Fire Prevention Code

AN ORDINANCE REPEALING ORDINANCE NUMBER 2013-03 AND ENACTING IN LIEU THEREOF A NEW ORDINANCE PRESCRIBING MINIMUM REQUIREMENTS AND CONTROLS TO SAFEGUARD LIFE, PROPERTY OR PUBLIC WELFARE FROM THE HAZARDS OF FIRE AND EXPLOSION: KNOWN AS THE FIRE PREVENTION CODE: PROVIDING FOR THE ISSUANCE OF PERMITS, COLLECTION OF FEES, MAKING OF INSPECTIONS, PROVIDING PENALTIES FOR THE VIOLATIONS THEREOF:

BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE ROBERTSON FIRE PROTECTION DISTRICT OF ST. LOUIS COUNTY, MISSOURI AS FOLLOWS:

SECTION 1. INCONSISTENT ORDINANCES REPEALED.

Ordinance number 2013-03 of the Robertson Fire Protection District of St. Louis County, Missouri, and all other Ordinances or parts of Ordinances in conflict herewith are hereby repealed.

SECTION 2. ADOPTION OF FIRE PREVENTION CODE.

That a certain document, one (1) copy of which are on file in the office of the Fire Marshal of the Robertson Fire Protection District of St. Louis County, Missouri, being marked and designated as "ICC©, International Fire Code, 2015 Edition" as published by the International Code Council, Inc., together with the standards which are referenced in Chapter 80, Appendix B-"Fire Flow Requirements for Buildings", Appendix C- "Fire Hydrant Locations and Distribution", Appendix D-"Fire Apparatus Access Roads"), Appendix F- "Hazard Ranking", Appendix L- "Requirements for Fire Fighter Air Replenishment Systems", Appendix M- "High-rise Buildings-Retroactive Automatic Sprinkler Requirement", be and is hereby adopted as the Fire Code of the Robertson Fire Protection District of St. Louis County, Missouri, regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefore; for the control of buildings and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions, and terms of the "ICC©, International Fire Code, 2015 Edition", are hereby referred to, adopted and made a part hereof, as if more fully set out in this Ordinance, with the additions, insertions, deletions and changes prescribed in Section 4 of this Ordinance, all of which shall be referred to as the "Fire Prevention Code" or the "Fire Code". The "ICC©, International Fire Code, 2015 Edition" may be viewed at

"http://codes.iccsafe.org/app/book/toc/2015/Icodes/

2015_IFC_HTML/index.html" or purchased from the International Code Council, 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001 or by calling (800) 786-4452.

SECTION 3. JURISDICTIONAL TITLES.

101.1 Wherever (name of jurisdiction) appears in such Code, it shall read the Robertson Fire Protection District of St. Louis County, Missouri.

103.2 "Code Official", "Fire Code Official" or "Building Official" wherever it may appear is defined as the Fire Marshal of the Robertson Fire Protection District of St. Louis County, Missouri, or the duly authorized representative.

103.1 "Department of Fire Prevention" wherever it may appear shall be read as "Division of Fire Prevention".

SECTION 4. AMENDMENTS, MODIFICATIONS, ADDITIONS, AND INSERTIONS TO THE "ICC© INTERNATIONAL FIRE CODE, 2015 EDITION".

CHAPTER 1

SECTION 101.1 Insert: Robertson Fire Protection District

SECTION 103.1 Delete in its entirety. Insert:

103.1 General. The Division of Fire Prevention/Life Safety is established within the jurisdiction under the direction of the Fire Marshal. The function of the division shall be the implantation, administration, and enforcement of the provisions of this code.

SECTION 104.10.2 Add a new Section. Insert:

104.10.2 Investigative authority. The Fire Marshal and such other personnel designated by the Fire Chief, shall have general police powers for the express purpose of enforcing the fire code and investigating fires and explosions. This power shall extend to the collection, preservation and storage of evidence, the interview of persons, or any other lawful action necessary to permit the peaceful completion of any lawful action by the Fire District.

SECTION 104.12 Add a new Section. Insert:

104.12 Rule-making authority: The Fire Marshal shall have authority as necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations to interpret and implement the provisions of this code to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such rules shall not have the effect of waiving structural or fire performance requirements specifically provided for in this code or of violating accepted engineering practice involving public safety.

SECTION 105.3.3. Delete existing text. Insert:

105.3.3 Occupancy prohibited without approval.

A building, structure or portion thereof, shall not be used or occupied, in whole or in part, without approval of the Fire Marshal. This shall apply to new buildings, buildings undergoing alteration, modification or repair and buildings or tenant spaces undergoing re-occupancy. All fire protection devices and equipment protecting the building, structure or portion to be occupied shall be tested and approved by the code official charged with enforcing this code. All portions of the means of

egress for the building, structure or portion to be occupied shall be unobstructed and available for immediate use.

SECTION 105.6.47 Add a new section. Insert:

105.6.49 Helicopter hoisting and lowering operations: Approval is required for helicopter hoisting and lowering operations in accordance with the following.

The helicopter service or the contractor in charge of a helicopter hoisting or lowering operations shall demonstrate financial responsibility of liability for damages arising from the hoisting or lowering operation by providing the Fire Marshal with proof of insurance or other appropriate financial responsibility. Forty-eight hours notice shall be provided before the hoisting or lowering operation is to begin. Notification shall be made to other jurisdictional agencies as may be required.

SECTION 105.6.47.1 Add a new section. Insert:

105.6.49.1 Safety precautions: During all helicopter lifting or lowering operations, the following safety precautions shall be followed:

1. The fire and police departments shall approve landing sites, if landings are necessary.

2. All materials or equipment to be lifted shall be brought as close as possible to the building or structure site by road vehicles.

3. The helicopter shall not carry equipment or materials lifted to or lowered from a building or structure over pedestrians, spectators, other buildings or vehicles.

4. When the operation involves setting or removing equipment or materials from or on an occupied building, the top 2 floors of the building shall not be occupied by anyone, other than individuals directly involved with the operation while the hoisting or lifting operation is in progress.

5. All flammable or combustible liquids brought to the site for refueling helicopters shall be stored, used and dispensed in accordance with this code.

6. A fire department safety officer, of fire department safety team, must be present on the sited during all helicopter lifting or lowering operations. The safety officer, or safety team, shall terminate the lift if weather conditions or other variables make the operation unsafe. The safety officer, or safety team, shall be provided radio communications with the helicopter pilot in the event safety conditions mandate evasive action.

SECTION 105.7.19 Add a new section. Insert:

105.7.19 Occupancy Permit. Any proposed tenant of any commercial building shall obtain an Occupant Permit from the Fire District prior to occupying the commercial space. The Occupancy Permit must remain valid and in effect for lawful occupancy to take place.

SECTION 105.7.19.1 Add a new section. Insert:

105.7.19.1 Occupancy permit no longer valid: Any Occupancy Permit issued by the Fire District shall be rendered void and no longer valid under the following circumstances:

- A. Any use of the building other than that was identified in the permit application.
- B. Modification of the space without permit.
- C. Failure to correct cited fire code violations within 60 days.
- D. Tampering with any life safety system of the building or any acts which deliberately impair a sprinkler or fire alarm system.

SECTION 108.1 through 108.3 Delete in its entirety. Insert:

108.1 Appeals process. An owner, lessee, agent, operator or occupant aggrieved by an order pursuant to this order, may file an appeal to the Board of Directors of the Robertson Fire Protection District within ten (10) days from the service of any order, and the Board of Directors shall fix a time and place not less than five (5) days or more than ten (10) days thereafter when and where such an appeal may be heard by it. Such appeal shall stay the execution of such order until it has been heard and reviewed, vacated or confirmed by the Board. In computing the number of days, Saturdays, Sundays and legal holidays shall be excluded.

The Board of Directors shall, at such hearings, affirm, modify, revoke or vacate such order. In conducting and holding the hearing, the Board of Directors shall follow the procedures set forth in §536 RSMo for "contested" matters. Unless revoked or vacated, such order shall then be complied with.

Nothing herein contained shall be deemed to deny the right of any person, firm, corporation, copartnership or voluntary association to appeal from an order of a decision of the Board of Directors to a court of competent jurisdiction. Appeals from final decisions of the Board shall be to the appropriate Circuit Court, pursuant to the provisions of §536.100 RSMo. Such appeals shall stay the execution of such order until it has been heard and reviewed, vacated or confirmed by the Court.

SECTION 109.3 Delete in its entirety. Insert:

109.3 Violation, penalties: Persons who shall violate any provision of this Ordinance, or who shall fail to comply with any of the requirements thereof, or who shall erect, construct, alter or repair a structure in violation of the approved construction documents or directive of the Fire Marshal, or of a permit or certificate issued under the provisions of this Ordinance, or shall start any work requiring a permit without first obtaining a permit therefor, or who shall continue any work in or about a structure after having been served a stop-work order, except for such work which that person has been directed to perform to remove a violation or unsafe condition, or any owner or tenant of a building, or premises or any other person who commits, takes part or assists in any violation of this Code or who maintains any building or premises in which such may cause to be instituted in the name of the District, a civil action for injunction or other appropriate relief to secure a compliance with the provisions of this Code. Injunctive or other appropriate relief shall not be denied on the grounds that an adequate remedy at law exists through the imposition of criminal sanctions.

SECTION 109.5 Add a new section. Insert:

109.5 Unlawful continuance: Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe conditions, shall be liable to penalties as specified in Section 109.3 of this Ordinance.

SECTION 109.6 Add a new section. Insert:

109.6 Civil action: Notwithstanding the provisions hereof, the Fire Marshal, with the approval of the Board of Directors, may cause to be instituted in the name of the District, a civil action for injunction or other appropriate relief to secure a compliance with the provisions of this Code. Injunctive or other appropriate relief shall not be denied on the grounds that an adequate remedy at law exists through the imposition of criminal sanctions.

SECTION 111.4 Delete in its entirety. Insert:

111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be in violation of Section 109.4 and 109.5 of this ordinance and liable to a fine of not less than \$5.00 or more than \$500.

CHAPTER 3

SECTION 308.4.2 Add a new section. Insert:

Section 308.4.2 Group R-1 hotels and motels. Candles, incense and similar open-flame-producing items shall not be allowed in sleeping units in Group R-1 hotel and motel occupancies.

Section 308.4.2.1 Portable cooking devices prohibited. It shall be unlawful for an owner, operator, or guest of any R-1 lodging establishment, to use, provide, or knowingly allow the use of a portable electrical or open-flame cooking device or appliance, including but not limited to hot plates, electric skillets and grills, propane and charcoal grills, camp stoves, slow cookers, crock pots, and any similar cooking device on the premises of an R-1 lodging establishment. Exceptions.

- 1. Approved kitchens or kitchenettes
- 2. Microwave ovens
- 3. Coffee makers

CHAPTER 5

SECTION 503.4 Delete in its entirety. Insert:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads and fire lanes shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances shall be maintained at all times. Objects or vehicles causing the obstruction are subject

to removal or towing by a local towing service in accordance with Section 304.157 R.S.MO. or local municipal ordinance.

SECTION 505.1. Delete in its entirety. Insert:

505.1 Address identification. New and existing buildings shall have 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 identification on glass shall be white in color. Building address numbers shall be Arabic numbers format. Suite or sub-address identification shall be Arabic number or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 6 inches (152 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response this will include but is not limited to every multi-unit building in the Fire District to affix address numbers, at least four (4) inches high, on or near the rear entrance of each unit. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained at all times.

SECTION 505.1.1 Add a new Section. Insert:

505.1.1 Address identification – remote exits. Address identification shall be provided at all remote exit doors in all occupancies.

Exception: Detached structures constructed in accordance with the International Residential Code.

SECTION 507.5.1.1 Add a new section. Insert:

507.5.1.1 Hydrant for fire department connections. A fire hydrant shall be located

within 100 feet of the fire department connection.

Exception: The distance shall be permitted to be greater than 100 feet when approved.

SECTION 507.5.5 Delete in its entirety. Insert:

507.5.5 Clear space around hydrants. There shall be no obstructions, planting, bushes, trees, signs, light standards, etc., within six (6) feet of any fire hydrant in all directions.

SECTION 507.5.5.1 Add a new section. Insert:

507.5.5.1 No parking area: When fire department connections are located in an area where vehicles may be parked or standing, said parking or standing shall be restricted for ten (10) feet in each direction from the fire department connection. Objects or vehicles are subject to removal or towing by a local towing service in accordance with Section 304.157 R.S.Mo. or local municipal ordinance.

SECTION 507.5.7 Add a new section. Insert:

507.5.7 Color coding of public fire hydrants: All public fire hydrant barrels are to be painted yellow. All fire hydrant bonnets are to be painted as follows:

COLOR WATER MAIN SIZE

Green Twelve (12) inch and larger

Orange Eight (8) and ten (10) inch

Red Six (6) inch and smaller

SECTION 507.5.8 Add a new section as follows. Insert:

507.5.8 Color coding of private fire hydrants: All private fire hydrants shall be painted red, including the bonnet.

CHAPTER 6

SECTION 607.1.1 Add a new section as follows. Insert:

607.1.1 Elevator emergency operations testing: All elevators that are equipped with emergency elevator operations in accordance with ASME A17.1, shall be tested at least once each year in all phases of emergency functions. An approved elevator service company shall conduct tests.

CHAPTER 9

SECTION 901.6.2 Delete in its entirety. Insert:

901.6.2 Records. Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for a minimum of 3 years or for the required testing frequency if greater than 3 years and shall be made available to the fire code official, not less than quarterly. Accurate logs shall be maintained indicating the number, location and type of device tested. Any defect, modification or repair shall be logged. Additional tag or system inspection record, identifying date, inspector, system pressures and company who inspector is employed shall be attached to each system riser or posted in the immediate area of each system riser. The company conducting the inspection shall have an address and telephone number identified on the tag or system inspection record.

SECTION 901.6.3. Add a new section. Insert:

901.6.3 Annual inspection reporting. All fire protection systems, which require an annual or semi-annual inspection under the respective NFPA Code shall submit such reports to the Fire District within thirty (30) days of the inspection in an Adobe PDF electronic format or via printed copy delivered to fire district.

SECTION 903.4.1 Delete in its entirety. Insert:

903.4.1 Monitoring. Alarm, supervisory and trouble signals shall be distinctly different and shall be monitored in accordance with Section 907.6.6 and shall sound an audible signal at a constantly attended location.

Exceptions:

1. Underground key or hub valves in roadway boxes provided by the municipality or public utility are not required to be monitored.

2. Backflow prevention device test valves located in limited area sprinkler system supply piping shall be locked in the open position. In occupancies required to be equipped with a fire alarm system, the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

<u>SECTION 903.4.2 Add a new Section. Insert:</u> Approved audible and visual devices shall be connected to every automatic sprinkler system. Such alarm devices shall be located in approved location(s) on the exterior and interior of the building at a location(s) approved by the Fire Official.

SECTION 903.5.1 Add a new section. Insert:

903.5.1 Water flow safety factor. A safety factor shall be applied to all flow tests for automatic sprinkler systems. A parallel curve shall be drawn to the actual flow test curve that has been reduced by 20% of the static pressure. An automatic sprinkler system design shall not exceed the 20% curve.

SECTION 903.6.1 Add a new Section. Insert:

903.6.1 New sprinkler system in existing buildings: For any *existing* non-sprinklered building where a sprinkler system is being installed, by election or by requirement, the Fire Sprinkler Permit and Underground Fire Main Permits shall be issued as a flat-rate permit where the Construction Cost is valued at zero dollars (\$0) but the base permit fee is applied.

SECTION 903.7 Add a new Section. Insert:

903.7 Post indicator valves: All automatic sprinkler systems, except limited area sprinkler systems, shall be provided with a post indicator valve or other approved system that shall control the water supply to all automatic sprinkler systems in that building.

SECTION 904.4.1. Delete in its entirety. Insert:

904.4.1 Acceptance inspection tests. All alternative automatic fire-extinguishing systems shall be tested in accordance with this section. A completed system shall be tested by a discharge of expellant gas through the piping and nozzles. Observations for gas leakage and for continuity of piping with free unobstructed flow shall be made. Observations shall be made of the flow of expellant gas through all nozzles. The identification of devices with proper designations and instructions shall be checked. All dry-chemical and wet-chemical extinguishing systems shall also

be tested by a discharge of the extinguishing agent. Discharge quantities shall be in accordance with the manufacturer's installation information and provide on construction documentation. After testing, all piping and nozzles shall be blown clean using compressed air or nitrogen, and the system shall be properly charged and placed in the normal "set" condition. Where persons will be exposed to an alternative automatic fire extinguishing system discharge, warning signs and discharge alarms shall be provided.

SECTION 906.1 Add a new subsection. Insert

7. In all hotels, motels, dormitories, lodging houses and apartment buildings, at least one (1) portable fire extinguisher shall be provided on each floor at the stairway landing, in the corridor at each elevator or bank of elevators and in the community laundry rooms.

SECTION 907.1.4 Add a new section. Insert:

907.1.4 Alarm device labeling. All fire alarm and detection devices shall be labeled with a device identification number in an approved manner. Upon an activation signal of a device, the location and the device identification number shall be displayed and correspond with the information on the fire alarm control panel.

SECTION 907.1.5. Add a new section. Insert:

907.1.5 Multiple Fire Alarm Systems. Multiple fire alarm systems within a single protected premise, building or complex are not permitted, unless specifically authorized by the Fire Marshal.

SECTION 907.5.3. Add a new section. Insert:

907.5.3 Notification at Fire Department Connection. An approved exterior audible and visual fire alarm notification appliance shall be installed above all fire department connections. This device shall activate upon a water flow fire alarm signal only. This device shall be visible from the closest fire apparatus access road and installed at twelve feet above ground level or other approved location.

907.5.3.1 Fire Department Connection Signage. A permanent sign bearing the letters "FDC" in red reflective lettering on white background shall be maintained at the Fire Department Connection in an *approved* location. This sign shall be a minimum of 12" x 18".

SECTION 907.6.6. Delete in its entirety. Insert:

907.6.6 Monitoring. Where required by this chapter or by the International Building Code, an approved supervising station in accordance with NFPA 72 shall monitor fire alarm systems. A (UL) Underwriters Laboratories Certificate (UUFX) or (FM) Factory Mutual Placard, in accordance with the 2007 Edition of NFPA 72, shall be issued by the UL Listed or FM Approved prime contractor for all newly installed fire alarm systems in commercial occupancies. This regulation shall apply to all fire alarm systems that are newly installed in commercial occupancies for which permits are required by the Robertson Fire Protection District on or after May 1, 2018. Any existing fire alarm system in a commercial occupancy wherein the fire alarm control panel and alarm system

components are to be replaced shall be considered newly installed for the purposes of this section. Also, any existing fire alarm system where four (4) or more "nuisance" alarms (determined to be from a system malfunction) occur in a one (1) month period shall be subject to the same certification requirement as a new fire alarm system or replacement of an existing fire alarm system. The Fire Prevention Division shall maintain a listing of local UL Listed or FM Approved prime contractors. Central station service in full compliance with the 2007 Edition of NFPA 72 shall be maintained at the protected property, so long as the requirement for the fire alarm system exists.

Exception. Monitoring by an approved central station is not required for:

1. Single- and multiple-station smoke alarms required by Section 907.2.11.

2. Smoke detectors in Group I-3 occupancies.

3. Automatic sprinkler systems in one- and two-family dwellings.

4. Fire alarm systems monitored by a proprietary monitoring system in accordance with NFPA 72 Chapter 26 for which a UL Certificate (UUKA) or FM or other approved documentation has been issued, as approved by the fire code official.

907.7.6.2 System Certification. All newly installed or re-certified commercial Fire Alarm Systems shall be approved by the Fire Marshal. The certification shall indicate that the Fire Alarm System is in compliance with Adopted Codes.

907.7.6.3 Inspection, Testing and Maintenance.

(A) The Owner shall ensure that all Fire Alarm Systems are inspected and tested at least once per year in accordance with Adopted Codes and standards.

(B) The Owner shall ensure that all Fire Alarm Systems are periodically maintained per manufacturer specifications and Adopted Codes.

907.7.6.4 Fire Alarm Activation; Response.

(A) The Owner shall be responsible for any activation of a Fire Alarm System. The Owner or Fire Alarm Business employee shall notify the Fire District or Fire Dispatch Agency prior to any planned activation of the fire alarm such as for fire evacuation drills or alarm testing. Prior to fire evacuation drills, alarm testing or construction that may activate alarms, the Owner shall take the system out of service by contacting the alarm monitoring company. If an alarm is received by the alarm monitoring company during the time that the alarm was agreed to be out of service, the alarm will be disregarded and the fire department shall not be notified.

(B) A response to the activation of a Fire Alarm System shall result when any officer of the Fire District is dispatched to the Premises where the Fire Alarm System has been activated.

(1) When an alarm is activated, it is the responsibility of the alarm monitoring company to immediately notify a Keyholder and such person(s) shall respond to the Premises.

(2) The keyholder, if on the premises at the time of the alarm, shall advise the alarm monitoring company of the situation. This information shall be immediately provided to the fire department.

(3) In the event the household or residential Fire Alarm System is a Monitored System, it is the responsibility of the alarm monitoring company to call the residence to verify the alarm prior to contacting the fire department.

SECTION 912.3.4 Add a new Section. Insert:

912.3.4 No parking areas at fire department connections: When fire department connections are located in an area where vehicles may be parked or standing, said parking or standing shall be restricted for ten (10) feet in each direction from the fire department connection. Objects or vehicles causing the obstruction are subject to removal or towing by a local towing service in accordance with Section 304.158 R.S.Mo. or local municipal ordinance.

SECTION 916. Add a new Section. Insert:

SECTION 916 - Fire Hydrants

916.1 New Subdivisions. No person shall commence construction of any new building or structure of any kind in any subdivision within the District, unless such person shall have first submitted to the Fire Marshal a plat of the aforesaid subdivision, indicating the proposed installation of the fire hydrants within such subdivision and receive approval by the Fire Marshal and furthermore shall have said public fire hydrants operable with the start of construction.

916.2 New Structures. No person shall commence construction of any new structure, or building, or addition to any structure or building, within or upon any real property within the District, unless such person shall first have submitted to the Fire Marshal a plat or drawing of the property whereon is located such building, structure or addition, which plat or drawing has indicated thereon the nearest existing fire hydrant. If there is not an existing fire hydrant within such distance as is approved by the Fire Marshal, then also the proposed installation of a new fire hydrant or hydrants, and unless, also, the particular locations proposed for such fire hydrants and the number of fire hydrants to be installed if any, shall be approved by the Fire Marshal.

916.3 Installation of other new fire hydrants. No person shall install or cause to be installed any fire hydrant within the District, unless the location thereof and the design and type of the hydrant, including the threads and outlets thereof, shall first have been approved by the Fire Marshal.

916.4 Use Groups R-3 and R-4. There shall be no more than six (6) dwelling units constructed prior to the installation of a public water system with fire hydrants as set forth herein so as to be accessible for Fire District use in the event of a fire emergency.

916.5 Other Use Groups. In all other Use Groups, public water systems with fire hydrants shall be installed with the commencement of construction.

916.6 Fire hydrant placement. Fire hydrants shall be placed within the guidelines of Section 916.6.1 through 916.6.8.

916.6.1 One- and two-family dwellings developments. In Groups R-3 and R-4 occupancies, single family residential developments, fire hydrant spacing shall not exceed five hundred (500) feet from hydrant to hydrant. Local conditions may be such that this distance may vary as much as one hundred (100) feet in either direction, if otherwise approved the Fire Official.

916.6.1.1 Water supply required. In Use Groups R-3 and R-4 single family developments, when the density is one (1) dwelling unit per ten-thousand (10,000) square feet of developed property or less, and there are five (5) or more dwelling units in a single development.

916.6.2 Other occupancy group developments: In all other Use Groups, fire hydrant spacing shall not exceed three hundred (300) feet from hydrant to hydrant, or as special site conditions may dictate. No part of a building shall be more than three hundred (300) feet from a fire hydrant. Local conditions may be such that this distance may vary as much as one hundred (100) feet in either direction, if otherwise approved by the Fire Official.

916.6.3 Area to be provided with fire hydrants. Fire hydrants and water mains shall be placed along the full length of the property to be developed that abuts an existing and/or proposed improved public way. Variances may be required by the water agency because of water quality considerations.

916.6.4 Fire hydrant spacing. Spacing of fire hydrants along a public way shall be regulated by the occupancy classification of the development that abuts the existing and/or proposed public way.

916.6.5 Private hydrants. The commencement of construction in any development by any such person within the Fire District shall be deemed to be a guarantee by such person to the Fire District that such person will cause the fire hydrants to be installed according to the aforesaid plat, as approved by the Fire Official. In areas of commercial construction, private fire hydrants shall be installed at a spacing of six hundred (600) feet of separation from hydrant to hydrant. Local conditions may be such that this distance may vary as much as one hundred (100) feet in either direction, if otherwise approved by the Fire Official.

916.6.6 No parking area at fire hydrants. Where fire hydrants are required to be installed in areas where vehicles would be parked or standing, said vehicle parking or standing shall be restricted for ten (10) feet in each direction from the fire hydrant.

916.6.7 Unacceptable locations for fire hydrants. Fire hydrants shall not be permitted in the locations indicated in Section 916.6.7.1.

916.6.7.1 Prohibited locations: A fire hydrant shall not be placed at any location where the fire hydrant could be damaged by vehicular traffic.

916.6.8 Relocation of fire hydrants. Relocation of fire hydrants requested or required by a property owner and/or developer shall be relocated as specified by the water agency's policies, procedures and relocation has been approved by the fire code official.

916.7 Fire hydrant installation. All fire hydrants shall be installed in accordance with Sections

916.7.1 through 916.7.3.

916.7.1 Fire hydrant set back distance. All fire hydrants shall be set back from the curb or edge of pavement. The setback shall not exceed twelve (12) feet.

916.7.2 Fire hydrant connection height. Fire hydrants shall be installed no less than twentyfour (24) inches and no more than thirty-six (36) inches above finished grade, measured from the center of the steamer connection.

916.7.3 Fire hydrant type: All fire hydrants shall be approved by the American Water Works Association (AWWA) and/or Missouri American Water Company or the Fire Official.

916.8 Obstructions: There shall be no obstructions, plantings, bushes, trees, signs, light standards, etc., within six (6) feet of any fire hydrant in all directions.

916.9 Color coding of public fire hydrants. All public fire hydrant barrels are to be painted yellow. All public fire hydrant bonnets are to be painted as follows:

COLOR WATER MAIN SIZE

Green Twelve (12) inch and larger Orange Eight (8) and ten (10) inch Red Six (6) inch and smaller

916.10 Color coding of private fire hydrants. All private fire hydrants shall be painted red, including the bonnet.

916.11 Minimum fire flow - single fire hydrant. The minimum fire flow from a single fire hydrant in any occupancy group shall be fifteen-hundred (1500) gallons per minute at twenty (20) psi residual pressure unless the new hydrant is ordered on a pre-existing main. These water flow tests shall be conducted in accordance with NFPA standards.

916.12 Minimum fire flow - next two fire hydrants. The minimum fire flow from the next two fire hydrants in any occupancy group shall be a cumulative fifteen-hundred (1500) gallons per minute at twenty (20) psi residual pressure.

916.13 Access. The commencement of construction of any such new subdivision, or new building, or structure or addition by any person, within the District, shall be deemed to be the granting of permission by such person for entry upon such property by the Missouri American Water Company, or other water supplier, for the installation of any such aforesaid fire hydrants and the water main leading thereto, and also to the District and to the members or staff and its equipment, for access to such fire hydrant, or hydrants, which may be located upon any such property, for any purpose whatever within the functions of the District, in considerations of issue of building permit.

916.14 Fire Hydrant Connection Height. Fire hydrants shall be installed a minimum of fourteen (14) inches and a maximum of thirty-six (36) inches above finished grade, measured from the center of the steamer connection.

916.15 Public Fire Hydrant Spacing. Spacing of public fire hydrants and water mains shall be placed the full length of the property to be developed that abuts an existing and/or proposed public

way and shall be regulated by the Use Group classification of the development as set forth in Section 916 that abuts the existing and/or proposed public way.

916.16 Private Fire Hydrant Spacing. Where a building is greater than one hundred fifty (150) feet from an existing fire hydrant, measured along the drivable access, a private hydrant shall be required on said developed property, private streets and/or parking lots, at spacing between fire hydrants as required by the Use Group as set forth in Section 916.

916.17 Building Permits. The Fire Official shall not approve, nor issue building permits for, nor permit the construction of any such new development or structure, so long as the owner thereof fails to provide for fire hydrants, or perform and guarantees, or to permit access according to this section.

916.18 Exceptions. On the application of any person, the Fire District may grant an exception to the requirements of this Section for fire hydrant installations, where such person shall prove to the satisfaction of the Fire District that there is no water supply reasonably available for the installation of hydrants and other source of water supply approved by the Fire Official as provided. <u>SECTION 917. Add a new Section. Insert:</u>

Section 917 - Fire Service Mains and Appurtenances

917.1 General. This section covers the application, installation, inspection, and testing for fire service mains and appurtenance and their components for new and existing buildings and structures.

917.2 Where required. An approved Fire Service Mains and Appurtenances shall be installed in accordance with the provisions of this code and NFPA 24. The Fire Service Mains and Appurtenances shall be designed and installed to support the fire flow requirements of the Standpipe System and Automatic Sprinkler Systems of the building or structure being protected.

917.3 Construction documents. Construction documents for Fire Service Mains and Appurtenances shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code, the International Building Code, NFPA 24 and relevant laws, ordinances, rules and regulations, as determined by the fire code official. All construction documents shall meet the requirements of Section 107 of the Building Code.

917.3.1 Required. Construction documents shall be drawn to an indicated scale on sheets of uniform size, with a plan of each floor as applicable, and shall include the following items that pertain to the design of the system:

- 1. Name of owner.
- 2. Location, including street address.
- 3. Point of compass.
- 4. A graphic representation of the scale used on all plans.
- 5. Name and address of contractor.
- 6. Size and location of all water supplies.

7. Size and location of standpipe risers, hose outlets, hand hose, monitor nozzles, and related equipment.

8. The following items that pertain to private fire service mains:

a) Type of pipe being installed. (Shall meet requirements of NFPA 24)

b) Size.

c) Length.

d) Location.

e) Weight.

f) Material.

g) Point of connection to city main.

h) Sizes, types, and locations of valves, valve indicators, regulators, meters, and valve pits.

i) Depth at which the top of the pipe is laid below grade.

j) Method of restraint. (Shall meet requirements of NFPA 24)

9. The following items that pertain to hydrants:

a) Size and location, including size and number of outlets and whether outlets are to be equipped with independent gate valves.

b) Thread size and coupling adapter specifications if different from NFPA 1963

c) Whether hose houses and equipment are to be provided, and by whom

d) Static and residual hydrants used in flow

e) Method of restraint (Shall meet requirements of NFPA 24)

f) Meet requirements of Section 916 of this Code.

10. Size, location, and piping arrangement of Fire Department Connections

11. Location and piping arrangement for Post Indicator Valve. All Post Indicator Valves shall be OSHA safety red in color. Post Indicator Valves shall have address identification signs permanently affixed to body of post to identify the address in which the valve serves.

917.3.2 Manufacturer's Installation Instructions. The Construction Documentation submittals shall include the manufacturer's installation instructions for all pipe used or American Water Works Association (AWWA) installation documentation and any specially listed equipment, including descriptions, applications, and limitations for any devices, piping, or fittings.

917.4 Qualified Installer. Installation work shall be performed by fully experienced and responsible persons. The construction application and installation shall be by a Licensed Master Pipe Fitter, Master Plumber or Master Sprinkler Fitter with St. Louis County, Missouri.

917.5 Inspections. The following inspection shall be conducted during the installation of Fire Main Services and Appurtenance:

1. Pipe / trench inspection. This inspection can be conducted while pipe is being installed into trench. No back fill shall be introduced into trench until inspection unless previous approval from fire code official.

2. Proper fill and tamping of fill around pipe. (Per manufacturer's installation instructions or AWWA installation documents. No rocks per NFPA 24.)

3. Thrust block pre-pour inspection. Framed or non-framed.

4. Thrust block pour inspection.

5. Hydrostatic testing. (Per NFPA 24).

6. Flush Inspection. Flush flow shall be through a minimum four inch opening with proper hose or pipe attached. Hose or pipe shall be retrained to prevent injury and or damage. A catch or filter system shall be attached to the end of the hose to prevent debris from causing injury or damage.

7. Additional inspections may be required by fire code official due to project conditions or project requirements.

917.6 Final authority. The Fire Marshal shall always be consulted before the installation, upgrading or remodeling of private fire service mains.

CHAPTER 10

SECTION 1008.3. Modify as follows. Insert:

1008.3 Emergency power for illumination. The power supply for means of egress illumination shall normally be provided by the premises' electrical supply. All circuits which provide power for emergency means of egress shall be identified in each electrical panel.

SECTION 1008.3.3. Modify as follows. Insert:

6. Mechanical rooms and rooms containing roof access ladders

7. Commercial kitchens

8. Room or areas of Occupancy Group H and in any room or area that utilizes hazardous materials or hazardous processes

SECTION 1010.1.4.2.1. Add a new section. Insert:

1010.1.4.2.1 Power-operated sliding door lock. Sliding doors which use a manual lock to prevent the door from opening manually shall have the following:

 The locking device is readily distinguishable as locked. The locking device shall be able to be unlocked by a quarter turn bold operation without a key or special knowledge.
A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background. SECTION 1010.1.9.3. Modify as follows: Item #2 – Delete in its entirety.

SECTION 1010.1.9.9. Delete in its entirety. Insert:

1010.1.9.9 Electromagnetically locked egress doors. Doors in the means of egress that are not otherwise required to have panic hardware in buildings with an occupancy in Group A, B, E, I-1, I-2, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, M, I-1, I-2, R-1 or R-2 shall be permitted to be electromagnetically locked if equipped with listed and labeled hardware that incorporates a built-in switch and meet the requirements below:

1. The listed and labeled hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.

2. The listed and labeled hardware is capable of being operated with one hand.

3. Operation of the listed and labeled hardware releases to the electromagnetic lock and unlocks the door immediately.

4. Loss of power to the listed and labeled hardware automatically unlocks the door.

5. Where listed and labeled panic or fire exit hardware is required by Section 1010.1.10, operation of the panic or fire exit hardware also releases the electromagnetic lock.

6. The locking system units shall be listed in accordance with UL 294.

7. Activation of the building fire alarm system or building automatic sprinkler system shall

release the electromagnetic lock and unlocks the door immediately.

<u>SECTION 1013.1. Modify as follows:</u> Where required, all required means of egress shall be indicated with approved <u>RED LETTERED</u> signs reading "Exit", visible from the exit access and, where necessary, supplemented by directional signs in the exit access corridors indicating the direction and way of egress. All "Exit" signs shall be located at exit doors or exit access areas, so as to be readily visible. Sign placement shall be such that an "Exit" sign or directional sign shall be visible at any point within the exit access, but not to exceed one hundred (100) feet.

Exception #2 – Delete in its entirety.

SECTION 1013.3. Delete in its entirety. Insert:

1013.3 Illumination. Exit signs shall be electrically powered internally illuminated. All replacement and new exit signs shall be illuminated with Light Emitting Diode (LED) technology. Exit signs that are externally illuminated shall only be installed upon approval of the fire code official. All circuits which provide power for exit signs shall be identified in each electrical panel.

CHAPTER 23

SECTION 2204.3.8 add a new section. Insert:

2204.3.8 Fire suppression system: The dispensing area (pump islands, canopy and adjacent ground area) shall be provided with an approved automatic fire-extinguishing system.

CHAPTER 32

SECTION 3201.3. Delete in its entirety. Insert:

3201.3 Documents for permit. Permits are required for the following:

- 1. storage in new structures designed to accommodate high-piled storage
- 2. requesting a change of occupancy/use involving high-piled storage
- 3. the installation of racking in existing buildings
- 4. the re-occupancy of an existing building involving high-piled storage

In addition to the information required by the International Building Code, the storage or "racking" permit submittal shall include the information specified in this section. Following approval of the plans, a copy of the approved plans shall be maintained on the premises in an approved location. The plans and documents shall include all of the following:

1. Floor plan of the building showing locations and dimensions of high-piled storage areas.

- 2. Usable storage height for each storage area.
- 3. Number of tiers within each rack, if applicable.
- 4. Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement.
- 5. Aisle dimensions between each storage array.
- 6. Maximum pile volume for each storage array.
- 7. Location and classification of commodities in accordance with Section 3203.
- 8. Location of commodities that are banded or encapsulated.

9. Location of required fire department access doors.

10. Type of fire suppression and fire detection systems.

11. Location of valves controlling the water supply of ceiling and in-rack sprinklers.

12. Type, location and specifications of smoke removal and curtain board systems.

13. Dimension and location of transverse and longitudinal flue spaces.

14. Documentation from table 3206.2 as per the "Commodity Class" versus the "Size of High-Piled Storage Area," in details in reference to all columns in table.

15. Signed and sealed construction document from a Missouri Licensed Professional Engineer specializing in Fire Protection, confirming automatic sprinkler system coverage and protection to the stored commodity classifications and allowable storage heights with the installed automatic sprinkler system and protection provided.

16. Additional information regarding required design features, commodities, storage arrangement and fire protection features within the high-piled storage

CHAPTER 56

SECTION 102.2 Add new exceptions. Insert:

10. Starter pistols for sporting or theatrical performance, toy caps and similar non-projectile items containing not more than 16.2 milligrams (0.25 grains) of pyrotechnic composition per cap or item

11. Party poppers containing not more than 16.2 milligrams (0.25 grains) of pyrotechnic composition per item and not containing any ignitable paper or plastic

12. Snappers containing not more than 1 milligram (0.02 grains) of pyrotechnic composition

13. Sparklers containing not more than 100 grams (3.5 ounces) of pyrotechnic composition

14. Other novelty effects containing not more than 50 milligrams (0.8 grains) of pyrotechnic composition per effect, and that have no projectile components

APPENDIX D

SECTION 102.1 Delete: "75,000". Insert: "80,000"

SECTION 102.2 Add a new section. Insert:

Obstructions. It is a violation of this code to erect, construct, place or maintain any gates, barricades, chains, bars, pipes, sawhorses, speed bumps or other obstructions in or on any street or fire apparatus access road, whether public or private, without approval of the Fire Marshal or his representative.

SECTION 102.3 Add a new section. Insert:

Residential. Any one or two family residential structure located greater than 300 feet from a public street shall be accessible to fire district 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 a fire apparatus weighing at least 60,000 pounds.

SECTION D103.5 Delete in its entirety. Insert:

D103.5 Fire apparatus access road gates. Security gates installed or constructed on a fire apparatus access road shall comply with Section D103.5.1 through D103.5.3. A permit shall be required before the construction or installation of a security gate across a fire apparatus access road.

1. Where a single gate is provided, the gate width shall be not less than 20 feet (6096 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm).

2. Gates shall be of the swinging or sliding type.

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

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

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

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

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

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

SECTION D103.5.1. Add a new section. Insert:

D103.5.1 Required Access or Ingress for Fire Apparatus to Construction Sites. All premises that the Fire District may be called upon to protect in case of fire or other emergency incident response shall be maintained readily and adequately accessible to fire apparatus, as determined by the Fire Official.

SECTION D103.5.2. Add a new section. Insert:

D103.5.2 Electrically operated gates. All electrically operated gates shall be installed in accordance with the following requirements:

1. Set back: The gate shall be at least 50 feet back from the edge of the cross street from which the "gated" street is accessed, and shall open the full width of the required pavement, roadway or driveway.

2. Operation: The gate shall be equipped with a "Siren Activated" system, that will automatically open the gate upon approach of emergency vehicles, which have their sirens sounding in the "yelp" mode. It shall also be equipped with a

'Rapid Entry' key operated switch to open the gate, in addition to the normal operated mechanism. The key switch, when activated, shall keep the gate open until fire district personnel reset it after the emergency. The 'Rapid Entry' key operated switch shall be purchased through the Knox Company.

3. Power failure: The gate shall release in the event of a power failure, allowing it to be opened manually;

4. Manual release: Provide a means to manually release the gate, in addition to item 3 above to allow the gate to be opened in the event the switch, motor, or some other component fails; and

5. Approval prior to use: The gate installation shall be inspected, tested and approved by the Fire Marshal prior to the use of the gate.

6. Gates added to existing subdivisions. Prior to approval a signed petition stating: "I agree

with a gate being installed at the entrance to all the streets to the subdivision, I understand that when this gate is installed the fire department response can be lengthened by as much as two additional minutes. I further will not hold the fire department responsible for loss of life or property due to the additional response time." This document must be signed by 100% of all residents within the subdivision.

SECTION D103.5.3. Add a new section. Insert:

D103.5.3 Manually operated gates. All manually operated gates shall be installed in accordance with the following requirements:

1. Set Back: The gate shall be at least 50 feet back from the edge of the cross street from which the "gated" street is accessed, and shall open the full width of the required pavement, roadway or driveway;

2. Lock: If the gate is to be locked, it shall be equipped with an *approved* lock or device. The gate locking mechanism shall be constructed in such a manner as to always allow the gate to open with the activation/removal of an approved padlock; and

3. Approval Prior to Use: The gate installation shall be inspected, tested and approved by the Fire Marshal prior to the use of the gate.

4. Gates added to existing subdivisions: Prior to approval a signed petition stating: "I agree with a gate being installed at the entrance to all the streets to the subdivision, I understand that when this gate is installed the fire department response can be lengthened by as much as two additional minutes. I further will not hold the fire department responsible for loss of life or property due to the additional response time." This document must be signed by 100% of all residents within the subdivision.

D107.1 One-and two-family dwelling residential developments. Developments of one-or two-family dwellings where the number of dwelling units exceeds 100 shall be provided with separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3.

Exceptions:

1. Where there are more than 100 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with approved automatic residential sprinkler systems in accordance with Section 903.3.1.1 or 903.3.1.3 of the International Fire Code, access from two directions shall not be required.

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

3. The Fire Marshal shall be permitted to increase the number of dwelling units allowed with a single fire apparatus access road when topography or other approved reasons do not permit an additional access road to be provided.

APPENDIX L

SECTION L101.1 Delete in its entirety. Insert: Fire fighter air replenishment systems (FARS)

shall be provided in accordance with this appendix. The requirement for FARS shall be based upon the fire department's capability of replenishing fire fighter breathing air during sustained emergency operations. Considerations shall include:

- 1. Building characteristics, such as two (2) stories below or seven (7) stories above grade plane, floor area greater than 500,000 square feet, type of construction and fire-resistance of the primary structural *frame* to allow sustained fire-fighting operations based on a rating of not less than 2 hours.
- 2. Special hazards that require unique accommodations to allow the fire department to replenish fire fighter breathing air such as the manufacturing of hazardous chemicals or products.

SECTION 5. SAVINGS CLAUSE.

That nothing in this Ordinance or in the Fire Code hereby adopted shall be construed to affect any suit or proceeding pending in any Court, or any rights acquired or liability incurred, or any cause or causes of action acquired or existing under any act or Ordinance hereby repealed, as cited in Section 1; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this Ordinance.

SECTION 6. VALIDITY.

If any Section, subsection, provision, sentence, clause or phrase of this Ordinance or of the "ICC© International Fire Code, 2015 Edition", is, for any reason, held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this Ordinance or of said Code, and the Robertson Fire Protection District of St. Louis County, Missouri, hereby declares that it would have passed the same, even though such portions so held to unconstitutional had not been included therein.

SECTION 7. VIOLATION, PENALTIES.

Any person, firm or corporation who shall violate any provision of this Ordinance, or who shall fail to comply with any of the requirements thereof, or who shall fail to comply with any order issued pursuant to any Section thereof, shall be guilty of a Class B misdemeanor pursuant to §321.600(12) and §557.021 RSMo and punishable as provided by law. Each day that a violation exists or continues to exist shall be deemed a separate offense. In accordance with §321.600(b) R.S.Mo., the district adopts a fine structure for specific offenses as defined in the "ICC©, International Fire Code, 2015 Edition".

SECTION 8. EFFECTIVE DATE.

This Ordinance Number_____having been duly considered and voted upon by the Board of Directors of the Robertson Fire Protection District of St. Louis County, Missouri, was duly enacted

as an Ordinance of said Fire Protection District on the 24th day of April 2018. The effective date of the Ordinance shall be at 12:01 a.m. on the 1st day of May 2018.

Joan Noel, Director/Chairman

Jenn Parkin, Director/Treasurer

Mike Conley, Director/Secretary