ORDINANCE NO. <u>133</u>

AN ORDINANCE REPEALING ORDINANCE NUMBER <u>130</u> 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 MEHLVILLE FIRE PROTECTION DISTRICT OF ST. LOUIS COUNTY, MISSOURI AS FOLLOWS:

SECTION 1. INCONSISTENT ORDINANCES REPEALED.

Ordinance number 130 of the Mehlville 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District of St. Louis County, Missouri, and all other Ordinances or parts of Ordinances in conflict herewith are hereby repealed.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 is on file in the office of the Code Official of the Mehlville Fire Protection District of St. Louis County, Missouri, being marked and designated as "ICC®, International Fire Code, 2021 Edition" as published by the International Code Council, Inc., together with the standards which are referenced in Chapter 80, Appendix D, Appendix H and Appendix K be and is hereby adopted as the Fire Code of the Mehlville Fire Protection District of St. Louis County, Missouri, 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, 2021 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. The "ICC®, International Fire Code, 2021 Edition" may be viewed at 2021 I-Codes Building Codes - ICC Digital Codes (iccsafe.org) 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 AND LIMITS.

- 100.1 Wherever [NAME OF JURISDICTION] appears in such Code, it shall read the Mehlville Fire Protection District of St. Louis County, Missouri.
- 100.2 "Fire Code Official" and/or "Code Official" wherever it may appear is defined as the Fire Marshal and/or Chief Fire Inspector of the Mehlville Fire Protection District of St. Louis County, Missouri, or their duly authorized representative.
- 100.3 Wherever [JURISDICTION TO SPECIFY] appears in such Code, it shall read the metes and bounds of the Mehlville Fire Protection District of St. Louis County, Missouri, or as permitted by the St Louis County, Missouri, Zoning and/or Subdivision Ordinances.

Section 506 – the Mehlville Fire Protection District of St. Louis County, Missouri, utilizes only the KnoxBox system of rapid entry devices. Such devices may be ordered at www.knoxbox.com/5097.

SECTION 4. AMENDMENTS TO THE "ICC[©] INTERNATIONAL FIRE CODE, 2021 EDITION".

CHAPTER 1

Section 105.5.52 add a new section. Insert:

105.5.52 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 code official 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 105.5.52.1 add a new section. Insert:

105.5.52.1 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 Chapters 11 and 34 of this code.
- 6. A fire department safety officer, or fire department safety team, must be present on the site 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 106.1.1 add a new section. Insert:

- **106.1.1 Application of seals:** When construction documents are submitted, the application of seals and signatures on those documents shall be required as follows:
 - a. All construction documents submitted shall bear a seal in accordance with 20 CSR 2030-3.060.

Any addenda or modifications submitted for changes to the construction documents shall also bear a seal in accordance with 20 CSR 2030-3.060. Such changes shall be clearly indicated.

Section 107.2 delete in its entirety. Insert:

107.2 Schedule of permit fees. A fee for each permit shall be paid as required, in accordance with Table 109.2 of the *International Building Code*.

SECTION 111.1 through 111.4 delete in its entirety. Insert:

111.1 Appeals: An owner, lessee, agent, operator or occupant aggrieved by an order pursuant to this order, may file an appeal to the Board of Directors 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, co-partnership 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 112.4 delete in its entirety. Insert:

112.4 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 Code Official, 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 112.5 add a new section. Insert:

112.5 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 112.6 add a new section. Insert:

112.6 Civil action: Notwithstanding the provisions hereof, the Code Official, 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.

CHAPTER 3

Section 307.2 delete in its entirety. Insert:

Section 307.2 Approval required. Approval shall be obtained from the *fire code official* prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, bonfire or disposal of yard waste. Application for such approval shall only be presented by and approval issued to the owner of the land upon which the fire is to be kindled.

Exception: Portable outdoor fireplaces used at one- and two-family dwellings.

Section 307.4 delete in its entirety. Insert:

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

Exceptions:

- 1. Fires in *approved* containers that are not less than 15feet (4572 mm) from a structure.
- 2. The minimum required distance from a structure shall be 25 feet (7620 mm) where the pile size is 4 feet (1,219mm) or less in length or width and 4 feet (1,219mm) or less in height.

Section 307.4.1 delete in its entirety. Insert:

307.4. Bonfires and Recreational fires. *Bonfires and recreational fires* shall not be conducted within 25 feet (7620 mm) of a structure or combustible material. Conditions which could cause a fire to spread within 25 feet (7620 mm) of a structure shall be

eliminated prior to ignition. The maximum pile size is 3 feet (914mm) or less in length or width and 3 feet (914mm) or less in height.

Section 307.4.2 delete in its entirety.

Section 307.4.3 delete in its entirety. Insert:

307.4.3 Portable outdoor fireplaces. Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet (3048 mm) of a structure or combustible material. Portable outdoor fireplaces shall not be used for burning yard waste, trash, rubbish or food waste.

CHAPTER 5

Section 503.4.1 delete in its entirety. Insert:

Section 503.4.1 Traffic calming devices. Traffic calming devices shall be prohibited unless approved by the *fire code official*. Plans for such measures must be submitted and approved prior to installation. Speed bumps or similar measures that hamper emergency response or cause undue jarring of emergency vehicles are prohibited, except as allowed by Ordinance 85. Existing traffic calming measures determined to constitute a hazard are subject to repair or removal in accordance with this section.

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:

- 1. Single tenant buildings.
- 2. Detached structures constructed in accordance with the *International Residential Code*.

Section 506.1 delete in its entirety. Insert:

506.1 Where required. The *fire code official* is authorized to require a key box to be installed in an *approved* location when any of the following conditions exist. The key box shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the *fire code official*.

- 1. Where access to or within a structure or an area is restricted because of secured openings, or
- 2. Where immediate access is necessary for life-saving or fire-fighting purposes, or
- 3. The structure has a *fire alarm system*, or
- 4. The structure has an *automatic fire sprinkler system*.

The key box shall be of an *approved* type and shall contain keys to gain necessary access as required by the *fire code official*.

Section 506.1.1 delete in its entirety. Insert:

506.1.1 Locks. An *approved* lock shall be installed on gates or similar barriers.

Section 506.1.2 delete in its entirety. Insert:

506.1.2 Key boxes for fire service elevator keys. Key boxes shall be provided for fire service elevator keys and shall comply with Section 506.1 and all of the following:

- 1. The key box shall be compatible with an existing rapid entry key box system in use in the jurisdiction and *approved* by the *fire code official*.
- 2. The front cover shall be permanently labeled with the words "Fire Department Use Only—Elevator Keys."
- 3. The key box shall be mounted at each elevator bank at the lobby nearest to the lowest level of fire department access.
- 4. The key box shall be mounted 5 feet 6 inches (1676 mm) above the finished floor to the right side of the elevator bank or other *approved* location.
- 5. Contents of the key box are limited to fire service elevator keys. Additional elevator access tools, keys and information pertinent to emergency planning or elevator access shall be permitted where authorized by the *fire code official*.
- 6. In buildings with two or more elevator banks, a single key box shall be permitted to be used where such elevator banks are separated by not more than 30 feet (9144 mm). Additional key boxes shall be provided for each individual elevator or elevator bank separated by more than 30 feet (9144 mm).

Exception: A single key box shall be permitted to be located adjacent to a fire command center or the nonstandard fire service elevator key shall be permitted to be secured in a key box used for other purposes and located in accordance with Section 506.1.

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 by the fire code official.

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.

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

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 yellow, including the bonnet.

Section 510.4.1.4 add a new section as follows. Insert:

510.4.1.4 Isolation. Emergency responder radio coverage systems shall be isolated to the public safety spectrum only, and shall be approved by the local or regional emergency communication authority.

CHAPTER 6

Section 604.2.1 add a new section as follows. Insert:

604.2.1 Elevator emergency operations testing: All elevators that are equipped with emergency elevator operations in accordance with ASME A17.1 listed in Chapter 45, shall be tested at least once each year in all phases of emergency functions. An approved elevator service company shall conduct tests. Records of all inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for a minimum of 3 years

Section 604.6.1 delete in its entirety. Insert:

604.6.1 Elevator key location. Keys for the elevator car doors and fire-fighter service keys shall be kept in an *approved* elevator lobby key box in accordance with Section 506.1.2.

CHAPTER 9

Section 901.6.3 delete in its entirety. Insert:

901.6.3 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. Accurate logs shall be maintained indicating the number, location and type of device tested. Any defect, modification or repair shall be logged.

Section 901.6.3.2 add a new section. Insert:

901.6.3.2 Records copies to fire code official. Within sixty (60) days of the completion of the required system inspections, tests and maintenance an electronic copy of the report shall be forwarded to the *fire code official* in Adobe® PDF format. The reports shall be sent via e-mail to <u>firepreventionbureau@mehlvillefire.com</u>. The type of fire protection system inspection and the address of the inspected property shall be included in the subject of the e-mail.

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SECTION 903.3.5.3 add a new Section. Insert:

903.3.5.3 Water flow tests: Water flow tests for *fire protection systems* shall be conducted between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. Tests shall be within the last twelve (12) months.

SECTION 903.3.5.3.1 add a new Section. Insert:

903.3.5.3.1 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. A *fire protection system* design shall not exceed the 20% curve.

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 907.7.5 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.

Section 903.4.2.1 add a new section. Insert:

903.4.2.1 Fire Sprinkler System Fire Department Connection. An approved exterior audio/visual fire alarm notification device 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.

Section 903.4.2.1.1 add a new section. Insert:

903.4.2.1.1 Water Flow Alarm Signage. A permanent sign shall also be installed under the audio/visual fire alarm notification device which states "Water Flow Alarm". This sign shall have red letters on a white reflective background. The letters shall be red in color and be Arabic alphabetical letters. Each character shall be not less than 3 inches (76 mm) high.

SECTION 903.4.4 add a new section. Insert:

903.4.4 Dry-pipe alarm time. Initial water shall be discharged from the system test connection in not more than 60 seconds, starting at the normal air pressure on the system and at the time of fully opened inspection test connection.

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 that shall control the *water supply* to all *automatic sprinkler systems* in that building.

Section 904.4.4 add a new section. Insert:

904.4.4 Safety requirements. Where persons will be exposed to an alternative automatic fire-extinguishing system discharge, warning signs and discharge alarms shall be provided.

Section 904.4.5 add a new section. Insert:

904.4.5 Acceptance 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. 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.

Section 907.1.4 add a new section. Insert:

907.1.4 Device labeling. The loop and device address shall be placed on each addressable device or module 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 unit.

Section 907.6.3 delete in its entirety. Insert:

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

Exceptions:

- 1. Fire alarm systems that only include manual fire alarm boxes, waterflow initiating devices and not more than 6 additional alarm-initiating devices.
- 2. Special initiating devices that do not support individual device identification when approved by the fire code official.
- 3. Fire alarm systems or devices that are replacing existing equipment.

Section 907.6.6 delete in its entirety. Insert:

907.6.6 Monitoring. All *fire alarm systems* shall be monitored by an *approved* central station as defined in NFPA 72. A UL Certificate (UUFX) or FM Placard, in accordance with NFPA 72, shall be issued by the UL Listed or FM approved prime contractor for all newly installed required *fire alarm systems*. This regulation shall apply to all new required *fire alarm systems*. An existing required *fire alarm system* wherein the fire alarm control unit or alarm components are to be replaced shall be considered new for the purposes of this section. Central station service in full compliance with 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.

Section 907.6.6.1 add a new section. Insert:

907.6.6.1 Owners declaration. When a *fire alarm system* is provided an "Owner's Declaration of Fire Alarm Certifying" form provided by the District shall be completed and returned before the main building permit will be issued.

Section 912.2.2 delete in its entirety. Insert:

912.2.2 Fire Department Connection Location Signage. On new and existing buildings, the fire department connection shall be indicated by an *approved* sign mounted on the street front or on the side of the building. Such sign shall have red letters "FDC" not less than 6 inches (152 mm) high and words in red letters not less than 2 inches (51 mm) high or an arrow to indicate the location on a white reflective background. Such signs shall be subject to the approval of the *fire code official*.

Section 912.2.2.1 add a new section. Insert:

912.2.2.1 Fire Department Connection Signage. The fire department connection shall be indicated by an approved sign mounted above its location. Such sign shall have red letters "FDC" not less than 6 inches (152 mm) high and the addresses which the fire department connection servers in red letters not less than 2 inches (51 mm) high on a white reflective background. Such signs shall be subject to the approval of the *fire code official*.

SECTION 912.4.4 add a new Section. Insert:

912.4.4 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.

SECTION 918.0 Fire Hydrants

- **918.1** 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 Code Official of the Mehlville Fire Protection District a plot of the aforesaid subdivision, indicating the proposed installation of the fire hydrants within such subdivision, approved by the Code Official.
- **918.2** 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 Code Official of the District a plat or drawing of the property whereon is located such building, structure of addition, which plat or drawing has indicated there on the nearest existing fire hydrant, and if there is not an existing fire hydrant within such distance as is approved by the Code Official, 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 Code Official.
- **918.3 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 Code Official.
- **918.4** Groups R-3 and R-4 occupancies: 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.
- **918.5 Other Occupancy Groups:** In all other occupancy Groups, public water systems with fire hydrants shall be installed with the commencement of construction.
- **918.6 Fire hydrant placement:** Fire hydrants shall be placed within the guidelines of Section 918.6.1 through 918.6.9.
- **918.6.1 Single family residential:** In Groups R-3 and R-4 occupancies, single family residential developments, fire hydrant spacing shall not exceed six hundred (600) feet from hydrant to hydrant, or as special site conditions may dictate. Local conditions may be such that this distance may vary as much as 100 feet in either direction.
- **918.6.1.1 Water supply required:** In Groups R-3 and R-4 occupancies, 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.
- **918.6.2 Multi-family residential:** In Group R-2 occupancies, multi-family residential developments, fire hydrant spacing shall not exceed four hundred and fifty (450) feet from hydrant to hydrant, or as special site conditions may dictate. Local conditions may be such that this distance may vary as much as 75 to 100 feet in either direction.

- **918.6.2.1** Water supply required: In Group R-2 occupancies, multi-family residential developments, when there are four (4) or more dwelling units within one (1) building or structure.
- **918.6.3 Other occupancy group developments:** In all other occupancy 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 the distance between fire hydrants or from a building to a fire hydrant may vary as much as 75 to 100 feet in either direction, if otherwise approved by the code official.
- **918.6.4 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.
- **918.6.5 Fire hydrant spacing:** Spacing of fire hydrants along a public way shall be regulated by the occupancy Group classification of the development that abuts the existing and/or proposed public way.
- **918.6.6 Private hydrants:** Where a development, other than Group R-3 or R-4 occupancies, is greater than one hundred fifty (150) feet from an existing and/or proposed improved public way, measured along the driveable access, additional private fire hydrants shall be required on said developed property, private streets and/or parking lots, at a spacing between fire hydrants as required by the occupancy Group as set forth in Section 918.6.1 through and including Section 918.6.4.
- **918.6.7** 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.
- **918.6.8 Prohibited locations:** A fire hydrant shall not be placed at any location where the fire hydrant could be damaged by vehicular traffic.
- **918.6.9 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 and procedures.
- **918.7 Fire hydrant installation:** All fire hydrants shall be installed in accordance with Sections 918.7.1 through 918.7.3.
- **918.7.1 Fire hydrant set back distance:** All fire hydrants shall be set back from the curb or edge of pavement. The set back shall not exceed twelve (12) feet.
- **918.7.2 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.
- **918.7.3 Fire hydrant type:** All fire hydrants shall be approved by the American Water Works Association (AWWA) and/or Missouri American Water Company.

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

918.9 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:

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

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

918.11 Minimum fire flow - single 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.

918.12 Minimum fire flow - next two 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.

Exception: Detached buildings of Groups R-3 and R-4 occupancies.

918.13 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 of its Staff and to 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.

918.14 Building permits: The Code Official of the District shall not approve, nor issue building permits for, nor permit the construction of any such new subdivision, or new building or structure or addition, so long as the owner thereof shall fail to provide for fire hydrants, or to perform any guarantees, or to permit access, according to this Section.

Exception: On the application of any person, the Board of Directors of the District may grant exception to the requirements of this Section for fire hydrant installations, where such person shall prove to the satisfaction of the Board of Directors that there is no water supply reasonably available for the installation of hydrants.

SECTION 919.0 add a new Section. Insert:

SECTION 919.0 Fire Service Mains and Appurtenances

919.1 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.

- **919.2** Where required. 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.
- **919.3** 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 *International Building Code*.

- **919.3.1** Fire service main drawings. 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 use 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
 - b. Pipe size
 - c. Pipe length
 - d. Location
 - e. Weight
 - f. Pipe 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 in accordance with 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 test
 - e. Method of restraint in accordance with NFPA 24
 - f. Installation shall done in accordance with Section 918 of this Code
 - 10. Size, location and piping arrangement of fire department connection(s)
 - 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
- **919.3.2 Manufacturer's Installation Instructions.** The construction document 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.
- **919.4 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.

919.5 Inspections. The following inspection shall be conducted during the installation of Fire

Main Services and Appurtenance:

- 1. Pipe/trench inspection shall 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. Installation shall be done in accordance with the manufacturer's installation instructions or AWWA installation documents. Rocks are not permitted in accordance with NFPA 24.
- 3. Thrust block pre-pour inspection. Framed or non-framed.
- 4. Thrust block pour inspection.
- 5. Hydrostatic testing is required in accordance with 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 the *fire code official* due to project conditions or project requirements.

919.6 Final authority. The authority having jurisdiction shall always be consulted before the installation, upgrading or remodeling of private fire service mains.

CHAPTER 10

Section 1008.3.6 add a new section. Insert:

1008.3.6 Circuit identification. All circuits which provide power for emergency lighting shall be identified in each electrical panel.

SECTION 1011.5.2 Exception 3 delete in its entirety. Insert:

1011.5.2 Exception 3:

3. In Group R-3 occupancies, as applicable in Section 101.2, within dwelling units in occupancies in Group R-2, as applicable in Section 101.2, and in occupancies in Group U, which are accessory to an occupancy in Group R-3, as applicable in Section 101.2, the maximum riser height shall be 8.25 inches (210 mm) and the minimum tread depth shall be 9 inches (229 mm), the minimum winder tread depth at the walk line shall be 9 inches (229 mm), and the minimum winder tread depth shall be 6 inches (152 mm). A nosing not less than 0.75 inch (19 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 11 inches (279 mm).

Section 1013.3.1 add a new section. Insert:

1013.3.1 Circuit identification. All circuits which provide power for exit signs shall be identified in each electrical panel.

1016.2 Egress through intervening spaces. Egress through intervening spaces shall comply with this section.

- 1. Exit access through an enclosed elevator lobby is permitted. Access to not less than one of the required *exits* shall be provided without travel through the enclosed elevator lobbies required by Section 3006.2, 3007 or 3008 of the *International Building Code*. Where the path of exit access travel passes through an enclosed elevator lobby the level of protection required for the enclosed elevator lobby is not required to be extended to the *exit* unless direct access to an exit is required by other sections of this code.
- 2. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a discernible path of egress travel to an *exit*.

Exception: *Means of egress* are not prohibited through adjoining or intervening rooms or spaces in a Group H, S or F occupancy when the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

- 3. An *exit access* shall not pass through a room that can be locked to prevent egress.
- 4. *Means of egress* from dwelling units or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.
- 5. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

Exceptions:

- 1. *Means of egress* are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.
- 2. *Means of egress* are not prohibited through kitchens, storage rooms, closets or spaces used for similar purposes or stockrooms in Group M occupancies when all of the following are met:
 - 2.1. The area is not a high-hazard use;
 - 2.2. Not more than 50 percent of the *exit access* is through the adjoining area;
 - 2.3. The adjoining area is not subject to locking from the egress side; and
 - 2.4. There is a demarcated, minimum 44-inch wide (1118mm) *aisle* defined by full- or partial-height walls or similar construction that will maintain the required width and lead directly to the *exit* without obstructions.

CHAPTER 11

Section 1103.5.1 delete in its entirety.

CHAPTER 23

Section 2304.3.8 add a new section. Insert:

2304.3.8 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 add the following exceptions. Insert

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.

APPENDIX D

Section D103.5 delete in its entirety. Insert:

D103.5 Fire apparatus access road gates. Gates securing the 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 horizontal swing, horizontal slide, vertical lift or vertical pivot type.
- 3. Construction of gates shall be of materials that allow manual operation by one *person*.
- 4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- 5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be *approved* by the *fire code official*.
- 6. Methods of locking shall be submitted for approval by the *fire code official*.
- 7. Electric gate operators, where provided, shall be *listed* in accordance with UL 325.
- 8. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

Section D103.5.1 add a new section. Insert:

D103.5.1 Number of gates. Fire apparatus shall not be required to pass through more than one gate to access, or pass through, any part of a subdivision, development, facility or building.

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. 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. It shall be equipped with a rapid entry key operated switch to open the gate, in addition to the normal 'resident 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. The gate shall release in the event of a power failure, allowing it to be opened manually.
- 4. Provide a means to manually release the gate to allow the gate to be opened in the event the switch, motor, or some other component fails.
- 5. The gate installation shall be inspected, tested and approved by the *fire code official* prior to the use of the gate.
- 6. Applications for gates being added to existing subdivisions shall include 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. I further will not hold the fire department responsible for loss of life or property due to the additional response time." The petition shall 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. 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. If the gate is to be locked, it shall be equipped with a rapid entry padlock, The Rapid Entry padlock shall be purchased through the Knox Company. The gate locking mechanism shall be constructed in such a manner as to always allow the gate to open with the activation/removal of the rapid entry padlock
- 3. The gate installation shall be inspected, tested and *approved* by the *fire code official* prior to the use of the gate.
- 4. Applications for gates being added to existing subdivisions shall include 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. I further will not hold the fire department responsible for loss of life or property due to the additional response

time." The petition shall be signed by 100% of all residents within the subdivision.

Section D107.1 delete in its entirety. Insert:

D107.1 One- and two-family dwelling residential developments. Developments of oneor 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 sprinkler system* 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 code official*.
- 3. The *fire code official* 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.

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, 2021 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 Mehlville 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 A 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.

SECTION 8. EFFECTIVE DATE.

This Ordinance Number <u>133</u> having been duly considered and voted upon by the Board of Directors of the Mehlville Fire Protection District of St. Louis County, Missouri, was duly enacted as an Ordinance of said Fire Protection District on the <u>28th</u> day of <u>September</u>, 2022. The effective date of the Ordinance shall be at 12:01 a.m. on the <u>1st</u> day of <u>January</u>, 2023.

Chairman and Director

SEAL

Bonnie C Stegman Treasurer and Director