#### ORDINANCE NO. O-019-002

## THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF DOUGLAS, COLORADO

# AN ORDINANCE ADOPTING THE 2018 EDITION OF THE *INTERNATIONAL FIRE CODE* SUBJECT TO THE AMENDMENTS AS SET FORTH IN ATTACHMENT 1 AND APPENDICES B AND C AND REPEALING ALL ORDINANCES AND RESOLUTIONS IN CONFLICT THEREWITH

**WHEREAS**, Section 30-15-401.5(1), C.R.S., authorizes the Board of County Commissioners to adopt ordinances to provide for minimum safety standards, and;

**WHEREAS,** Section 30-15-401.5(3), C.R.S., authorizes the Board of County Commissioners to adopt fire code provisions for the unincorporated areas of Douglas County, and;

**WHEREAS,** pursuant to Section 30-15-401.5(2), C.R.S., the Board of County Commissioners has appointed a permanent commission, known as the Fire Code Adoption and Revision Commission, for the purpose of reviewing and making recommendations for the adoption of a fire code, and;

**WHEREAS**, pursuant to Section 30-15-401.5(2), C.R.S., the Board of County Commissioners has received a recommendation from the Fire Code Adoption and Revision Commission, and;

WHEREAS, after receiving the recommendations of the Fire Code Adoption and Revision Commission and duly considering the same, the Board of County Commissioners of Douglas County desires to adopt by reference the 2018 International Fire Code ("IFC") in its entirety, except as modified herein, to protect the safety and welfare of the citizens of Douglas County; and

# NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY as follows:

- A. The Board of County Commissioners hereby approves the 2018 IFC, subject to the Amendments set forth in Attachment 1 and Appendices B and C.
- B. The following properties shall be exempt from IFC coverage, except as provided in Subsection 102.5, as amended herein:
  - 1. Detached one or two-family dwellings;
  - 2. Factory built housing units certified by the State of Colorado;
  - 3. Factory built housing units constructed to federal standards;
  - 4. Buildings or structures accessory to a dwelling or other allowed private use; or used exclusively for private agricultural purposes; and
  - 5. Residential developments containing or creating three or fewer lots or parcels.
- C. The provisions of the International Fire Code, as adopted herein, and from the date on which this ordinance shall take effect, shall be controlling within the limits of the Fire

Protection Districts of Castle Rock, North Fork, South Metro Fire Rescue, Franktown, Jackson 105, Larkspur, West Douglas, Mountain Communities and West Metro Fire Rescue, along with the Metropolitan Districts of Highlands Ranch, Roxborough Park and Castle Pines and those areas of unincorporated Douglas County not included within a fire protection district. The Fire Code shall be enforced by the chief, commander or designated representative of each fire protection department or district specified in Section 1, or by the Board of County Commissioners in areas not included within a fire protection district.

- D. Should any section, clause, sentence, or part of this Ordinance be adjudged by any court of competent jurisdiction to be unconstitutional or invalid, the same shall not affect, impair or invalidate the ordinance as a whole or any part thereof other than the part so declared to be invalid.
- E. All ordinances and/or resolutions, including Ordinance No. O-016-001, or parts or ordinances and/or resolutions, which are inconsistent with the provisions of this ordinance, are hereby repealed, except that this repeal shall not affect or prevent the prosecution or punishment of any person for any act done or committed in violation of any ordinance hereby repealed prior to the effective date of this ordinance.

# ATTACHMENT 1 TO ORDINANCE NO. O-019-002

### Amendments to the 2018 International Fire Code

- **Section 1.** <u>Adoption of the International Fire Code</u>. That certain document, three (3) copies of which are filed in the office of the Douglas County Clerk & Recorder, being marked and designated as the *International Fire Code*, 2018 edition, including Appendix Chapters B and C as published by the International Code Council and amended by Douglas County, be and is hereby adopted by the Board of County Commissioners as the Douglas County Fire Code, 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; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes prescribed in Section 2 of this Ordinance.
- Section 2. <u>Additions, Insertions, Deletions and Changes</u>. The following sections of the Fire Code are hereby revised as follows:

### Subsection 101.1 is amended to read as follows:

101.1 Title. These regulations shall be known as the Fire Code of Douglas County, hereinafter referred to as "this code".

## Subsection 102.5 is amended to read as follows:

102.5 Application of this code to residential properties and construction. Where buildings, structures and portions thereof are designed and constructed in accordance with the International Residential Code, the provisions of this code shall apply only as follows:

- 1. Provisions of this code pertaining to fire apparatus access roads, water supplies and fire flow requirements apply to community fire protection for residential developments in which four (4) or more new lots or parcels are created but shall not apply to individual structures and properties within those residential developments, except when specifically required and approved by the Board of County Commissioners as a condition of the planned development process. Requirements for fire apparatus access roads for new residential development apply per Subsections 503.1 and 503.2 as amended herein. Water supplies and fire flow requirements for new residential development, where adequate and reliable water supplies exist and in which four (4) or more new lots or parcels are created, apply per Subsection 507.1, 507.3 and 507.5 as amended herein.
- 2. Construction permits for fire protection systems and associated equipment in the interior or exterior of the structure, not including dwelling unit fire sprinkler systems installed in accordance with IRC Section P2904.
- 3. Administrative and maintenance provisions shall apply. Operational permit requirements shall apply only as follows:
  - a. Amusement buildings per Subsection 105.6.2.
  - b. Open burning per Subsection 105.6.32.
  - c. Explosives per Subsection105.6.14.
  - d. Carnivals and fairs per Subsection 105.6.4.
  - e. LP-gas per Subsection 105.6.27.
  - f. Temporary membrane structures and tents greater than 2,500 sq. ft.

## A new Subsection 102.13 is enacted to read as follows:

102.13 Douglas County Regulations. Where any of the provisions of this code are in conflict with any Douglas County code, standard or other adopted regulation, the Douglas County provisions shall control. The Douglas County Wildfire Mitigation Standards shall govern in lieu of the International Wildland-Urban Interface Code. References within this code to the International Wildland-Urban Interface Code shall not apply.

### Subsection 105.7.21 is amended to read as follows:

105.7.21 Solar Photovoltaic Power Systems. A building permit is required to install or modify solar photovoltaic power systems. Maintenance performed in accordance with the International Building Code or International Residential Code as amended and adopted by Douglas County is not considered to be a modification and does not require a permit.

### Subsection 105.7.26 add new subsection to read as follows:

105.7.26 Electrified fences on commercial property. A construction permit is required to install or modify an electrified fence on commercial property regardless of the height of the fence.

### Subsection 109.1 is amended to read as follows:

109.1 Board of appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be created a Regional Fire Code Board of Appeals ("board") by the entry of various fire districts into an intergovernmental agreement ("IGA"). The board of appeals shall be appointed through the operation of the IGA. The fire code official shall be an ex officio member of said board but shall have no vote on any matter before the board. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official. The Douglas County Board of County Commissioners shall be notified of all appointments made to the board. Said notification shall be in writing and shall be given within 30 days of said appointment(s). Upon 30 days written notice, the County may elect to withdraw from the use of the board at any time and for any reason.

## Subsection 110.4 is amended to read as follows:

110.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or perform work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be subject to fine and/or imprisonment up to the maximum specified in Section 30-15-402, C.R.S. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

### Subsection 112.4 is amended to read as follows:

112.4 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 subject to fine and/or imprisonment up to the maximum specified in section 30-15-402, C.R.S.

## Section 202 General Definitions Fire Apparatus Access Road- is amended to read as follows:

Fire apparatus access road - Any improved surface, designed or ordinarily used for vehicular travel that provides fire apparatus access, including fire lanes, public or private streets, and parking lot lanes. Fire Apparatus Access Road shall not include a private residential driveway, or a private residential shared driveway as defined herein.

## **Residential Driveway – Add new definition to read as follows:**

Residential Driveway – A vehicular access for private use that serves one lot or parcel connecting a house, garage, or other allowed use to the public or private road.

## **Residential Shared Driveway – Add new definition to read as follows:**

Residential Shared Driveway – A vehicular access for private use that may serve no more than three lots or parcels for the purpose(s) of ingress and egress to buildings structures or other allowed use.

### Subsection 503.1 is amended to read as follows:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 and the Douglas County Roadway Design and Construction Standards ("the Standards"). Should any provision of the fire code conflict with the Standards, the Standards shall control. Where the Standards are silent with respect to fire apparatus access roads, the Douglas County Public Works Engineering Director shall make the final determination based on fire code official input as to whether Sections 503.1.1 through 503.1.3 of the fire code shall apply.

## Subsection 503.2 is amended to read as follows:

503.2 Specifications. Fire apparatus access roads shall be designed and installed in accordance with the Douglas County Roadway Design and Construction Standards ("the Standards"). Should any provision of the fire code conflict with the Standards, the Standards shall control. Where the Standards are silent with respect to roads, both public and private, the Douglas County Public Works Engineering Director shall make the final determination, based on fire code official input. For fire apparatus access, other than roads, both public and private, such as fire lanes and parking lot lanes, Sections 503.2.1 through 503.2.8 of the fire code shall apply.

## Subsection 503.2.2 is amended to read as follows:

503.2.2 Authority. The Douglas County Public Works Engineering Director is the authority having jurisdiction (AHJ) and shall have the authority to review, permit, inspect and approve all fire apparatus access roads, public or private, in unincorporated Douglas County. For fire apparatus access, other than roads and private residential driveways, both public and private, such as fire lanes and parking lot lanes, the fire code official is the AHJ.

## Subsection 503.4.1 is amended to read as follows:

503.4.1 Traffic calming devices. During design and prior to construction of traffic calming devices, fire code official review and comments shall be requested and considered by Douglas County.

# Subsection 507.1 Required water supply. Exceptions are added to read as follows:

Exceptions:

- 1. Individual residential lots, parcels and developments legally in existence prior to the adoption of this code.
- 2. Developments containing or creating 3 or fewer residential lots or parcels.
- 3. Buildings or structures accessory to a dwelling or other allowed private use; or used exclusively for private agricultural purposes.
- 4. Developments subject to the Douglas County Standard for Water Supplies for Rural Fire Fighting.

### Subsection 507.3 is amended to read as follows:

507.3 Fire flow. Fire flow requirements for buildings or portions of buildings and facilities shall be determined in accordance with Appendix B of this code as amended or a method approved by the fire code official and Douglas County. Where an existing water supply for firefighting is not available within two road miles of the vehicular entrance of any parcel, the Douglas County Standard for Water Supplies for Rural Fire Fighting shall apply. Residential developments legally in existence at the time of the adoption of this code are not required to provide minimum water supplies or upgrade existing water supplies to meet this code. Non-residential developments and multifamily developments legally in existence at the time of the adoption of this code are not required to provide minimum water supplies to meet this code. Non-residential developments and multifamily developments legally in existence at the time of the adoption of this code are not required to provide minimum water supplies to meet this code. Non-residential developments hall not apply to individual residential lots, parcels or developments listed as exceptions in subsection 507.1.

### Subsection 507.5 is amended to read as follows:

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6, and Appendix C of this code as amended, or the Douglas County Standard for Water Supplies for Rural Fire Fighting where applicable. The following locations shall not be subject to the standards contained in these Sections and/or Appendix C:

- 1. Fire apparatus access roads not having an existing water line, except when a new water line is installed to serve commercial or residential development or to convey water to another location.
- 2. Where access to sufficient water flow is unavailable as determined by the fire code official and the building official.

## Subsection 507.5.1 is amended to read as follows:

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

- 1. [No Change]
- 2. [No Change]

# Subsection 510.1 Emergency responder radio coverage in new buildings. Exception 4 is added to read as follows:

Exceptions:

- 1. [No Change]
- 2. [No Change]
- 3. [No Change]
- 4. One and two-family dwellings and townhouses.

# Section 610 Electrified fences on commercial property. Add new Section to read as follows:

**610.1 General.** Electrified fences on commercial property shall be permitted in accordance with Section 105.7.26 and comply with the provisions of 610.2 through 610.6.

**610.2 Components.** Electrified fences on commercial property shall be installed with components manufactured and listed for use in such installations to ensure they do not pose a significant life-safety risk to humans.

**610.3 Clearance from combustibles.** Combustible materials including vegetation capable of being ignited shall be prohibited within 10' (minimum) of electrified fences, unless limited by lot lines or as otherwise approved by the Fire Code Official.

**610.4 Disconnecting means.** A means shall be provided outside the electrified fence for emergency responders to disconnect power to electrified fences on commercial property to provide access to the site. The type and location of the disconnecting means shall be approved by the Building Code Official and the Fire Code Official.

**610.4.1 Disconnecting means identification.** The means provided to disconnect power to electrified fences on commercial property shall be approved by the Fire Code Official.

**610.5 Fire apparatus access roads.** Fire apparatus access roads shall be maintained in accordance with Section 503 as amended.

**610.6 Warning signs.** Outward-facing warning signs shall be posted in a conspicuous manner at intervals of not less than thirty (30) feet on electrified fences on commercial property. The warning signs shall have a minimum letter size of two (2) inches and shall include the international symbol for high voltage.

## Subsection 1101.1 is amended to read as follows:

1101.1 Scope. Where required by the fire code official and the building official, the provisions of this chapter shall apply to existing buildings constructed prior to this code. Exceptions:

1. One and two-family dwellings and townhouses.

# Subsection 1103.2 is amended to read as follows:

1103.2 Emergency responder radio coverage in existing buildings. Where required by the fire code official and the building official, existing buildings that do not have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communications systems of the jurisdiction at the exterior of the building, shall be equipped with such coverage according to one of the following:

- 1. Whenever an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 510.1, Exception 1.
- 2. Within a timeframe established by Douglas County.

Exception: Where it is determined by the fire code official or the building official that the radio coverage system is not needed.

## Subsection 1103.5.1 is amended to read as follows:

1103.5.1 Group A-2. Where alcoholic beverages are consumed in a Group A-2 occupancy having an occupant load of 300 or more, the fire area containing the Group A-2 occupancy shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1. The fire code official shall work directly with the building owner to establish the scope of the work required and a reasonable timeframe to bring the building into compliance not to exceed one year from the formal written notification from the fire code official of this requirement.

# Subsection 1103.7.6 is amended to read as follows:

1103.7.6 Group R-2. A manual and automatic fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in existing Group R-2 occupancies more than three stories in height or with more than 16 dwelling or sleeping units.

Exceptions:

- 1. [No Change]
- 2. [No Change]
- 3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1026.6, Exception 4, items 4.2 or 4.5.

## Section 1204 is amended to read as follows:

Solar photovoltaic power systems. Solar photovoltaic power systems shall be installed in accordance with the International Building Code as amended, the International Residential Code as amended, and NFPA 70.

### Subsection 3103.6 add sentence to end of paragraph.

Tents that utilize a water ballast system shall require a written analysis from a structural engineer demonstrating the ability to resist the wind load established by the jurisdiction where the tent is to be located.

### Subsection 3105.5 Item number 1 add new 1.7 to read as follows:

1.7. Temporary special event structures that utilize a water ballast system shall require a written analysis from a structural engineer demonstrating the ability to resist the wind load established by the jurisdiction where the structure is to be located.

## Subsection 5601.1.3 Fireworks Exception 4 is amended to read as follows:

Exceptions:

- 1. [No Change]
- 2. [No Change]
- 3. [No Change]
- 4. The possession, storage, sale, handling and use of permissible fireworks as defined by Section 12-28-101, C.R.S.

### Subsection 5704.2.9.6.1 is amended to read as follows:

5704.2.9.6.1 Locations of above-ground tanks. Above-ground tanks shall be located in accordance with this section.

# Subsection 5706.2.4.4 Locations where above ground tanks are prohibited, is hereby deleted in its entirety.

Subsection 5806.2 Limitations, is hereby deleted in its entirety.

Subsection 6104.2 Maximum capacity within established limits, is hereby deleted in its entirety.

# APPENDICES B AND C TO ORDINANCE NO. 0-019-002

Only those appendix chapters of the 2018 International Fire Code listed herein are adopted as follows:

## **APPENDIX B, Fire-Flow Requirements for Buildings.**

### Subsection B103.3 is amended to read as follows:

B103.3 Areas without water supply systems. In rural and suburban areas in which adequate and reliable water supply systems do not exist, the International Fire Code as amended shall apply. When agreed upon by the fire code official and the building official, NFPA 1141, NFPA 1142, ISO Fire Suppression Rating Schedule or other approved method may be utilized to determine fire flow requirements.

### Table B105.2 is amended as follows:

# Table B105.2 REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

AUTOMATIC SPRINKER	MINIMUM FIRE FLOW	FLOW DURATION
SYSTEM	(gallons per minute)	(hours)
(Design Standard)		
No automatic sprinkler system	Value in table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the International	50% of the value in	Duration in TableB105.1(2) at the
Fire Code	TableB105.1(2) <sup>a</sup>	reduced flow rate
Section 903.3.1.2 of the International	75% of the value in	Duration in TableB105.1(2) at the
Fire Code	TableB105.1(2) <sup>b</sup>	reduced flow rate

For SI: 1 gallon per minute = 3.785 L/m

a. The reduced fire flow shall be not less than 1,000 gallons per minute

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

## APPENDIX C, Fire-Hydrant Locations and Distribution.

### Subsection C103.1 is deleted and replaced as follows:

C103.1 Fire hydrants available. Where existing water supplies permit, as determined by the fire code official and building official, the minimum number and distribution of fire hydrants available to a building, complex, or subdivision shall not be less than that listed in Table C105.1.

Where existing water supplies do not permit, nothing in this section shall be construed so as to require the presence of a minimum number and distribution of fire hydrants as set forth in Table C105.1.

For the purpose of a complex or subdivision, fire hydrant number and distribution requirements in Table C105.1 are to be applied to fire apparatus access roads and perimeter public streets from which fire operation could be conducted.

- Section 3. <u>Applicability and Enforcement</u>: The provisions of the International Fire Code, as modified in Section 2 herein, and from the date on which this ordinance shall take effect, shall be controlling within the limits of the Fire Protection Districts of Castle Rock, North Fork, South Metro Fire Rescue, Franktown, Jackson 105, Larkspur, West Douglas, Mountain Communities and West Metro Fire Rescue, along with the Metropolitan Districts of Highlands Ranch, Roxborough Park and Castle Pines and those areas of unincorporated Douglas County not included within a fire protection district. The Fire Code shall be enforced by the chief, commander or designated representative of each fire protection department or district specified in Section 1, or by the Board of County Commissioners in areas not included within a fire protection district.
- Section 4. <u>Repeal of Conflicting Ordinances, Resolutions, and Regulations</u>: All ordinances and/or resolutions or parts of ordinances and/or resolutions inconsistent with the provisions of this Ordinance, including Ordinance No. O-016-001, are hereby repealed, except that this repeal shall not affect or prevent the prosecution or punishment of any person for any act done or committed in violation of any ordinance hereby repealed prior to the effective date of this Ordinance.

**INTRODUCED, READ AND ADOPTED ON FIRST READING** on September 10, 2019

**ADOPTED ON SECOND AND FINAL READING, AS AMENDED,** on November 12, 2019 and ordered published in its entirety in the <u>Douglas County News-Press</u>.

# THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF DOUGLAS COLORADO

BY: /s/ Roger A. Partridge

# **ROGER A. PARTRIDGE, Chair**

ATTEST: /s/ Kristin Randlett

# **KRISTIN RANDLETT, Clerk to the Board**