

MARCH 1, 2022

3:00 P.M.

CITY COUNCIL WORKSHOP AGENDA





NOTICE OF WORKSHOP OF THE CITY COUNCIL OF THE CITY OF HARKER HEIGHTS, TEXAS

Notice is hereby given that, beginning at 3:00 p.m. on Tuesday, March 1, 2022,, and continuing from day to day thereafter if necessary, the City Council of the City of Harker Heights, Texas, will hold a workshop in the Kitty Young Council Chamber at 305 Miller's Crossing, Harker Heights, Texas 76548. The subjects to be discussed are listed in the following agenda:

MEETING AGENDA

I. ROLL CALL:

II. PRESENTATIONS BY CITIZENS:

1. Citizens who desire to address the Council on any matter may do so during this item. Please understand that while the Council appreciates hearing your comments, State law (Texas Gov't Code §551.042) prohibits them from: (1) engaging in discussion other than providing a statement of specific factual information or reciting existing City policy, and (2) taking action other than directing Staff to place the matter on a future agenda. Please state your name and address for the record and limit your comments to three minutes.

III. DISCUSSION ITEMS:

 Receive and discuss a presentation on Amendments to §150.02(J) of the Harker Heights Code of Ordinances, relating to the 2021 International Fire Code. (Fire Chief)

Staff Report Attachments

2. Receive and discuss a presentation regarding the Current and Future of Emergency Services for the City of Harker Heights. (Fire Chief)

Staff Report Attachments

IV. ADJOURNMENT:

I hereby certify that the above notice of meeting was posted on the bulletin board of City Hall, City of Harker Heights, Texas, a place readily accessible to the general public at all times, on the 25th day of February 2022, by 2:00 p.m., and remained posted for at least 72 continuous hours preceding the scheduled time of said meeting.

Julie Helsham City Secretary

This facility is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please contact the City Secretary's office at 254-953-5600, or FAX 254-953-5614, or email jhelsham@harkerheights.gov for further information. Pursuant to Chapter 551 of the Government Code the City Council reserves the right to go into Closed Meeting

on any item listed above if deemed necessary.

Note: On occasion the City Council may consider agenda items out of order.



CITY COUNCIL MEMORANDUM

AGENDA ITEM # III-1

FROM: THE OFFICE OF THE CITY MANAGER

DATE: MARCH 1, 2022

RECEIVE AND DISCUSS A PRESENTATION ON AMENDMENTS TO §150.02(J) OF THE HARKER HEIGHTS CODE OF ORDINANCES, RELATING TO THE 2021 INTERNATIONAL FIRE CODE.

EXPLANATION:

The City of Harker Heights is in the process of amending and adopting the 2021 International Fire Codes as promulgated by the International Code Council (ICC). This will enable the City to apply the most current life safety standards, and to maintain our Insurance Service Organization (ISO) rating.

The City's Fire Marshall has attended updated training to understand and properly enforce the new requirements.

ATTACHMENTS:

1. Proposed amendments with indicated potential changes (red-line document)

Recommended Amendments to the 2021 International Fire Code

The following sections, paragraphs, and sentences of the 2021 International Fire Code (IFC) are hereby amended as follows: Standard type is text from the IFC. <u>Underlined type is text inserted.</u> <u>Lined through type is deleted text from IFC.</u> Italicized and or {}, () is informational.

(J) *The International Fire Code, 2015 Edition* as promulgated by the International Code Council Inc., and all subsequently published annual revisions issued, except for the following, which shall amend, and change said code only to the extent referenced:

Section 101.1 "Title." Amend to read: "These regulations shall be known as the Fire Code of <u>The City of Harker Heights</u>, hereinafter referred to as "this code."

(Reason: Several sections of this code require jurisdictional specificity.)

Section 102.1; "Construction and Design provisions." Amend #3 to read: "Existing structures, facilities and conditions when required in Chapter 11 or in other sections of this code." ... {remainder of text unchanged} ...

(Reason: To clarify that there are other provisions in the fire code applicable to existing buildings that are not located in Chapter 11, including but not limited to Section 505 Premises Identification.)

Section 103.1 "Creation of Agency." Amend to read: "The <u>Harker Heights Fire Department Fire Prevention Division</u> is hereby created and the <u>official in charge thereof Fire Chief or his designee</u> shall be known as the *fire code official*. The function of the division shall be the implementation, administration and enforcement of the provisions of this code."

(Reason: Several sections of this code require jurisdictional specificity.)

Section 103.2 "Appointment." Amend to read: "The fire code official shall be appointed by the chief appointing authority of the jurisdiction the Fire Chief or his designee."

(Reason: Several sections of this code require jurisdictional specificity.)

Section 104.1 General. Amend to read: "The fire code official or any peace officer licensed the city of Harker Heights is hereby authorized to enforce the provisions of this code. The fire code official shall have the authority to render interpretations of this code and to adopt policies, procedures, rules, and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules, and regulations shall be in compliance with the intent and purpose of this code. Such policies, procedures, rules and regulations shall not have the effect of waiving requirements specifically provided for in this code."

(Reason: To allow police officers the ability to enforce provisions of this code to correct issues that present an immediate danger such as a blocked fire exit.)

<u>Section 104.3.2 "Photographic Documentation."</u> <u>Amend by adding: "Members of the Fire Department making such examinations or inspections shall have the right, with proper credentials, and be authorized to take a reasonable number of photographs or videotapes for evidence and for records for use by the Fire Department to document violations, study hazards and scientific control for fire safety."</u>

(Reason: To coincide with the laws and rules pertaining to photography and body camera by peace officers)

<u>Section 105.3.1 "Expiration."</u> Amend by adding an exception to read: <u>"Exception: Construction permits attached to, or in association with, the master commercial permit shall not be subject to the provisions of Section 105.3.1 and shall follow the expiration period of the master commercial permit if applicable."</u>

(Reason: To work in conjunction with "master" permits issued by the Building Department.)

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

(Reason: For clarity to allow for better understanding, not all occupancies require a permit.),

Section 105.5 "Required operational permits." Amend to read: "The fire code official is authorized to issue operational permits for the operations set forth in Sections 105.5.1 <u>105.5.2</u> through 105.5.53 <u>105.5.52</u>."

<u>Section 105.5.53 "Food Booths."</u> Add section to read: An operational permit is required for the operation of a food booth. For permit to operate a food booth, see Section 322.

(Reason: For correction of typo and to allow for addition of food booth permits.),

Section 105.6 "Required construction permits." *Amend to read*: "The fire code official is authorized to issue construction permits for work set forth in Sections 105.6.1 through 105.6.25 105.6.24."

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

(Reason: Adds construction permit requirements for electronic access control systems affecting access and/or egress to ensure proper design and installation of such systems.)

107.3 Permit valuations. delete this section in its entirety: The applicant for a permit shall provide an estimated permit value at the time of application. Permit valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the fire code official, the valuation is underestimated on the application, the permit shall be denied unless the applicant can show detailed estimates to meet the approval of the fire code official. Final permit valuation shall be set by the fire code official.

(Reason: The HHFD does not utilize this methodology for establishing Fire Code-required permit fees, as well as have already established and adopted applicable permit fee requirements.)

Section 109.6 "Overcrowding." Amend to read: Overcrowding or admittance of any person beyond the approved capacity of a building or a portion thereof shall not be allowed. The fire code official, an officer of the fire department or any peace officer licensed by the City of Harker Heights on finding any overcrowding conditions or obstructions in aisles, passageways or other means of egress, or on finding any condition that constitutes a life safety hazard, shall be authorized to cause the event to be stopped until such conditions or obstruction is corrected.

Section 109.6.1 "Removal of Occupants". Add section to read: "The fire code official, an officer of the fire department or any peace officer licensed by the City of Harker Heights s is authorized to require the removal of occupants at a location when actual occupancy exceeds the permitted or posted occupant load. A person commits an offense if they refuse to obey an order to vacate."

(Reason: To allow other responsible individuals the ability to correct hazardous life safety conditions on the spot.)

Section 111.1 Board of appeals established. Delete Sections 111.1, 111.2, 111.3 & 111.4 Amend Section 111.1 to read:" Appeals shall be handled as set forth in Section 113 of the adopted international Building Code."

(Reason: Maintain consistence between the various codes.)

Section 112.4 "Violation penalties." Amend to read: "Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents, or directive of the fire code official, or of a permit or certificate under provisions of this code, shall be guilty of a [specify offense] Misdemeanor and upon conviction shall be punished as provided in Section 10.99 of the Code of Harker Heights. punishable by a fine of not more than [amount] dollars or by imprisonment not exceeding [number of days] or both such fine and imprisonment. Each day that a violation continues after notice has been served shall be deemed a separate offense."

SECTION 202, GENERAL DEFINITIONS Amend section to include the following definitions:

"ALL WEATHER DRIVING SURFACE - A driving surface that is capable of supporting the imposed loads of fire apparatus and consisting of material that is impervious to damage from wet conditions and does not produce dust during dry weather conditions. Accepted materials shall consist of concrete or asphalt correctly applied.

(Reason: Accepted practice in the region based on legacy codes.)

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

(Reason: to clarify the range of uses included in the definition)

AS DEVELOPED - The change of use of a parcel of land from a vacant, unimproved tract to one which is prepared for occupancy by buildings or structures, or which becomes occupied by buildings, structures.

(Reason: Accepted practice in the region based on legacy codes.)

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

(Reason: IBC Section 1009 permits unenclosed two-story stairways under certain circumstances.)

<u>DEFEND IN PLACE.</u> 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.

(Reason: Added from International Building Code (IBC) definitions for consistency in interpretation of the subject requirements pertaining to such occupancies.)

FIRE MARSHAL shall mean the designated authority charged with the administration, interpretation, and enforcement of this code, responsible for the investigations of fires and inspection of facilities.

(Reason: Based on legacy codes and to clarify responsibilities.)

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

(Reason: Clearly defines options to the fire department for providing a fire watch.)

FIREWORKS. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, *deflagration*, or *detonation*, <u>and/or activated by ignition with a match or other heat producing device</u> that meets the definition of 1.3G fireworks or 1.4G fireworks. ... {Remainder of text unchanged} ...

(Reason: Increased safety from fireworks related injuries.)

FOSTER CARE FACILITIES. Facilities that provide care to more than five children, 2 ½ years of age or less. shall mean an independent residential occupancy that is the primary residence of the caregiver and licensed by the state to provide twenty four (24) hour care for five or fewer children (including those related to the caregiver) up to the age of eighteen (18) years.

(Reason: To be consistent with State rules and other sections of the code.)

HIGH-PILED COMBUSTIBLE STORAGE: add a second paragraph to read as follows:

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

(Reason: Allows for additional construction safety features to be provided, based on firefighting response capabilities.)

HIGH-RISE BUILDING. A building with an occupied floor located more than 75 55 feet (22860 16764 mm) above the lowest level of fire department vehicle access.

(Reason: Allows for additional construction safety features to be provided, based on firefighting response capabilities.)

MOBILE FOOD PREPARATION VEHICLES. shall mean a mobile food operation using any heat producing equipment for the purpose of preparing and serving food for consumption to the public, from a unit which is wheeled, or otherwise designed to be readily transported from place to place, whether towed or self-propelled, and which is not designed to be permanently connected to domestic water, sanitary sewer systems, or electricity. vehicles that contain cooking equipment that produce smoke or grease-laden vapors for the purpose of preparing and serving food to the public. Vehicles intended for private recreation shall not be considered mobile food preparation vehicles.

(Reason: Allows for a broader definition consistent with legacy codes.)

MOBILE HOME PARK - For purposes of enforcement of these code provisions, a mobile home park shall be considered as commercial property.

(Reason: To apply the codes to common areas.)

MODIFICATION OF A FIRE PROTECTION SYSTEM To change, alter or upgrade a system from its original design, coverage, and method of actions. This may include but is not limited to the following:

- Changing piping or coverage of a system
- Replacing one single board or FA control unit with a newer model
- Conversion from a horn system to a voice alarm system
- Replacing POTS lines with Cellular Dialers

The following are not considered a modification:

- Replacing painted or corroded heads with same type and temp rating or replacing gauges
- Firmware updates
- Software updates
- Replacing boards of the same model utilizing the same or newer firmware

(Reason: This is referenced in several places, but the wording of "modify or repair" is somewhat ambiguous and open to interpretation. Defining it here allows for consistent application.)

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

(Reason: To further clarify types of service work allowed in a repair garage, as well as to correspond with definition in the IBC.)

ROUTE THAT A FIRE HOSE WOULD BE LAID - The routing of fire hose from either a public or approved on-site fire hydrant to the fire apparatus along the length of the public roadway and/or approved private fire lanes.

(Reason: Allows for a broader definition consistent with legacy codes.)

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

(Reason: To provide a definition that does not exist in the code.)

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

(Reason: To provide a definition that does not exist in the code for fire watch accommodations as required by the jurisdiction.)

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

Exception: {No change.}

(Reason: To further protect adjacent property owners/occupants from open burning and/or smoke emissions from open burning.)

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

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

- 1. Texas Commission on Environmental Quality (TCEQ) guidelines and/or restrictions.
- 2. State, County, or Local temporary or permanent bans on open burning.
- 3. Local written policies as established by the fire code official.

(Reason: Amendments to 307.2, 307.4, 307.4.3, and 307.5 better explain current requirements and recognize that jurisdictions have local established policies that best fit their environments.)

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

(Reason: Provides direction as to responsible parties relative to extinguishment of the subject open burning.)

307.4 Location. Amend to read: The location for open burning shall not be less than 50 300 feet (15 240 91 440 mm) from any structure, and provisions shall be made to prevent the fire from spreading to within 50 300 feet (15 240 91 440 mm) of any structure.

Exceptions: {No change.}

307.4.1 Bonfires. Delete entire section: A bonfire shall not be conducted within 50 feet (15 240 mm), of a structure or combustible material, unless the fire is contained in a barbecue pit. Conditions that could cause a fire to spread 50 feet (15 240 mm) of a structure shall be eliminated prior to ignition.

(Reason: To increase the separation distance thereby increasing the safety to adjacent properties, as per applicable TCEQ rules and regulations regarding outdoor burning. Bonfires were deleted in 307.2, per legacy code Bonfires have been deleted).

307.4.2 Recreational fires. Amend to read: Allowed without a permit in approved containers at one- and two-family dwellings, subject to the regulations contained herein. Recreational fires shall not be conducted within 25 feet (7620 mm) 15 feet (3048mm) of a structure or combustible material. Conditions that could cause a fire to spread within 25 feet (7620 mm) 15 feet (3048mm) of a structure shall be eliminated prior to ignition. Fires shall be limited to a maximum of three feet in diameter and two feet in height, must be contained in a non-combustible chimney, outdoor fireplace, fire pit, or other method approved by the Fire Code Official. All openings in the container or fire pit must be covered with wire mesh or other screening materials that will prevent the passage of sparks or embers. No such fire or container used for open burning may be used on any porch, deck, balcony, or other portion of a building. Within any room, space, or under any building overhang.

(Reason: To allow for commercially made devices and decrease the separation distance allowed for outdoor firepits due to their nature of construction having substantial stability.)

<u>307.4.4 Permanent Outdoor Firepit.</u> Add section: Permanently installed outdoor firepits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

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

<u>307.4.5 Trench Burns.</u> Add section: Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2.

(Reason: To provide a greater level of safety for this potentially hazardous fire exposure condition. Decrease in separation distance allowed for outdoor firepits due to permanent nature of construction having substantial securement.)

307.5 Attendance. Amend to read: Open burning, trench burns, bonfires, recreational fires, and use of portable outdoor fireplaces shall be constantly attended until the... {Remainder of section unchanged}

(Reason: Adds attendance for trench burns and deletes bonfires based on previous amendment provision for such.)

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

Exceptions:

- One- and two-family dwellings where LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity] with an aggregate LPgas capacity not to exceed 100 pounds (5 containers). All LP-gas containers shall be stored outside, as per Chapter 61.
- 2. Where buildings, balconies and decks are protected by an <u>approved</u> <u>automatic sprinkler system</u>, <u>and LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity], with an aggregate LP-gas capacity not to exceed 40 lbs. (2 containers). All LP-gas containers shall be stored outside, as per Chapter 61.</u>
- 3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 2-1/2 pounds [nominal 1-pound (0.454 kg) LP-gas capacity].

(Reason: Decrease fire risk in multi-family dwellings and minimizes ignition sources and clarify allowable limits for 1 & 2 family dwellings and allow an expansion for sprinklered multi-family uses. This amendment adds clarification and defines the container size allowed for residences.)

Section 308.1.6.2, Exception #3; Amend to read as follows:

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

(Reason: Section identified in published code is inappropriate.)

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

(Reason: Eliminates the potential fire hazard presented by utilization of such devices and the potential accidental release of such devices.)

Section 311.5 Placards. Amend to read: Any The fire code official is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 114 of this code relating to structural or interior hazards, shall be marked as required by Section 311.5.1 through 311.5.5.

(Reason: There may be situations where placarding is not desired or necessary; also clarifies intent that it is not the fire code official's responsibility to provide the placard.)

<u>Section 319.11</u> Add section: Flammable / Combustible gas containers shall be located and secured on the exterior of the mobile food unit, open to atmosphere or if containers are kept in compartment, said

compartment must be separate from the interior food preparation area. Access must be from the exterior of the unit and compartment floor and exterior door must be vented to the atmosphere.

Section 319.12 Signage. Add section: All mobile units with combustible / flammable gas shall post a "NO SMOKING" sign next to or directly above the bottle and visible to the public. Such sign shall be posted with a minimum of four-inch red lettering on white background.

Section 319.13 "Generators" Add section: Units using electrical power for cooling or heating must provide a shutoff or means of disconnect located outside the confines of the unit, which is readily accessible and marked with a sign consisting of three-inch red letters on a white background, which states "ELECTRICAL SHUTOFF." This shutoff must be placed where it can be readily seen and reached without endangering the person(s) attempting to shut off the power source in the event of a fire or short circuit.

<u>Section 319.14 Baffles.</u> Add section: All deep-fat fryers shall have a steel baffle between the fryer and surface flames of an adjacent appliance or shall maintain a 16-inch separation distance. The baffle, if installed, shall be eight inches in height.

(Reason: to bring legacy changes to the new section)

SECTION 320 - "FOOD BOOTHS." Add Sections to read:

<u>"Section 320.1 "Permits."</u> For permit to operate a food booth, see Section 105.5.53. It shall be unlawful to operate a food booth without a permit.

Section 320.2 "Fire Protection." One 2A –10 BC fire extinguisher shall be required for all food booths. Booths containing deep fat fryers shall also have a class K portable fire extinguisher for up to four fryers having a maximum cooking medium capacity of 80 pounds each. For every additional group of four fryers having a maximum cooking capacity of 80 pounds each, an additional class K extinguisher will be required. For individual fryers exceeding 6 square feet in surface area, class K extinguishers will be installed in accordance with manufacturers' recommendations. All fire extinguishers shall have a current (within a year) inspection sticker from a licensed extinguisher company or provide proof (such as a store receipt) that the extinguisher was purchased sometime within the last 12 months.

<u>Section 320.3 "Location.</u>" Food booths utilized for cooking shall have a minimum of 10 feet clearance on two sides. Booths shall not be placed in fire lanes unless otherwise approved by the fire code official. Booths shall not be placed within 10 feet of amusement rides or devices.

<u>Section 320.4 "Cooking equipment location."</u> Barbeque pits shall not be located within 10 feet of combustible materials. Barbeque pits shall not be located under the food booth canopy.

<u>Section 320.5 "Acceptable Cooking Sources"</u>. The following are the only approved cooking sources for food booths:

- 1. Wood or charcoal
- 2. Propane
- 3. Natural Gas
- 4. Electricity

Section 320.6 "Generators." Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours. Generators shall be isolated from contact with the public. Storage of gasoline is not allowed in or near generators or food booths.

<u>Section 320.7 "Decorations."</u> All decorative material shall be at least six feet away from any open flame, cooking element, or heat source or be flame resistant.

<u>Section 320.8 "Escape route."</u> All concession stands shall have a minimum of a 36-inch aisle for emergency escape.

Section 320.9" Propane." All equipment used in conjunction with propane tanks must be UL Listed for the purposes in which they will be used. Tanks shall be secured to prevent falling. Tanks shall only be white or aluminum in color. Only one spare tank will be allowed in a food booth. Emptied propane tanks are to be removed from the site immediately after use. Regulators shall be attached to the tanks as close as possible. Leaks can be detected using a soap and water solution. Tank shutoff valves and/or additional shutoff valves shall be accessible and away from the cooking appliance(s). Propane tanks shall not be within five feet of an ignition source. Propane tanks shall not be located within 10 feet of a building door or window.

Section 320.10 "Area." A food booth shall consist of an area 10 feet by 10 feet. Extended food booths that exceed 10 feet by 10 feet space and used for cooking will be charged additional fees. These fees will be charged in one hundred square foot increments and any portion thereof."

(Reason: Accepted practice in the region based on legacy codes.)

<u>Section 401.9 "False Alarms and Nuisance Alarms."</u> Add section to read: "False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner."

(Reason: To support false alarm requirements in other ordinances)

Section 403.4 Group E Occupancies. *Amend to read:* An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. <u>A diagram depicting two evacuation routes shall be posted in a conspicuous location in each classroom.</u> Group E occupancies shall also comply with Sections 403.4.1 through 403.4.3.

(Reason: The diagrams are intended to assist with egress in such occupancies – specifically, the primary teacher is not always present to assist children with egress. Also, such will help reinforce evacuation drill requirements.)

Section 404.2.2 Fire safety plans. Add Number 4.10. to read as follows:

4.10. Fire extinguishing system controls.

(Reason: This information could be of great help to be on such plans to facilitate locating sprinkler valves to minimize water damage, for instance.)

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

(Reason: Reflects current practice in the region relative to ensuring fire department and EMS access during construction, which can be a time of increased frequency for emergency incidents.)

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

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.

(Reason: Amendments to 503.2.1 recognize that the equipment now used in firefighting is increasing in size. The code already recognizes that larger dimensions may be required under Section 503.2.2. The amendments are to standardize the dimensions for this area. With the increase in fire apparatus size, this will allow for the passage of two fire apparatus during a fire or EMS emergency.)

503.2.3 Surface. Amend to read: Fire apparatus access roads shall be designed and maintained to support imposed loads of at least <u>85,000 Lbs. for</u> fire apparatus and shall be surfaced so as to provide all-weather driving capabilities. <u>Drivable grass surfaces</u>, or other alternative drivable surfaces, are permitted when approved by the Fire Marshal or his designee and in accordance with all of the following conditions:

- 1. Sealed documents indicating compliance with the provisions of 503.2.3 shall be submitted by a registered design professional for review.
- 2. The drivable grass surface, or alternative drivable surface, shall not be used as the primary access to the site.
- 3. The surface shall be capable of supporting the imposed load of fire apparatus weighing at least 85,000 pounds.
- 4. Red traffic reflectors shall be provided on each side of the surface every 20 feet to clearly mark its boundaries. Vegetation on and surrounding the surface shall be maintained such that said reflectors are visible at all times.
- 5. Sod is not permitted to be placed over the drivable base.
- 6. Concrete curbing, or other approved edging, shall be installed along both sides of the portion to be used as such for enhanced lateral stability.
- 7. If sand or other free-flowing fill is used as a main structural component for the surface, concrete curbing or other approved edging shall be installed along both sides of the surface for material containment.
- 8. The surface shall be maintained in proper working order at all times when utilized as a required fire lane. Should the surface become damaged or fall into disrepair, the Fire Marshal or his designee shall be authorized to require the repair and re-certification of said surface."

(Reason: To address the current size of fire trucks in use – figure derived from DOT requirements for waiver of vehicle exceeding such weight and from current maximum weights of fire trucks being purchased by jurisdictions in our area. And to allow for alternatives)

Section 503.2.5 "Dead Ends." Amend to read: Dead-end fire apparatus access roads in excess of 150 feet (54720 mm) in length "Required fire apparatus access when not connected at both ends to a public roadway, shall be provided with an approved area for the turning around of fire apparatus. A turn around as approved by the Fire Marshal or as permitted by Appendix D are acceptable. Cul-de-sac as noted in Appendix D shall have a minimum radius of fifty (50) feet."

(Reason: Accepted practice in the city based on legacy codes.)

503.3 Marking. Amend to read: Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING — FIRE LANE Striping, signs, or other markings, when approved by the fire code official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

(1) Striping – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING TOW AWAY ZONE" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

(2) Signs – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

(Reason: Establishes a standard method of marking and reflects regional long-standing practices.)

503.4 Obstruction of Fire Apparatus Access Roads. *Amend to read:* Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and 503.2.2 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

(Reason: As originally worded, the section implied that vehicles could be parked in the marked fire lane and not be in violation if the minimum width is still maintained. Current accepted enforcement practice is to require the entire marked fire lane to be maintained clear and unobstructed.)

Section 503.6.1 "Direction of Swing." Add new section to read: "Security gates installed across a Fire Apparatus Access Road shall swing in the direction of travel or open horizontally to avoid backing up of Fire Apparatus and to allow for an expedited response."

Section 503.7 "Abandonment of Fire Apparatus Access Roads" Add new section to read: "No owner or person in charge of any premises served by an existing required fire apparatus access road shall abandon or close any such fire apparatus access road without first complying with the following procedure:

1. A request to the Fire Code Official shall be made in writing by the owner, stating the reasons for abandonment of the fire apparatus access road.

- 2. The Fire Code Official shall determine if said property is no longer subject to the requirements of this Code. The Fire Code Official shall either approve or deny the request for abandonment and notify the owner in writing within 10 working days of receiving the request.
- 3. No fire apparatus access road may be abandoned until the Fire Code Official has approved the abandonment in writing."

505.1 Address Identification. Amend to read: New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) 6 inches (152.4 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, pole or other sign with approved 6 inch (152.4 mm) height building numerals or addresses and 4 inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. Address identification shall be maintained.

Exception: R-3 Single Family occupancies shall have approved numerals of a minimum 4 inches (101.6 mm) in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

(Reason: To increase the minimum addressing requirements for commercial properties and establish a minimum for single-family residential properties Such improves legibility of these signs which are critical to emergency response in a more timely manner.)

Section 507.3 "Fire flow." *Amend to read*: "Fire Flow requirements for buildings or portions of buildings and facilities shall be determined by an as per Appendix B of the International Fire Code or approved method as determined by the Fire Marshal."

(Reason: To include the Appendix and indicate if other method used it could be approved.)

507.5 Fire hydrant systems. *Amend to read*: Fire hydrant systems shall comply with Sections 507.5.1 through <u>507.5.6.507.5.10</u>

507.5.1 Where required. Amend to read: Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved rout around the exterior of the facility or building, onsite fire hydrants and mains shall be provided where required by the *fire code official*.

Exceptions:

- 1. For group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m)
- 2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirements shall be 600 feet (183 m)

All Public and/or private fire hydrants and mains are required to be installed as follows:

- 1. All non-residentially zoned property or use: As the property is developed, fire hydrants shall be located at a maximum spacing of three hundred (300) feet, as measured along the length of the roadway or as determined by the Fire Code Official. No part of the structure shall be further than five hundred (500) feet from the fire hydrant, as measured by the route that a fire hose would be laid.
- 2. All residentially zoned property or use, except one- and two-family dwellings: As the property is developed, fire hydrants shall be located at a maximum spacing of six hundred (600) feet, as measured along the length of the roadway or as determined by the Fire Code Official. No part of the structure shall be further than five hundred (500) feet from the fire hydrant, as measured by the route that a fire hose would be laid.
- <u>507.5.1.2</u> "Accessibility." Add section to read: "No fire flow credit is allowed for hydrants which are located or so obstructed as to make their use impractical, such as, but not limited to, hydrants across railroad tracks, across limited access highway, expressways, primary thoroughfares, minor or principal arterials, across creeks or streams, or walls."

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

(Reason: Additional guidance based on legacy language to ensure these critical devices are available in an emergency incident.)

<u>Section 507.5.7 "Design Criteria for Water Mains."</u> <u>Add sections to read: "The minimum diameter for public water mains shall be six inches in single-family residential areas and eight inches in all other areas. Larger mains may be required to accommodate fire flow requirements."</u>

Section 507.5.7.1. Flow Rate. All fire hydrants must be capable of and maintain a minimum flow rate, as measured by Fire Department gauges, of 1,000 gpm in single-family residential areas; 1,250 gpm in

commercially zoned areas; and 1,500 gpm in all other areas.

Section 507.5.7.2. Where the fire service mains are used to supply required fire hydrants, the mains shall be sized to flow the required fire flow as determined by Section 507.3.

Section 507.5.7.3. Where the fire service mains are used to supply required fire hydrants plus fire sprinkler and/or fire standpipe systems, the mains shall be sized to flow the larger of the fire hydrant flow demand as determined by Section 507.3, the fire sprinkler demand or the fire standpipe demand as determined by as determined by Chapter 9.

Section 507.5.7.4. When sizing the fire service main, the distribution of the fire flow among the required fire hydrants (as determined by 507.5.7.2 or 507.5.7.3 above) shall be no less than 1,000 gpm at the hydraulically remote fire hydrant, with the remaining fire flow equally distributed among the remaining required fire hydrants, unless otherwise determined by the Fire Marshal.

Section 507.5.7.5 Private fire mains shall be hydraulically calculated.

Section 507.5.7.6. Water pressure in private fire mains shall not be less than thirty-five pounds per square inch (35 psi) with no hydrants in use. When hydrants are in use supplying the required fire flow, water pressure in the main at the fire hydrant discharge level shall be not less than 25 pounds per square inch (25 psi) residual.

<u>Section 507.5.7.7.</u> The minimum required number of fire hydrants for the fire flow determined by Section 507.3 shall be specified in Appendix C, Table C 102.1.

Section 507.5.7.8. Except for specific requirements of this code, all hydrants and mains required for private protection shall be designed, constructed, and operated in conformance with the City of Harker Heights criteria, specifications and regulations for public fire hydrants and mains on public streets and NFPA 24.

Section 507.5.7.9. Fire hydrants located on un-looped six inch (6") water mains of more than eighteen hundred feet (1,800'), or on looped six inch (6") water mains of more than three thousand five hundred feet (3,500'), shall not be considered as meeting the requirements of this code."

<u>Section 507.5.8 "Fire Hydrant Installation Criteria."</u> Add section to read: "Fire hydrants shall be installed per the following criteria:

- 1. All required fire hydrants shall be Mueller Super Centurion or American -Darling three-way break-away-type, painted reflective yellow, no less than five and one-quarter inches (5-1/4") in size, and shall conform to the provisions of the latest AWWA specifications.
- 2. Fire hydrants shall be right tum only.
- 3. The steamer (pumper) connection shall have a nominal inside diameter of 4 inches and shall have two other hose connections with a nominal inside diameter of 2.5 inches in addition to the steamer (pumper) connection.
- 4. Fire hydrants shall be a minimum of two feet (2') and a maximum of six (6') feet from the gutter face of the curb which forms a public way or Fire Lane. Fire hydrants located on private property and/or in parking lots adjacent to a Fire Lane or public way shall meet the same requirement for distance and be located on a curbed island and/or protected from damage in accordance with Section 312.
- 5. Gate valves shall be placed on all fire hydrant leads.
- 6. Required fire hydrants shall be installed so the break-away point will be no less than three inches (3") and no greater than five inches (5") from finished grade.
- 7. All required fire hydrants shall be installed with the steamer connection facing the fire apparatus access road, street or fire lane, as applicable.
- 8. All required fire hydrants shall be approved by the Fire Code Official and installed by the contractor in accordance with City Standards prior to the delivery of combustible materials to the construction site.
- 9. There shall be no parking within fifteen feet (15') of either side of a fire hydrant, along the curb

line or within three feet (3') of the backside of any fire hydrant. Fire hydrants shall not be blocked to the front."

<u>Section 507.5.9 "Maintenance."</u> Add sections to read: "All fire hydrants shall be inspected and flushed annually. All such inspections and flushing shall be the responsibility of the Harker Heights Fire <u>Department."</u>

<u>Section 507.5.9.1</u> Any maintenance or repairs required to keep private on-site fire hydrants in proper working order shall be the responsibility of the owner of same, subject to the discretion of the Fire Department's annual inspection and flushing.

<u>Section 507.5.9.2</u> All required private on-site fire hydrants shall be accessible to the Fire Department at all times."

<u>Section 507.5.10 "Required Extension."</u> <u>Add section to read:</u> "The Fire Code Official may require that an individual extend a six-inch (6") or larger water main and install an on-premises fire hydrant conforming to these regulations, in cases where it is determined that a structure will be situated such that it cannot comply with the maximum distance requirements of subsection 507.5.7 of this code."

(Reason: All of Section 507.5 are Legacy changes to continue to maintain the local standard for hydrants and water supply)

- **605.4 Fuel oil storage systems.** *Amend to read:* Fuel oil storage systems for building heating systems shall be installed and maintained in accordance with this code. Tanks and fuel-oil piping systems shall be installed in accordance with Chapter 13 of the *International Mechanical Code* and Chapter 57.
- **605.4.1 Fuel oil storage in outside, above-ground tanks.** *Amend to read:* Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31 and Chapter 57.
- **605.4.1.1 Approval.** *Amend to read:* Outdoor fuel oil storage tanks shall be in accordance with UL 142 or UL 2085, and listed as double wall/secondary containment tanks.
- **605.4.2 Fuel oil storage inside buildings.** *Amend to read:* Fuel oil storage inside buildings shall comply with Sections 605.4.2.2 through 605.4.2.8 or and Chapter 57.
- 605.4.2.1 Approval. Indoor fuel oil storage tanks shall be in accordance with UL 80, UL 142 or UL 2085.
- **605.4.2.2 Quantity limits.** Amend to read: One or more fuel oil storage tanks containing Class II or III combustible liquid shall be permitted in a building. The aggregate capacity of all tanks shall not exceed the following:
 - 1. 660 gallons (2498 L) in unsprinklered buildings, where stored in a tank complying with UL 80, UL 142 or UL 2085, and also listed as a double-wall/secondary containment tank for Class II liquids.
 - 2. 1,320 gallons (4996 L) in buildings equipped with an *automatic sprinkler* system in accordance with Section 903.3.1.1, where stored in a tank complying with UL 142 or UL 2085. The tank shall be listed as a secondary containment tank, and the secondary containment shall be monitored visually or automatically.
 - 3. 3,000 gallons (11 356 L) in buildings equipped with an *automatic sprinkler* system in accordance with Section 903.3.1.1, where stored in protected above-ground tanks complying with UL 2085 and Section 5704.2.9.7. The tank shall be listed as a secondary containment tank, as required by UL 2085, and the secondary containment shall be monitored visually or automatically.

(Reason: Issues addressed by Chapter 57, such as venting to outside of buildings, remote fill to outside of

building, overfill protection, physical protection, etc., are not included in Section 605.4, so compliance with Chapter 57 is also required. The applicability to heating systems only was removed from the charging statement based on this more prudent method of diesel storage for generators, boilers, fire pumps and other fuel-fired equipment inside buildings without requiring Group H occupancy classification.)

Section 609.1 "General." Amend to read: "Commercial kitchen exhaust hoods shall comply with the requirements of the *International Mechanical Code* and NFPA 96."

(Reason: Clarification of the use of NFPA 96 as well).

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

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

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

(Reason: This change allows an increase in wall coverage due to the presence of sprinklers. Also provides additional guidance relative to fire resistance requirements in these areas.)

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

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

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

(Reason: This change allows an increase in wall coverage due to the presence of sprinklers. Also provides additional guidance relative to fire resistance requirements in these areas.)

<u>901.6.1.1 Standpipe Testing.</u> Add section to read: <u>Building owners/managers must maintain and test standpipe systems and FDCs as per NFPA 25 requirements and tagged in accordance with the Texas Administrative Code.</u>

(Reason: Clarify these systems are tested with the rest of a sprinkler system.)

<u>901.6.4 False Alarms and Nuisance Alarms.</u> Add section to read: <u>False alarms and nuisance alarms shall</u> not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any <u>manner.</u>

(Reason: Places the responsibility on the business or property owner to maintain their fire alarm systems

in approved condition. Allows the enforcement of "prohibition of false alarms" from other areas of the city ordinances.)

903.2.1.3 "Group A-3." Amend to read: "An automatic sprinkler system shall be provided for fire areas containing Group A-3 occupancies and intervening floors of the building where one of the following conditions exists:

- 1. The fire area exceeds 12,000 square feet (1115 m2).
- 2. The fire area has an occupant load of 300 or more.
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
- 4. Any pool hall, billiard parlor or dance hall type occupancies that serves alcohol shall comply with the fire sprinkler requirements for Group A-2 Occupancies in section 903.2.1.2."

(Reason: To clarify the stricter A-2 requirement for the potential inability to escape due to possible impairment.)

903.2.11 Specific buildings areas and hazards. *Amend to read*: In all occupancies other than group U an automatic sprinkler system shall be installed for building design or hazards in locations set forth in Sections 903.2.11.1 through 903.2.11.6 903.2.11.9.

903.2.11.3 Buildings 55 35 feet or more in height. Amend to read: An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more, other than penthouses in compliance with Section 1511 of the International Building Code, located 55 35 feet (46 764 10 668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exception:

- 1. One- and two-family dwellings Occupancies in Group F-2.
- <u>903.2.11.7 High-Piled Combustible Storage.</u> Add section to read: For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply.
- <u>903.2.11.8 Spray Booths and Rooms.</u> Add section to read: New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system
- Section 903.2.11.9 "High volume low speed fans in new and existing buildings." Add section to read: "The use of High-Volume Low Speed (HVLS) or High-Volume Low Velocity (HVLV) fans in fire sprinkled areas of new and existing buildings shall only be permitted as follows:
 - 1. HVLS fans are permitted in rack storage and palletized storage arrangements up to twenty (20) feet in height in buildings with thirty (30) feet or less ceiling clearance, when Early Suppression Fast Response (ESFR) sprinklers are used to protect the storage array.
 - 2. HVLS fans are permitted in light-hazard and ordinary-hazard occupancies as defined in NFPA 13. Standard for the Installation of Sprinkler Systems.
 - 3. HVLS fans are not permitted in sprinkled areas with palletized storage greater than twelve feet (12') in height protected by control mode sprinklers.
 - 4. In all cases, HVLS fans are required to be designed and installed to shut down automatically on any fire alarm signal. This includes automatic shut down upon sprinkler system water flow alarm or any manual or automatic fire alarm detection device provided in the space.
 - 5. In all cases, the clearance between the HVLS fans and the ceiling sprinklers and the top of storage shall be III compliance with the obstruction and clearance rules of NFPA 13.

Exception: When a technical opinion and report is provided in accordance with Section 104.8.2, the Fire Marshal or his designee shall analyze the opinion and report and may

approve the use of HVLS or HVLV fans in additional areas when it is determined that the effectiveness of the fire sprinkler system is not compromised."

(Reason: Provides sprinkler protection based on multiple factors including firefighting philosophies/capabilities.)

903.2.4.2 Group F-1 distilled spirits. *Amend to read*: An automatic sprinkler system shall be provided throughout a Group F-1 fire area used for the manufacture of distilled spirits <u>involving more than 120 gallons of distilled spirits</u> (>16% alcohol) in the fire area at any one time.

(Reason: To establish a sprinkler criteria limit based on existing maximum allowable quantities provided for flammable liquids in a non-sprinklered space from Chapter 50 and allow very small distillery type operations without sprinkler requirements as has been historically allowed.)

903.2.8.1 "**Group R-3.**" *Amend to read*: "An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 occupancies."

Exceptions:

- 1. One- and two-family dwellings.
- 2. FOSTER CARE FAMILY HOME as defined in Section 202 General Definitions.

(Reason: State law prohibits requiring sprinkler systems in one- and two-family dwellings.)

<u>903.2.8.5 "Group R-2."</u> Add section to read: <u>"An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 occupancies."</u>

Exceptions:

1. Construction of one (1) apartment building containing up to four (4) units on a single lot, constructed with a two (2) hour fire separation (with no penetrations) from slab to the underside of the roof between dwelling units, shall not be required to install a fire sprinkler system.

903.2.9.3 Group S-1 distilled spirits or wine. *Amend to read:* An automatic sprinkler system shall be provided throughout a Group S-1 fire area used for the bulk storage of distilled spirits or wine <u>involving</u> more than 120 gallons of distilled spirits or wine (>16% alcohol) in the fire area at any one time.

(Reason: To establish a sprinkler criteria limit based on existing maximum allowable quantities provided for flammable liquids in a non-sprinklered space from Chapter 50 and allow very small storage operations without sprinkler requirements as has been historically allowed.)

903.3.1.1.1 Exempt Locations. *Amend to read:* Automatic sprinklers shall not be required in the following rooms or areas where such ... *{text unchanged}* ... because it is damp, of fire-resistance-rated construction or contains electrical equipment.

- 1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
- 2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, where approved by the fire code official.
- 3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
- 4. Rooms or areas that are of noncombustible construction with wholly noncombustible contents.
- 5. Fire service access Elevator machine rooms, and machinery spaces, <u>and hoist ways, other than pits</u> where such sprinklers would not necessitate shunt trip requirements under any circumstances.
- 6. {remainder of text unchanged.}

(Reason: Exception 4 deleted to provide protection where fire risks are poorly addressed.)

903.3.1.2 NFPA 13R sprinkler systems. Amend to read: Automatic sprinkler systems in Group R

occupancies shall

be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions:

- 1. Four stories or less above grade plane.
- 2. The floor level of the highest story is 30 35 feet (9144 10668 mm) or less above the lowest level of fire department vehicle access.
- 3. The floor level of the lowest story is 30 35 feet (9144 10668 mm) or less below the lowest level of fire department vehicle access. {remainder of text unchanged.}

(Reason: The change to the 2021 IFC over-reached to limit 13R systems to 30 ft. high at topmost floor level, which basically results in limiting 13R systems to 3 story buildings in reality. This change to 35 ft. would still allow 13R systems in 4 story apartment buildings, as has been allowed historically and as intended by 13R's scope.)

903.3.1.2.2 Corridors and balconies *Amend as follows:* **in the means of egress.** Sprinkler protection shall be provided in <u>all</u> corridors and for <u>all</u> balconies. **in the means of egress where any of the following conditions apply:** {Delete the rest of this section.}

(Reason: Corridor protection is critical to the means of egress, and corridors are regularly utilized for miscellaneous storage, fixtures, artwork, food kiosks and beverage dispensers, and furnishings. Balcony protection is required due to issues with fire exposure via soffit vents and the potential for significant combustible loading.)

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

(Reason: To allow the use of the Plumbing section of the International Residential Code (IRC) and recognize current state stipulations in this regard.)

904.14 Domestic cooking facilities. *Amend to read:* Cooktops and ranges installed in the following occupancies shall be protected in accordance with Section 904.14.1

- 1. {text unchanged}
- 2. {text unchanged}
- 3. {text unchanged}
- 4. <u>In Groups B, E F, H, I-4, M and S where domestic cooking facilities are installed in accordance with the International Building Code.</u>

(Reason: Cooking fires remain the #1cause of both residential and commercial fire. Unattended cooking remains the #1 cause of cooking fires. This bring protection to other occupancies such as day care and home economics room is schools.)

Section 906.1Where required. Amend section by deleting Exception 3 as follows: {text unchanged}

3. In storage areas of Group S occupancies where forklift, powered industrial truck or powered cart operators are the primary occupants,

fixed extinguishers, as specified in NFPA 10, shall not be required where in accordance with all of the following:

- 3.1. Use of vehicle-mounted extinguishers shall be approved by the fire code official.
- 3.2. Each vehicle shall be equipped with a 10-pound, 40A:80B:C extinguisher affixed to the vehicle using a mounting bracket approved

by the extinguisher manufacturer or the fire code official for vehicular use.

3.3. Not less than two spare extinguishers of equal or greater rating shall be available on-site to replace a discharged extinguisher.

3.4. Vehicle operators shall be trained in the proper operation, use and inspection of extinguishers.
3.5. Inspections of vehicle-mounted extinguishers shall be performed daily.

{remainder of text unchanged.}

(Reason: This provision of only having vehicle-mounted fire extinguishers is not at all consistent with historical practice of requiring extinguishers throughout based on travel distance. Often, the vehicle is what has caused the incident and/or may be the source of the incident, so having the extinguisher vehicle-mounted results in greater potential injury of the user. This assumes the only occupants in the building are on a vehicle, which again, significantly reduces access to fire extinguishers throughout the building to other occupants. Future use of the building/tenancy may change further complicating the issue.)

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

Exception: {No change.}

Activation of fire alarm notification appliances shall:

- 1. Cause illumination of the *means of egress* with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
- 2. Stop any conflicting or confusing sounds and visual distractions.

(Reason: Increases the requirement to be consistent with Group B requirement. Also addresses issue found in Group A occupancies of reduced lighting levels and other A/V equipment that distracts from fire alarm notification devices or reduces ability of fire alarm system to notify occupants of the emergency condition.)

907.2.3 Group E. Amend to read: 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 occupancies. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

{No change to remainder of text.}

(Reason: To distinguish educational from day care occupancy minimum protection requirements. Further, to define threshold at which portable buildings are considered a separate building for the purposes of alarm systems. Exceptions provide consistency with State law concerning such occupancies.)

907.2.10 Group S. Amend to read: 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 three stories or greater in height for interior corridors and interior common areas. Visible notification appliances are not required within storage units.

Exception: {No change to remainder of text.}

(Reason: Because of the potential unknown fire load and hazards in self-storage type facilities, which could include flammable liquids for instance, as well as other hazardous materials, prompt evacuation in the event of fire alarm is needed; therefore, notification in the corridors/common areas is critical to all such

occupancies, regardless of height.)

Section 907.2.13, High-rise buildings. Exception #3; change to read as follows:

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

(Reason: To indicate that enclosed areas within open air seating type occupancies are not exempted from automatic fire alarm system requirements.)

907.6.3 Initiating device identification. *Amend by deleting all four exceptions*. 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 and supervisory status, as appropriate.

Exceptions:

- 1. Fire alarm systems in single-story buildings less than 22500 square feet (2090m²) in area.
- 2. Fire alarm systems that only include manual fire alarm boxes, waterflow initiating devices and not more than 10 additional alarm initiating devices.
- 3. Special initiating devices that do not support individual device identifications.
- 4. Fire alarm systems or devices that are replacing existing equipment.

(Reason: To assist responding personnel in locating the emergency event for all fire alarm systems. This is moved from 907.6.5.3 in the 2012 IFC and reworded to match new code language and sections.)

Section 907.6.6 Monitoring *Amend by adding a sentence at end of paragraph to read as follows:* Fire alarm systems required by this chapter or by the *International Building Code* shall be monitored by an approved supervising station in accordance with NFPA 72. See 907.6.3 for the required information transmitted to the supervising station.

(Reason: To assist responding personnel in locating the emergency event for all fire alarm systems. This was moved from 907.6.5.3 in the 2012 IFC and reworded to match new code language and sections (legacy language.)

912.2.1 Visible location. *Amend to read:* Fire department connections shall be <u>remote and freestanding</u> <u>from the building</u> <u>located on the street side of buildings or</u> facing *approved* fire apparatus access roads, fully visible and recognizable from the street, fire apparatus access road or nearest point of fire department vehicle access or as otherwise *approved* by the *fire code official*.

<u>912.2.3 Hydrant Distance.</u> Add section to read: An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

(Reason: To accommodate limited hose lengths, improve response times where the FDC is needed to achieve fire control, and improve ease of locating a fire hydrant in those situations also. Also, consistent with NFPA 14 criteria.)

1032.2 Reliability. Amend to Read: Required exit accesses, exits and exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency where the building area served by the means of egress is occupied. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress.

(Reason: Maintain legacy levels of protection and long-standing practice and provide firefighter safety.)

1103.5 Sprinkler Systems *Amend to read:* An automatic sprinkler system shall be provided in existing buildings in accordance with Section 1105.5.1 through 1103.5.7

(Reason: To provide for adding a section.)

1103.5.1 Group A-2 *Amend to read:* Where alcoholic beverages are consumed in a Group A-2 occupancy having an occupant load of 300 or more, the *fire area* containing the Group A-2 occupancy shall be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1. <u>Fire sprinkler system</u> installation shall be completed within 24 months from date of notification by the fire code official.

(Reason: This a retroactive requirement and the change allows business owners adequate time to budget to accommodate the cost of the fire sprinkler system.)

1103.5.3 Group I-2 Condition 2. Amend to read: In addition to the requirements of Section 1103.5.2 existing buildings of Group I-2 Condition 2 occupancy shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The automatic sprinkler system shall be installed as established by the adopting ordinance 31 January 2023 [DATE BY WHICH SPRINKLER SYSTEM MUST BE INSTALLED].

(Reason: Several sections of this code require jurisdictional specificity.)

<u>1103.5.6 Spray Booths and Rooms</u>. *Add section to read*: Existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404.

(Reason: Consistent with amendment to IFC 2404, and long-standing requirement to protect this hazardous operation.)

<u>Sec. 1103.5.7 Existing R-1, 2, 3, and 4 Occupancies:</u> Add section to read: <u>In R-1, 2, 3, and 4 occupancies</u> where a fire has occurred and displaces more than one occupant, the affected building shall be firesprinkled prior to re-occupancy of the unit/building.

1103.7 Fire alarm systems. *Amend to read:* An approved fire alarm system shall be installed in existing buildings and structures in accordance with Sections 1103.7.1 through 1103.7.6 and provide occupant notification in accordance with Section 907.5 unless other requirements are provided by other sections of this code. *{No change to remainder of text.}*

(Reason: To provide for adding a section.)

<u>1103.7.7 Fire Alarm System Design Standards.</u> Add section to read: Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

<u>1103.7.7.1 Communication requirements.</u> Add section to read: Refer to Section 907.6.6 for applicable requirements.

(Reason: To assist responding personnel in locating the emergency event and provide clarity as to percentages of work that results in a requirement to upgrade the entire fire alarm system.)

1203.1 General. *Amend to read:* Emergency power systems and standby power systems required by this code or the International Building Code shall comply with Sections 1203.1.1 through <u>1203.1.9</u> <u>1203.1.10</u>.

(Reason: To provide for adding a section.)

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

Section 2401.2 Nonapplicability. Delete this section in its entirety.

(Reason: This section eliminates such booths from all compliance with Chapter 24 including, but not limited to: size, ventilation, fire protection, construction, etc. If the product utilized is changed to a more flammable substance, the lack of compliance with Chapter 15 could result in significant fire or deflagration and subsequent life safety hazard.)

3103.3.1 Special amusement area. Delete this section in its entirety.

(Reason: This section requires a fire sprinkler system to be installed in temporary tents and membrane structures, which is not a reasonable or enforceable requirement for a temporary use. A fire watch or fire alarm system is a more advisable approach for such occupancies that are only temporary in nature.)

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

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

(Reason: This is a long-standing legacy requirement and provides passive protection for extremely large buildings where it would be otherwise impossible to control the spread of fire without the fire wall in place in an uncontrolled fire event, which is much more likely in high hazard commodities, such as tires, flammable liquids, expanded plastics, etc.)

Section 3311.1 Required access. Amend to read: Approved vehicle access for firefighting and emergency response shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 50 feet (30 480 15 240 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available. When fire apparatus access roads are required to be installed for any structure or development, access shall be approved prior to the time which construction has progressed beyond completion of the foundation of any structure. Whenever the connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign.

(Reason: Improves access to the FDC where required, as well as coordinates with the timing of installation amendment from Section 501.4.)

5601.1.3 Fireworks. *Amend as follows*: The possession, manufacture, storage, sale, handling, and use of fireworks are prohibited.

Exceptions:

- 1. Only when approved for fireworks displays, the storage and handling of fireworks as allowed in Section 5604 and 5608.
- 2. Manufacture, assembly and testing of fireworks as allowed in Section 5605.
- 3.2. The use of fireworks for <u>approved</u> fireworks displays as allowed in Section 5608.... {Delete remainder of text.}

(Reason: Restricts fireworks to approved displays only, which is consistent with regional practice. Such is intended to help protect property owners and individuals from unintentional fireworks fires within the jurisdiction, as well as to help protect individuals from fireworks injuries. It is noted that there has been a change in the State Law to allow possession of unopened fireworks in certain areas of the vehicle, and it is highly recommended that AHJ's familiarize themselves with the applicable State Laws in this regard.)

5704.2.9.6.1 Locations where above ground tanks are prohibited. *Amend to read:* Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited [JURISDITION TO SPECIFY] without prior written approval from the fire code official.

(Reason: Several sections of this code require jurisdictional specificity.)

5704.2.11.4 Leak Prevention. *Amend to read:* Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 and 5704.2.11.4.2 <u>An approved method of secondary containment shall be provided for underground tank and piping systems.</u>

(Reason: Increased protection in response to underground leak problems and remediation difficulty in underground applications. Coordinates with TCEQ requirements.)

5806.2 Limitations. *Amend to read:* Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited [JURISDITION TO SPECIFY] without prior approval from the fire code official.

(Reason: Several sections of this code require jurisdictional specificity.)

6104.2 Maximum capacity within established limits. Amend to read: Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7579 L) [JURISDITION TO SPECIFY] without prior written approval from the fire code official.

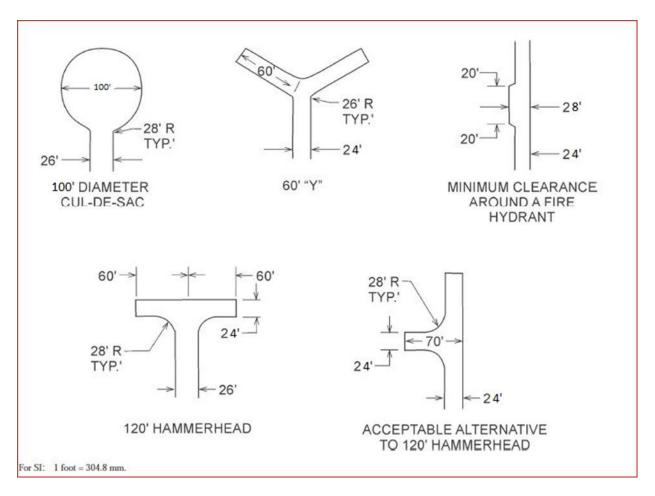
(Reason: Reduces the hazard presented by such containers when natural gas is already available. Please note that current State Law does not allow for the enforcement of any rules more stringent than that adopted by the State, so this amendment is only applicable as to the extent allowed by that State Law.)

Appendices A, J, K, and M are not adopted. Appendices B, C, D, E, F, G, H, I and L are hereby adopted.

D102.1 Access and loading. Amend to read: Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an *approved* fire apparatus access road with an asphalt, concrete or other *approved* driving surface capable of supporting the imposed load of fire apparatus weighing up to 75,000 85,000 pounds (34 050 38 556 kg).

(Reason: To address the current size of fire trucks in use – figure derived from DOT requirements for waiver of vehicle exceeding such weight and from current maximum weights of fire trucks being purchased by jurisdictions in our area.)

Appendix D. "FIRE APPARATUS ACCESS ROADS." Amend accompanying figure D103.1 to show:



(Reason: To match the dimensions established in 503.2.1)

"D103.4 Dead ends. Amend to read: Dead-end fire apparatus access roads in excess of 150 feet (45,720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4 and 503.2.5.

TABLE D103.4
REQUIREMENT FOR DEAD-END FIRE APPARATUS ACCESS Amend to show:

REQUIREMENT FOR DEAD-END FIRE AFFARATOS ACCESS Afficila to show.		
LENGTH	WIDTH	TURNAROUNDS REQUIRED
(feet)	(feet)	
0 - 150	20 <u>24</u>	None Required 120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-
		sac in accordance with Figure D103.1
151 - 500	20 -24	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in
		accordance with Figure D103.1
501 - 750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in
		accordance with Figure D103.1
Over 750		Special Approval Required

For SI: 1 foot = 304.8 mm

D103.5 Fire apparatus access road gates. Amend to read: Change item 1 to read: Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the gate width shall be not less than 20 24 feet (6096 7315.2 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm). {No change to remainder of text.}

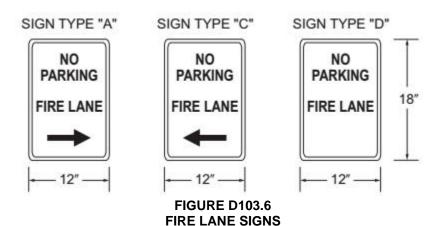
(Reason: Reflects current increased apparatus access roadway widths as indicated in the recommended amendment to 503.2.1.)

D103.6 Signs. Marking. Amend to read: Striping, signs, or other markings, when approved by the *fire code official*, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

(1) Striping – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKINGTOW AWAY ZONE" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

(2) Signs – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high (See Figure D103.6). Signs shall have red letters on a white reflective background, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

Where required by the *fire code official*, fire apparatus access roads shall be marked with permanent "NO PARKING—FIRE LANE" signs complying with Figure D103.6, or other approved method. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.



(Reason: Reflects current markings for apparatus access roadways as indicated in the recommended amendment to Section 503.3)

D103.6.1Roads 20 to 26 feet in width. Delete Section: Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm).

D103.6.2 Roads more than 26 feet in width. Amend to read: Fire lane signs as specified in Section

D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide (7925 mm) or more and less than 32 feet wide (9754 mm).

(Reason: Reflects current markings for apparatus access roadways as indicated in the recommended amendment to 503.3 and D103.6, changes to D103.6.2 allow for an exception to 503.3 and D103.6.)

D104.3 Remoteness. Amend to read: 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.

(Reason: To provide some additional flexibility to the fire code official on the location of the two fire apparatus access roads.)

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

(Reason: To provide some additional flexibility to the fire code official on the location of the aerial fire apparatus access roads.)

D106.3 Remoteness. Amend to read: 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.

(Reason: To provide some additional flexibility to the fire code official on the location of the two fire apparatus access roads.)

***Section D107.2; change to read as follows:

D107.2 Remoteness. Amend to read: 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.

(Reason: To provide some additional flexibility to the fire code official on the location of the two fire apparatus access roads.)



CITY COUNCIL MEMORANDUM

AGENDA ITEM # III-2

FROM: THE OFFICE OF THE CITY MANAGER

DATE: MARCH 1, 2022

RECEIVE AND DISCUSS A PRESENTATION REGARDING THE CURRENT AND FUTURE OF EMERGENCY SERVICES FOR THE CITY OF HARKER HEIGHTS.

EXPLANATION:

Discuss the current and future needs of the Fire Emergency Services.

ATTACHMENTS:

1. HHFD Overview Presentation

HHFD Overview & Presentation

- Engine
- Medic Unit
- Battalion Chief
- Brush Truck
- Reserve Medic Unit
- 21 Personnel across three shifts
 - A shift
 - B shift
 - C shift



Station 2

- Quint
- Medic Unit
- Brush Truck
- Reserve Engine
- 18 personnel across three shifts
 - A shift
 - B shift
 - C shift





Response Territory

City limits – 15.7 sq. miles

County response area – approximately 12 sq. miles.

Calls for Service

2011 Calls for service

- Fire calls for service 620
- EMS calls for service 2501
- Total calls 3121
- 8.5 responses per day

2016 Calls for service

- Fire calls for service 733
- EMS calls for service 3197
- Total 3930
- 10.7 responses per day

- Fire calls for service 1711
- EMS calls for service 4329
- Total calls -6040
- 16.5 responses per day

- ❖58% from Central Fire Station
- ❖42% from Station 2

2021 Calls for Service

Call Volume Increase Over Time

35% increase - 2011 to 2016

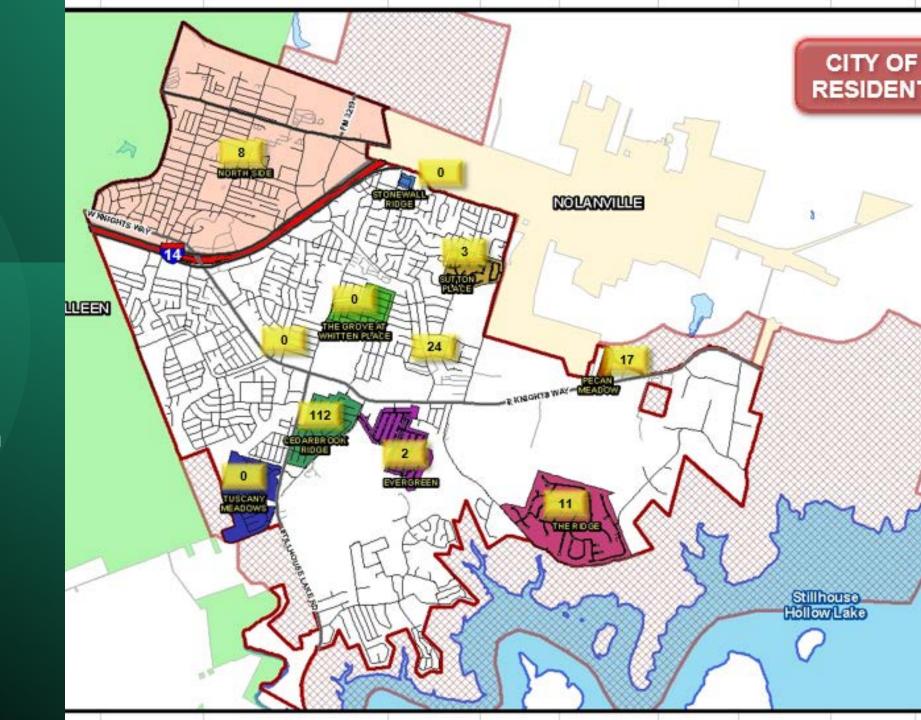
48% increase - 2011 to 2021

Development

City growth

For example: 2021 Calendar year residential permits

71% of the permits occurred in the Station 2 and proposed Station 3 district.



Density 2010

- Population 26,700
- Population density in 2010 was 1,756 per sq. mile

Sources

https://www.harkerheights.gov/images/PDF/planning/2017AnnualReport.pdf https://worldpopulationreview.com/us-cities/harker-heights-tx-population

Density 2021

- Population 34,422,+7,722
- Population density,
 2,200 people per sq.
 mile, a 20% increase.

Source

Population - City of Harker Heights December 2021 Economic Development Report

Distance – Central Fire Station

Central Fire station

- Approximately 85% of the City is within 4 miles of Central Fire Station and the remaining 15% is 5-7 miles.
- Approximately 65% of the City is within a 0-5 minute response time from Central, 10% is within 7 minutes and the remaining 25% is 10 minutes or greater.

Distance – Station 2

Station 2

- Approximately 90% of the City is within 4 miles of Station 2 and the remaining 10% is 5-7 miles.
- Approximately 75% of the City is within 0-5 minutes response time from Station 2, 10% is within 7 minutes and the remaining 15% is 10 minutes or greater.

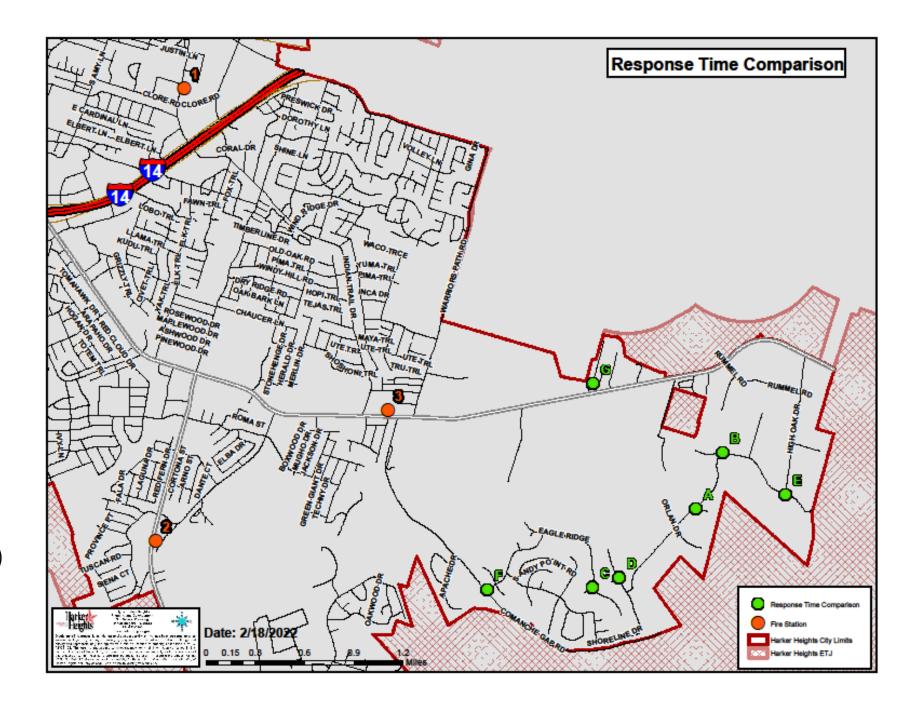
Distance – Proposed Station 3

Proposed Station 3 location, 1761 FM 2410/Knights Way

- Approximately 90% of the City is within 4 miles of this location and the remaining 10% is greater than 5 miles but less than 7.
- Approximately 91% of the City is within 0-5 minutes response times from proposed site, 8% is within 7 minutes and 1% is 10 minutes or greater.

Response Time Comparison

- A. Welch Cove & Lakeside
- B. Highview & Lakeside Dr.
- C. Shoreline Dr & Cedar Breaks Ct.
- D. Eagle Ridge/Vista Dr
- E. High Oak Dr & Highview Dr.
- F. Comanche Gap & Lake Front
- G. Hankus A & Hankus B (new residential subdivision off FM 2410)



Stations Proposed Station 3

Approximately 98% of the City is covered in a 0-5-minute response time and the remaining 2% is within 7 minutes.

Deployment – Insurance Rating

- Fire Stations coverage is specifically important for insurance ratings. Public Protection Classification (PPC) also known as the Insurance Service Office or ISO rating.
 - The City of Harker Heights current rating as of November 2021 is a 3/3X.
 - What that means is, if you live within 5 road miles of a fire station and within 1000 feet of a creditable water supply, you will have a 3 classification for your fire insurance rating.
 - If you live inside the 5 road miles but beyond 1000 ft. from a creditable water supply, your insurance rating is a 3X.
 - The higher the ISO rating, the higher the insurance rates are for residents and commercial agencies.

Deployment — National Fire Protection Association (NFPA)

- The planning standard for fire apparatus response comes directly from NFPA 1710 which establishes standards for response times as well as the numbers of personnel that are needed to respond to specific types of fires, such as a residential, commercial, apartment and high-rise structural fires.
- As for response times, NFPA 1710 standard for a 4-minute response for first due apparatus and the remaining level of response to arrive on scene within an additional 4 minutes, thus making it be a total of 8 minutes for all units to be on scene for residential, commercial and apartment fires.
 - For high-rise fires, this number moves to 10 minutes for all dispatched resources to be on scene with the initial first-due apparatus still recommended to be on scene within 4 minutes.

Items to Consider:

- Land city owns the property
- Building w/equipment and accessories \$5-6 million
- Training building (this structure can also assist in lowering the PPC classification) -\$350,000
- Fire Truck \$750,000 with equipment
- Medic unit 375,000 with equipment
- Personnel (ongoing costs)
 Total estimated costs \$7-8 million



Questions?

