change to read as follows:**

**910.4.3.1 MAKEUP AIR.** Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be ~~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 m<sup>2</sup> per 0.4719 m<sup>3</sup>/s) of smoke exhaust.

**Section 910.4.4; add to read as follows:**

**910.4.4 ACTIVATION.** The automatic sprinkler or approved fire detection system shall automatically activate the mechanical smoke removal system. Individual manual controls shall also be provided.

**Exception:** Manual-only systems per Section 910.2.

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**SECTION 912 - FIRE DEPARTMENT CONNECTIONS**

**Section 912.2.1; add to read as follows:**

**912.2.1 VISIBLE LOCATION.** Fire department connections shall be remotely located on the street side of buildings or facing *approved* fire apparatus access roads, set back 5 feet from the back of the curb or fire lane, and provided with vehicle impact protection per Section 312. FDCs shall be fully recognizable from the street, fire apparatus access road, the nearest fire department vehicle access point, or as approved by the *fire code official*.

**Section 912.2.3; change to read as follows:**

**912.2.3. HYDRANT DISTANCE.** An approved fire hydrant shall be located within 50 feet on the same side of the fire lane of the fire department connection as the fire hose lays along an unobstructed path unless *approved* by *the fire code official*.

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**SECTION 913 - FIRE PUMPS**
**Section 913.2.1; add second paragraph and exception to read as follows:**

**913.2.1.1 ACCESS TO FIRE PUMP ROOMS.** When located on the ground level at an exterior wall, the fire pump room shall have an exterior fire department access door at least 3 feet in width and 6-8 feet in height, regardless of any interior doors 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.

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**SECTION 914 - FIRE REQUIREMENTS BASED ON SPECIAL DETAILED REQUIREMENTS OF USE AND OCCUPANCY**
**Section 914.3.1.2; change to read as follows:**

**914.3.1.2 WATER SUPPLY TO REQUIRED FIRE PUMPS.** In buildings over 120 feet in height, required fire pumps shall be supplied by connections to no fewer than two water mains located on different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

**Exception:** 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.

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**SECTION 915 - CARBON MONOXIDE (CO) DETECTION**
**Section 915; replace to read as follows:**

**915.1 GENERAL.** New and existing buildings shall be provided with carbon monoxide (CO) detection following 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 following 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 follow 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 near 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 close 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 airtight, carbon monoxide detection is not required for the adjoining 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 is 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 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, 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 close to bedrooms or sleeping rooms for either of the following conditions:

1. The dwelling or sleeping unit has a communicating opening to an attached garage.
2. A direct carbon monoxide source is located outside bedrooms or sleeping rooms in the dwelling or sleeping unit.

**915.2.4.2 FORCED-INDIRECT CARBON MONOXIDE SOURCES.** Bedrooms or sleeping rooms in dwelling units or sleeping units exposed to a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection per 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 the manufacturer's instructions in a location that avoids dead air spaces, turbulent air spaces, fresh air returns, open windows, and obstructions that would inhibit the 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 Section 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 instead 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 an ordinarily 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. They shall be provided with a battery backup. Carbon monoxide alarms shall be battery-powered in buildings without a wired power source.

**Exception:** For buildings not previously required to have carbon monoxide alarms permanently connected to a wired power source, existing battery-powered and plug-in carbon monoxide alarms with battery backup shall remain in service. When replaced, replacement with battery-powered and plug-in carbon monoxide alarms with battery backup 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, the actuation of any alarm shall cause all 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 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 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 defined 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 Occupations with 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 occupations. For Group E occupations with 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 detection systems shall be maintained in accordance with NFPA 72 and the manufacturer's instructions. Alarms and detectors that become inoperable or begin producing end-of-life signals shall be replaced.

## SECTION 916 GAS DETECTION SYSTEMS

**Section 916.9; change to read as follows:**

**916.9 SIGNS.** Signs shall be provided adjacent to gas detection system alarm signaling devices that advise occupants of the nature of the signals and actions to take in response to the signal.

## CHAPTER 10 MEANS OF EGRESS

### SECTION 1006 - NUMBERS OF EXITS AND EXIT ACCESS DOORWAYS

**Section 1006.2.1; change Exception #3 to read as follows:**

**1006.2.1 EGRESS BASED ON OCCUPANT LOAD AND COMMON PATH OF EGRESS TRAVEL DISTANCE.** *[existing text to remain]*

3. Unoccupied rooftop mechanical rooms and penthouses are not required to comply with the common path of egress travel distance measurement.

### SECTION 1032 - MAINTENANCE OF THE MEANS OF EGRESS

**Section 1032.2; amend to read as follows:**

**1032.2 RELIABILITY.** Required exit accesses, exits, or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or another emergency. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress. Security devices affecting means of egress shall be subject to the approval of the *fire code official*.

## CHAPTER 11 – CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS

### SECTION 1101 - GENERAL

**Section 1101.4; amend to read as follows:**

**1101.4 OWNER NOTIFICATION.** The *fire code official* shall notify the building owner when a building is non-compliant. Upon receipt of such notice, the owner shall, subject to the following time limits, take

necessary actions to comply with this chapter's provisions and other City of Keller adopted codes and standards.

**Section 1101.4.1; amend to read as follows:**

**1101.4.1 CONSTRUCTION DOCUMENTS.** Construction documents for the necessary alterations shall be completed within a schedule approved by the Fire Code Official. Within 30 days after receipt of the owner's notification, the owner shall submit a letter to the Fire Marshal's Office indicating the owner's proposed plan and timeline to complete the required work to bring the building into code compliance.

**Section 1101.4.1.1; add to read as follows:**

**1101.4.1.1** The Fire Marshal's Office will evaluate the submitted plan to determine if the proposed timelines are reasonable and achievable, determine alternative fire protection measures that can be implemented during the plan implementation period, and consult with the owner on developing an interim fire protection plan. If the submitted plan is deemed unreasonable to bring the building into code compliance, the Fire Marshal's Office shall establish a minimum timeline for the owner to complete the required work.

## SECTION 1102 - DEFINITIONS

**WORK AREA.** As indicated on the construction documents, the portion or portions of a building consist of all reconfigured spaces. The work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions where work not initially intended by the owner is specifically required by this or other codes.

## SECTION 1103 - FIRE SAFETY REQUIREMENTS FOR EXISTING BUILDINGS

**Section 1103.5.1; amend to read as follows:**

**1103.5.1 GROUP A-2.** Where alcoholic beverages are consumed in a Group A-2 occupancy with an occupant load of 300 or more, the fire area containing the Group A-2 occupancy shall be equipped with an automatic sprinkler system per Section 903.3.1.1. The fire sprinkler system installation shall be completed within 24 months from the date of notification by the Fire Code Official.

**Section 1103.5.3; add sentence to read as follows:**

**1103.5.3 GROUP I-2, CONDITION 2** *[Existing text to remain unchanged]*

The fire sprinkler system must be installed within 24 months of the fire code official's notification.

**Section 1103.5.6; add to read as follows:**

**1103.5.6 SPRAY BOOTHS AND ROOMS.** Per Section 2404, an approved automatic fire-extinguishing system shall protect existing spray booths and rooms.

**Section 1103.7.7; add to read as follows:**

**1103.7.7 FIRE ALARM SYSTEM DESIGN STANDARDS.** The devices shall be addressable when an existing fire alarm system is upgraded or replaced. 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, fire alarm system, remodel, or expansion exceeds 30% of the building. When a cumulative building or fire alarm system,

remodel, or expansion is initiated after the original fire alarm panel installation, exceeding 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.

**Section 1103.9; change to read as follows:**

**1103.9 CARBON MONOXIDE DETECTION.** Carbon monoxide detection shall be installed in existing buildings in accordance with Section 915.

## SECTION 1108 - MODIFICATIONS AND ALTERATIONS

**Section 1108.1; add to read as follows:**

**1108.1 SIX THOUSAND (6,000) SQUARE FEET.** An automatic fire protection system shall be installed throughout existing buildings enlarged to 6,000 square feet or greater, regardless of their current square footage. New and/or existing firewalls shall not define separate buildings for this provision.

## SECTION 1109 - ELECTRIC VEHICLE CHARGING STATIONS

**Section 1109; add new sections to read as follows:**

**1109.1 ELECTRIC VEHICLE CHARGING STATIONS.** All Electric Vehicle Charging Stations shall be installed according to Section 323 and Chapter 12.

## CHAPTER 12 ENERGY SYSTEMS

### Section 1201 - GENERAL

**Section 1201.4; add to read as follows:**

**1201.4 ELECTRICAL SHUTDOWN.** Energy systems, such as solar photovoltaic power systems, stationary fuel cell power systems, or electrical energy storage systems, must include a remote power shut-down box. The remote power box shall be installed at an approved exterior door entrance and be accessible only to the fire department. It should be keyed to the fire department Key Box as specified in Section 506.

### SECTION 1207 - ELECTRICAL ENERGY STORAGE SYSTEMS (ESS)

**Section 1207.2; add to read as follows:**

**1207.2 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 detail the procedures and methods to be used and the items subject to such inspections and tests. Such commissioning shall follow generally accepted engineering practice and, where possible, be based on published standards for the testing involved. This section's special inspections and tests shall be conducted under the same terms as in Chapter 17 of the International Building Code.

## CHAPTER 23 MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES

### SECTION 2304 - DISPENSING OPERATIONS

**Section 2304.1; change to read as follows:**

**2304.1 SUPERVISION OF DISPENSING.** A qualified attendant shall conduct the dispensing of fuel at motor fuel-dispensing facilities 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 under Section 2304.3.

If the qualified attendant of item Number 1 or 2 above is not present at any time, such operations shall be considered an unattended self-service facility and shall also comply with Section 2304.3.

## CHAPTER 24 FLAMMABLE FINISHES

### SECTION 2401 - GENERAL

**Section 2401.2; delete this section.**

## CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

### SECTION 3307 - FIRE DEPARTMENT SITE ACCESS AND WATER SUPPLY

**Section 3307.1; change 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 within 50 feet of temporary or permanent fire department connections. Vehicle access shall be provided by temporary or permanent roads 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 before construction has progressed beyond the completion of the foundation of any structure. Whenever the connection is not visible to approaching fire apparatus, an approved sign shall indicate the fire department connection.

**Section 3307.1.2; change to read as follows:**

**3307.1.2 STAIRWAYS REQUIRED.** Where building construction exceeds 40 feet in height above the lowest fire department vehicle access level, 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, an approved sign shall indicate the stairway locations.

**Section 3307.5.3; add a section to 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.

## CHAPTER 41 – TEMPORARY HEATING AND COOKING OPERATIONS

### SECTION 4104 - PORTABLE FUEL-FIRED COOKING APPLIANCES

**Section 4104.2; change to read as follows:**

**4104.2 OPEN-FLAME COOKING DEVICES.** Charcoal burners, charcoal grills, and other similar devices used for cooking shall not be operated or located on combustible balconies, decks, or within 10 feet 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 [nominal 20-pound 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. LP-gas cooking devices have LP-gas containers with a water capacity not greater than 2 1/2 pounds [nominal 1-pound LP-gas capacity].

## CHAPTER 56 EXPLOSIVES AND FIREWORKS

### SECTION 5601 - GENERAL

**Section 5601.1.3; change to read as follows:**

**5601.1.3 FIREWORKS.** The possession, manufacture, storage, sale, handling, and use of fireworks are prohibited. This includes the use of consumer fireworks products.

**Exceptions:**

1. Only when approved for fireworks displays, the storage and handling of fireworks are allowed as allowed in Sections 5604 and 5608.
2. The use of fireworks for approved fireworks displays as allowed in Section 5608.
3. The use of sparklers for organized events, with approval by the fire code official.

**Section 5601.7.1; add to read as follows:**

**5601.7.1 DOCUMENTATION.** The *fire code official* or his designee may seize and destroy illegal fireworks before a court appearance, and photographs of such seized and destroyed fireworks shall provide sufficient evidence of a violation of Section 5601.1.3 for the municipal court.

### SECTION 5605 - MANUFACTURE, ASSEMBLY, AND TESTING OF EXPLOSIVES, EXPLOSIVE MATERIALS, AND FIREWORKS

**Section 5605.1; delete exceptions 2 and 3 to read as follows:**

**5605.1. GENERAL.** The manufacture, assembly, and testing of explosives, ammunition, blasting agents, and fireworks are prohibited within the City's limits.

**EXCEPTIONS:**

1. The hand loading of small arms ammunition prepared for personal use and not offered for resale.

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**SECTION 5608 - FIREWORKS DISPLAY**

**Section 5608.11; add to read as follows:**

**5608.11. IGNITION.** Aerial shells shall be ignited by lighting the tips of fuses with an electrical ignition source.

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**CHAPTER 57 FLAMMABLE AND COMBUSTIBLE LIQUIDS**

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**SECTION 5703 - GENERAL REQUIREMENTS**

**Section 5703.6; add a sentence to the end of the paragraph to read as follows:**

**5703.6 PIPING SYSTEMS.** Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Sections 5703.6.1 through 5703.6.11. An *approved* secondary containment method shall be provided for underground tanks and piping systems.

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**SECTION 5704 - STORAGE**

**Section 5704.2.11.4; change 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* secondary containment method shall be provided for underground tanks and piping systems.

**Section 5704.2.11.4.2; change to read as follows:**

**5704.2.11.4.2 LEAK DETECTION.** Underground storage tank systems shall be provided with an approved method of leak detection from any component designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3.

**Section 5704.2.11.4.3; add to read as follows:**

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

**Section 5707.4; add a paragraph to read as follows:**

**5707.4 MOBILE FUELING AREAS.** [Existing text to remain]

Mobile fueling sites shall be restricted to commercial, industrial, governmental, or manufacturing operations where the parking area is primarily intended for employee vehicles. Mobile fueling shall be conducted only for fleet or employee vehicles, 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.

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**APPENDIX B FIRE - FLOW REQUIREMENTS FOR BUILDINGS**

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

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

**APPENDIX D FIRE APPARATUS ACCESS ROADS**

**Section D102.1; change to read as follows:**

**D102.1. ACCESS AND LOADING.** Facilities, buildings, or portions of buildings hereafter constructed shall be accessible to fire department apparatus through an approved fire apparatus access road. Fire lanes shall be constructed of a surface capable of supporting the imposed loads of an 85,000 lb. fire apparatus. In no event shall speed bumps, speed humps, or other “traffic-calming” devices be placed, installed, or located in the fire lane or fire apparatus access road unless approved by the Fire Code Official.

**Section D103.2; change to read as follows:**

**D103.2. GRADE.** The maximum allowable grade shall not exceed 6%. Any grade steeper than 6% must receive approval from the Fire Code Official.

**Section D103.3; change to read as follows:**

**D103.3. TURNING RADIUS.** The required turning radius of a fire apparatus access road shall be a minimum of 30 feet inner radius and 54 feet outer radius, as determined by the Fire Code Official.

**Section D104.3; change to read as follows:**

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

<b>LENGTH (Feet)</b>	<b>WIDTH (Feet)</b>	<b>TURNAROUNDS REQUIRED</b>
0-150	24	120-foot Hammerhead, 60-foot “Y”, or 100-foot diameter Cul-De-Sac. (Figure D103.1)
151-500	24	120-foot Hammerhead, 60-foot “Y”, or 100-foot diameter Cul-De-Sac. (Figure D103.1)
501-750	26	120-foot Hammerhead, 60-foot “Y”, or 100-foot diameter Cul-De-Sac. (Figure D103.1)
Over 750		Special Approval Required.

**Section D103.5; change to read as follows:**

**D103.5 FIRE APPARATUS ACCESS ROAD GATES.** Gates crossing fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the width shall be at least 24 feet. Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet.
2. Gates or other barricades shall be approved by the fire code official.

**Section D103.6; change to read as follows:**

**D103.6 MARKING.** When approved by the Fire Code Official, striping, signs, or other markings 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 clean and legible and 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-foot 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 the 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 approved by the Fire Chief.

**Section D103.6.1 and D103.6.2; delete sections.****Section D103.4.1; add to read as follows:**

**D103.4.1 INTERMEDIATE FIRE APPARATUS TURNAROUNDS.** The *fire code official* is authorized to require an intermediate fire apparatus turnaround where a single point of access exceeds 750 feet or when development projects utilize an alternative street design following the City of Keller UDC. All designs must accommodate fire apparatus turn radius requirements and be approved by the Fire Code Official.

**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*.

**Section D105.3; change to read as follows:**

**D105.3 PROXIMITY TO THE 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 and not greater than 30 feet from the building and shall be positioned parallel to two entire sides of the building. The *fire code official* shall approve the sides of the building on which the aerial fire apparatus access road is positioned.

**Section D106.3; change 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*.

**Section D107.2; change 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.*

## APPENDIX L FIREFIGHTER AIR REPLENISHMENT SYSTEM

**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 with an occupied floor or occupied roof located more than 75 feet above the lowest level of fire department vehicle access.
2. Buildings having two or more stories below the grade plane.

**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 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.

**L104.14 EXTERNAL MOBILE AIR CONNECTION.** An external mobile air connection shall be provided for the fire department's mobile air apparatus, as required by Section L104.5, to supply the system with breathing air. The external mobile air connection shall be located with approved separation from the Fire Department Connection (FDC) to allow the functionality of both devices by first responders; it shall be visible from and within 150ft of a fire apparatus access road along an unobstructed path and shall be located in an approved, labeled, secured cabinet. If the cabinet is susceptible to vehicle impact, bollards shall be supplied for vehicle impact protection.

**Section L106.1: Add a paragraph to read as follows:**

The inspecting FARS contractor shall provide an annual inspection tag/sticker on the FARS' interior air monitoring panel. The tag/sticker shall identify the approved inspecting contractor's name, physical address, phone number, certified inspector's name, and inspection date. The system shall not be tagged until all inspection requirements of this section have been completed. The tag/sticker shall be blue for a passing system. The tag/sticker shall be red for a failing system, with reasons for failure indicated on the tag. If a red tag/sticker is placed, the AHJ/ *fire code official* shall be notified immediately within 24 hours.

## SECTION 6-120. KELLER FIRE MARSHAL'S OFFICE

**DESIGNATION.** Keller Fire Rescue, "The Keller Fire Marshal's Office," is hereby designated as a law enforcement agency of the City of Keller, authorized to enforce applicable state laws and municipal ordinances.

**AUTHORITY.** The agency is authorized to employ and commission individuals who hold a peace officer license issued by the Texas Commission on Law Enforcement (TCOLE).

**LAW ENFORCEMENT DUTIES.** Peace officers assigned to Keller Fire – Rescue, Keller Fire Marshal's Office shall have authority to: Investigate violations of state and local laws; Conduct criminal investigations relating to fires, explosions, and related offenses; Execute warrants and make arrests as authorized by law; Prepare and submit criminal cases for prosecution.

**CRIMINAL JUSTICE INFORMATION ACCESS.** The City of Keller authorizes the agency to apply for and maintain an Originating Agency Identifier (ORI) through the Texas Department of Public Safety for access to criminal justice information systems, including TCIC and NCIC.

**ADMINISTRATION.** Keller Fire – Rescue, Keller Fire Marshal’s Office shall operate under the administrative oversight of the Fire Chief or their designee and shall comply with all applicable federal, state, and local laws governing law enforcement agencies.

## **SECTION 6-130. EXCESSIVE FALSE FIRE ALARMS.**

Definitions. As used in this section, the following words and terms shall have the following meanings:

**ENFORCEMENT OFFICIAL.** The Fire Chief, *fire code official*, or designee.

**FALSE FIRE ALARM.** The activation of any alarm which results in the response of the fire department caused by the negligence or intentional misuse of a fire alarm system by the owner/occupant or employees, servants, or agents, or by any other activation not caused by heat, smoke, or fire, exclusive of a fire alarm malfunction. An alarm is not considered a false fire alarm if the alarm is activated due to obvious malicious causes beyond the control of the owner/occupant.

**FALSE ALARM MALFUNCTION.** The activation of any alarm that results in the fire department’s response is caused by mechanical failure, malfunction, improper installation, lack of proper maintenance, or any other response for which the fire department personnel are unable to gain access to the premises for any reason or are unable to determine the apparent cause of the alarm activation.

**FEE.** The assessment of a monetary charge payable to the City of Keller, authorized according to this section, is to defray the expenses of responding to a false alarm or malfunction.

**FIRE ALARM SYSTEM.** Any mechanical, electrical, or radio-controlled device is designated to emit a sound or transmit a signal or message when activated, or any such device that emits a sound and sends a signal or message because of smoke, heat, or fire. Without limiting the generality of the foregoing, alarm systems shall be deemed to include audible alarms at the site of installing the detection device, proprietary alarms, and automatic telephone direct dial services or digital alarm communicator systems. A single-station alarm device shall not be deemed a fire alarm system under this section.

**FIRE ALARM TECHNICIAN.** Any person who inspects, installs, repairs, or performs maintenance on fire alarm systems is licensed by the State of Texas or works under a state-licensed alarm contractor.

**NUISANCE ALARM.** An alarm is caused by mechanical failure, malfunction, improper installation, lack of proper maintenance, or an alarm activated by a cause that cannot be determined.

**NOTIFICATION.** Verbal or written communication is made to the owner/occupant or authorized representative established by their emergency contact information provided via the alarm monitoring company.

**OWNER/OCCUPANT.** Any person or authorized representatives who own, leases, operate, occupies, or manages the premises installed by a fire alarm system.

**PREMISES.** Any building or structure, or combination of buildings or structures, including residential dwellings and tenant or lease spaces located wholly or partially inside such buildings or structures, classified by the International Fire Code as a group A, B, E, F, H, I, M, R, S, or U occupancy, where a fire alarm system is installed.

**REQUIRED FIRE ALARM SYSTEM.** According to this code, a fire alarm system must be installed and maintained in an operative condition by the owner/occupant of the premises.

**SERVE.** The hand-delivery of written notification by a fire department representative to the owner/occupant or authorized representative who responds to the premises upon activation of a fire alarm system. If the owner/occupant or authorized representative fails to respond to the premises within 30 minutes of the activation of the fire alarm system, "serve" shall also mean the placement of written notification, form, or other documentation within the postal system operated by the United States Postal Service, addressed to the most current or last known address of the owner/occupant or authorized representative.

**OWNER/OCCUPANT RESPONSIBILITY, RESPONSE, AND NOTIFICATION.**

The owner or occupant of the premises where the fire alarm system is installed is responsible for activating the system.

Once the fire department has responded to a false fire alarm or fire alarm malfunction, it shall be unlawful for the alarm panel to be reset by the owner/occupant of the premises until authorization from the enforcement official has been obtained.

**FALSE FIRE ALARM AND FIRE ALARM MALFUNCTIONS FEE CHARGES.**

No fee shall be assessed for the first three false fire alarms or fire alarm malfunctions or any combination thereof (collectively referred to as "false alarm" or "false alarms") at the same premises within one calendar year. Beginning with the fourth false alarm and continuing through the seventh such false alarm within a single calendar year, a fee in the amount identified in the Fee Schedule of this Code shall be paid by the owner/occupant for each false alarm located in a group A, B, E, F, H, I, M, U, R-1, and S occupancy. After the seventh false alarm has occurred at the premises within a single calendar year, the fee for each additional false alarm located in a group A, B, E, F, H, I, M, U, R-1, and S occupancy during the remainder of the then-current calendar year shall be an amount identified in the Fee Schedule.

False alarms activated by any components connected to the fire alarm system shall be included in computing this section's total number of false alarms.

**SECTION 6-140. OPEN BURNING**

***Ordinance 1807 is hereby repealed.***

A person shall not kindle, maintain, or authorize to be kindled or maintained any open burning unless conducted and approved per this article, and follow all applicable state, county, and local rules.

**DEFINITIONS.**

When used in this article, the following words, terms, and phrases shall have the meanings ascribed to them in this section, except where the context indicates a different meaning.

**OPEN BURNING.** The burning of materials wherein combustion products are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. Open burning does not include road flares, smudge pots, and similar devices associated with safety or occupational uses, typically considered open flames or recreational fires. For this definition, a chamber shall be regarded as enclosed when, during the time combustion occurs, only apertures, ducts, stacks, flues, or chimneys necessary to provide combustion air and permit the escape of exhaust gas are open.

**RECREATIONAL FIRE.** An outdoor fire that burns materials other than rubbish, where the fuel being burned is not contained in an incinerator, outdoor fireplace, barbeque grill, or barbeque pit. It has a total fuel area of three feet or less in diameter and two feet or less in height and is used for pleasure, religious, cooking, warmth, or similar purposes.

**BONFIRE.** An outdoor fire is utilized for ceremonial purposes.

**ENFORCEMENT.** The Fire Chief, or his designated representative, is hereby authorized and directed to enforce all provisions of this article. Enforcement may be by filing a complaint in municipal court, by legal proceedings to enjoin nuisances, or in any other manner authorized by law. An official of the fire department or the police department is authorized to issue citations for violating this article.

1. It shall be a violation of this article for any person being issued a citation for a violation of this article, to be filed in municipal court or any civil proceeding, to fail intentionally or knowingly to give the fire department official or police department official his or her true name and address or to fail deliberately or knowingly to appear per the terms of a citation issued by the fire department official or police department official. For purposes of this section, a person shall be in violation upon failure to provide the requisite identification information upon a request for identification being issued by a person known to be a fire department official or police department official.
2. The owner, lessee, or occupant of the property or structure where this article's violation occurs shall be deemed responsible for such violation.
3. If the individual receiving the citation is absent, the fire department or police department official may send the citation to the property owner by certified or registered mail, and a return receipt may be requested. If the citation is unclaimed, it shall be sent by regular mail. If this regular mailing does not come back unclaimed, then service shall be deemed completed.

## **RULES**

1. You may not burn within the incorporated City limits unless issued a burn permit.
2. A burn permit must be obtained by submitting a burn permit application for the specific area you wish to burn to the Keller Fire Marshal's Office
3. ONLY dry plant growth natural to the burn site can be burned.
4. A competent person of at least 18 years old must attend the site during the burn.
5. An adequate water supply to control the burn is required at the site.
6. Burning hours are from sunrise to sunset, as set forth by the United States Naval Observatory tables available from the National Weather Service.

## **EXCEPTIONS**

1. Complaints are received regarding safety or excessive nuisance smoke, and the complaint is valid (to be determined by the Fire Marshal, Fire Department, or Law Enforcement Officer), burning shall cease.
2. The Tarrant County Fire Marshal's Office determines it is a "No Burn Day".
3. During "Burn Ban" orders enacted by the Tarrant County Commissioners Court.
4. During "Burn Ban" orders enacted by the City of Keller Mayor.

**PERMIT REQUIRED.** Unless otherwise specified herein, a permit shall be required per Section 105 of the 2024 Edition of the International Fire Code, as amended. A permit constitutes permission to conduct processes that produce conditions hazardous to life or property. Such permission shall not be construed as authority to violate, cancel, or set aside any of the

provisions of this article. Such a permit shall not replace any license required by law. The following provisions shall apply to permits:

1. An open burning permit shall be obtained from the Keller Fire Marshal's Office before kindling a fire for recognized silvicultural, range, or wildlife management practices, prevention or control of disease or pests, or recreational fires. Application for such approval shall only be presented by the landowner upon which the fire is to be kindled, and permits shall be issued to the landowner upon which the fire is to be kindled. Application for permits shall be made to the fire department in the form and detail prescribed by the Fire Marshal's Office.
2. Open burning permits shall be issued only upon payment of the permit fee in an amount established by the Fire Department Schedule of Fees.
3. Open burn permits are valid for 30 days from the date of issue. Any extensions to open burn permits shall not exceed 40 days in total.
4. As determined by the Fire Code Official, standby personnel and standby apparatus may be required for the duration of the open burning, and a permit fee assessed per the Fire Department Schedule of Fees.

**COMPLIANCE WITH STATE AND COUNTY REGULATIONS.** Open burning shall only be permitted with prior approval from the state or local air and water quality management authority, provided all conditions specified in the authorization are followed. Open burning shall be conducted per rules promulgated by the Texas Commission on Environmental Quality, as amended, including but not limited to Chapter 111, Subchapter B, outdoor burning, and Chapter 106, subchapter v, section 106.496(d), and pertinent City ordinances. Nothing herein shall require that the City verify the requisite permits, licenses, and site visits mandated by other agencies.

**OPEN BURNING.** Open burning that is offensive or objectionable due to smoke or odor emissions when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited. The fire department official is authorized to order the extinguishment by the permit holder, another person responsible, or the fire department of open burning, which creates or adds to a hazardous or objectionable situation.

**BONFIRES AND TRENCH BURNS.** Bonfires and Trench Burns are not permitted within City limits.

**RECREATIONAL FIRES.** Recreational fires shall not be conducted within 50 feet of a structure or combustible material unless the fire is contained in a container approved by the Fire Code Official. Conditions that could cause a fire to spread within 50 feet of a structure shall be eliminated before ignition.

**PORTABLE OUTDOOR FIREPLACES.** Portable outdoor fireplaces shall be used per the manufacturer's instructions and shall not be operated within 15 feet of a structure constructed of combustible material.

**PERMANENT OUTDOOR FIREPLACES.** A permanent outdoor fireplace shall not be within 15 feet of a structure or combustible material.

**EXCEPTION:**

1. Fireplace appliance. When a UL-listed gas-fired appliance is installed and constructed of non-combustible materials, and non-combustible materials extend a minimum of 12 inches past any structures or combustible materials, it is

permitted to be located closer than 15 feet to a structure or combustible material with approval by the Fire Code Official.

**ATTENDANCE.** Any open burning shall be constantly attended to until the fire is extinguished. A minimum of one portable fire extinguisher, 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 immediately for utilization. The Fire Code Official is authorized to require greater precautions when deemed necessary by the Fire Code Official in his or her discretion, under existing or anticipated circumstances, and such additional precautions shall be addressed before the permit issuance.

**PENALTY.** Any person who violates any provision of this chapter shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine as provided in Section 113 of the adopted fire code amendments.

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