EXHIBIT A

LOCAL AMENDMENTS TO THE

2021 EDITION OF THE INTERNATIONAL FIRE CODE

CHAPTER 1 – ADMINISTRATION

Section 101.1 – **Title** – is amended to read as follows:

These regulations shall be known as the Fire Code of the Loveland Fire Rescue Authority, hereinafter referred to as "this code".

Section 105.18 – **Flammable and combustible liquids** – is amended as follows, with the remainder of the section to remain unchanged:

An operational permit is required:

2. To store, handle or use Class I liquids in excess of 10 gallons in a building or in excess of 50 gallons outside of a building, except that a permit is not required for the following: (2.1 and 2.2 remain unchanged)

3. To store, handle or use Class II or Class IIIA liquids in excess of 50 gallons in a building or in excess of 249 gallons outside a building, except for fuel oil used in connection with oil-burning equipment.

Section 105.32 – **Mobile food preparation vehicles** – is amended to read as follows:

A permit is required for mobile food preparation vehicles equipped with appliances that produce smoke or grease-laden vapors. Businesses shall be required to comply with Annex B of NFPA 96 (2021): Standard of Ventilation Control and Fire Protection of Commercial Cooking Operations, as well as specific policies approved by the fire code official.

Section 105.49 – **Planned outdoor event** – is amended to read as follows:

An operational permit is required to conduct a planned outdoor event where planned attendance exceeds 1,000 persons, or where the event includes high-risk activities as determined by the fire code official in Chapter 2 of this code.

Section 105.6.24 – **Temporary membrane structures and tents** – is amended to read as follows:

An operational permit is required to operate an air-supported temporary membrane structure, a temporary special event structure, or a tent having an area in excess of 700 square feet.

Section 105.6.40 – **Plant extraction systems** – is amended to read as follows:

An operational permit is required for businesses or establishments that sell, grow, or process marijuana or hemp, or businesses or establishments that perform extractions of marijuana or
hemp, and shall be required to comply with specific policies approved by the fire code official and the local government with jurisdiction, to include obtaining the required permit(s) for the operations of said business or establishment.

**Section 107.2 – Schedule of permit fees** – is amended to read as follows:

Fees for any permits, inspections and services authorized by this code shall be assessed in accordance with the fee schedule established by the Loveland Fire Rescue Authority Board of Directors.

**Section 111 – Means of appeal** – is deleted in its entirety.

**Section 112.4 – Violation penalties** – is deleted in its entirety.

**Section 113.4 – Failure to comply** – is amended to read as follows:

Any person who shall continue work after having been issued a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of $500 per day.

A new **Section 115 – Reporting of emergencies and false alarms** – is added and reads as follows:

**SECTION 115 REPORTING OF EMERGENCIES AND FALSE ALARMS**

115.1 **General.** Reporting of fires and hazardous materials releases shall be in accordance with Section 115.

115.2 **Reporting emergencies.** In the event a fire occurs or the discovery of a fire, smoke or unauthorized release of flammable, combustible or hazardous materials on any property occurs, the owner, owner’s authorized representative or occupant shall without delay report such condition to the fire department.

115.3 **False alarms.** False alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

**Section 202 – Definitions** – is amended, including by the addition of new definitions, to read as follows:

BOARD. Wherever the word “Board" is used, it shall be held to mean the Board of Directors of Loveland Fire Rescue Authority.

DISTRICT. Wherever the word "District" is used, it shall be held to mean the fire protection district with jurisdiction.

DRIVEWAY. A type of private roadway for local access that leads from a street or drive, either public or private, to a property, typically commercial or multi-family.

HIGH-RISK ACTIVITIES. Special events shall be deemed to be high-risk activities if they include the following proposed activities: display of fireworks, high-speed operation of
motor vehicles, mobile food vendors, parades, races, temporary road closures, air-supported structures, or public alcohol sales and/or consumption.

JURISDICTION. Wherever the word "Jurisdiction" is used, it shall be held to mean to the inclusive boundaries of the fire protection district with jurisdiction.

RURAL FIRE FLOW AREA. The geographic area as determined by the fire code official that traditionally has had inadequate fire flow.

URBAN FIRE FLOW AREA. The geographic area as determined by the fire code official that traditionally has had adequate fire flow.

Section 307.1.1 – **Prohibited open burning** – is amended to read as follows:

Open burning shall be prohibited when atmospheric conditions or local circumstances make such fire hazardous. Open burning shall be specifically prohibited during active Red Flag Warnings.

**Exceptions:** Prescribed burning for the purpose of reducing the impact of wildland fire when authorized by the fire code official, or agricultural burning that is approved by the fire code official and is conducted in accordance with Colorado Air Quality Control Commission Regulation Number 9 (5 CCR 1001-11).

Section 307.2 – **Permit required** – is amended to read as follows:

A permit shall be obtained from the County health department of jurisdiction in accordance with Section 105.5.34 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, or prevention or control of disease or pests. Application for such approval shall only be presented by and permits issued to the owner of the land on which the fire is to be kindled.

Section 308.1.6.3 – **Sky lanterns** – is amended to read as follows:

The use, lighting, tethering, or release of sky lanterns is prohibited.

Section 311.5 – **Placards** – is amended to read as follows:

The fire code official is authorized to require any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 115 of this code relating to structural or interior hazards to be marked as required by Sections 311.5.1 through Section 311.5.5.

Section 503.1 – **Where required** – is amended to read as follows:

Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1 through 503.6 and Appendix D “Fire Apparatus Access Roads.”

Section 503.1.1 – **Buildings and facilities** - **Exception 1.1** is amended to read as follows:

If the building is equipped throughout with an approved automatic sprinkler system installed
in accordance with 903.3.1.1, 903.3.1.2 or 903.3.1.3, the dimension is allowed to increase to 300 feet.

Section 503.1.2 – Additional access – is amended to read as follows:

A minimum of two approved fire-apparatus access roads shall be provided to each new residential development or new commercial or multi-family building within the jurisdiction. If multiple fire apparatus access roadways cannot be provided, all occupiable structures that are located more than 660 feet from the last roadway providing access from two directions, as measured from the centerline of this last roadway, shall be protected with an approved automatic fire sprinkler system.

Section 503.1.2 – Additional access – is amended by the addition of a new Section 503.1.2.1 to read as follows:

A minimum of two approved fire-apparatus access drives shall be provided to each building or portion of building hereafter constructed or moved into the jurisdiction.

Exception: A driveway to a one-family or two-family dwelling.

Section 503.1.4 – Limited access – is added and reads as follows:

The fire code official is authorized to modify the fire-apparatus access requirements due to existing waterways, topography, hazards or other factors.

Section 503.2 – Specifications – is amended to read as follows:

Fire apparatus access roads shall be installed and arranged in accordance with Section 503 and Appendix D “Fire Apparatus Access Roads.”

Section 503.2.7 – Grade – is amended to read as follows:

Fire apparatus access roads shall not exceed 10 percent in grade.

Exception: Grades steeper than 10 percent as approved by the fire code official.

Section 503.2.8 – Angles of approach and departure – is amended to read as follows:

Grade changes upon a fire apparatus access road or when entering or exiting from or to a fire apparatus access road, shall not exceed a 10 percent angle of approach or angle of departure.

Section 505.1 – Address identification – is amended to read as follows:

New and existing buildings or facilities shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numerals shall be Arabic numbers and street names, if required to be installed with the numerals, shall be alphabet letters. Numbers shall not be spelled out with alphabet letters. Address identification shall be maintained.
505.1.1 Addresses shall be assigned by the [City of Loveland, Town of Johnstown or Larimer County, as applicable] and shall comply with the Larimer County Street Naming and Addressing Standards as contained in the Larimer County Urban Area Street Standards.

505.1.2 The approved address numerals shall be visible from the street fronting the property and posted on a contrasting background. Bronze or brass numerals shall not be posted on a brick background.

505.1.3 The address numerals for any commercial or industrial buildings shall be placed at a height to be clearly visible from the street. Where required by the fire code official, address identification shall be provided in additional, approved locations to facilitate emergency response.

505.1.4 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.

505.1.5 Commercial or multiple-family buildings shall have numerals with a minimum height of six inches and stroke width of one-half inch. Buildings three or more stories in height or with a total floor area of 15,000 to 50,000 square feet, shall have numerals with a minimum eight-inch height and stroke width of one inch. Buildings with a total floor area of 50,000 square feet or greater shall have numerals with a minimum height of 12 inches and stroke width of 1.5 inches.

505.1.6 Residential buildings that contain not more than two dwelling units shall have a minimum four-inch-high numerals, with a minimum stroke width of one-half inch.

505.1.7 Individual suite or unit addresses shall be displayed with minimum four-inch-high numerals, with a minimum stroke width of one-half inch.

505.1.8 Monument signs shall not be used in lieu of address numerals on the building.

505.1.9 Buildings with multiple suites, apartments or units shall have the individual suites, apartments or units provided with individual identification numbers in an approved, sequential order. Suites, apartments or units located on the first floor shall be identified by numbers within the 100 or 1000 range or series; Suites, apartments or units located on the second floor shall be identified by numbers within the 200 or 2000 range or series; Suites, apartments or units located on the third floor units shall be identified by numbers within the 300 or 3000 range or series;...
range or series. Higher floors shall follow this same numbering scheme. Floors below grade shall be identified with numerals within the 0100 range on the first floor below grade and 0200 on the second floor below grade; lower floors shall follow the same numbering pattern.

505.1.10 Buildings, either individually or part of a multi-building complex, which have emergency access lanes on sides other than on the addressed street side, may be required to have the address numerals and street name on each side that fronts the fire lane(s).

505.1.11 Buildings that are addressed on one street, but are accessible from an adjoining street, may be required to affix the address numerals and street name on each side that is adjacent to the other street(s).

505.1.12 Approved signage shall be provided in conspicuous locations on or within buildings to provide clear direction to locate any suite, apartment or unit within the building.

505.1.13 Multiple-building complexes shall be provided with approved signage as needed to direct first responders to individual buildings.

Section 507.3 – Fire flow – is amended to read as follows:

Fire flow requirements for buildings or portions of buildings and facilities shall be determined in accordance with Appendix B of this code.

Section 507.5.1.1 – Hydrant for fire department connections – is amended as follows:

Buildings equipped with a fire department connection shall have a fire hydrant located within 150 feet of the fire department connection, using an approved route without obstacles. The hydrant and fire department connection shall be on the same side of the fire apparatus access road or parking lot drive aisle, unless otherwise approved by the fire code official.

Exception: The distance shall be permitted to exceed 150 feet where approved by the fire code official.

Section 509.1 – Identification – is amended by the addition of a new subsection 509.1.2 to read as follows:

509.1.2 Utility disconnect. The fire code official is authorized to approve utility disconnect locations.

Section 901.1 – Scope – is amended to read as follows:

The provisions of this chapter shall specify where fire protection and life safety systems are required and shall apply to the design, installation, inspection, operation, testing and maintenance of all fire protection systems. Where requirements of this code and the International Building Code are in conflict, the more restrictive shall apply.
A new Section 903.2.8.5 – **Dead-end roadways** – is added and reads as follows:

An approved automatic fire-sprinkler system shall be installed in all Group R occupancies, including one- and two-family residences and townhomes, when the structure is located beyond 660 feet of the entrance to a dead-end roadway, as measured from the centerline of the last roadway providing access to the dead-end road. If structures are protected by a fire sprinkler system, the fire marshal may approve a maximum dead-end length to 1,000 feet before a second access is required.

Section 903.2.9 – **Group S-1** – is amended with two new conditions to read as follows:

5. A Group S-1 fire area exceeds 5,000 square feet (464.5 m²) for self-storage buildings or structures.

6. A Group S-1 fire area for self-storage buildings or structures of any size where each individual unit is sold to an owner or owners. These buildings or structures are commonly referred to as “self-storage condominiums.”

Section 903.4.3 – **Control valves** – is amended to read as follows:

Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in all multi-story structures and to each individual tenant space in multi-tenant structures.

Section 907.5.2 – **Alarm notification appliances** – is amended to read as follows:

Alarm notification appliances shall provide full occupant notification throughout the entire building or structure and shall be designed and installed in accordance with NFPA 72. Alarm notification appliances shall be listed for their purpose.

Section 1103.5.3 – **Group I-2, Condition 2** – is amended to read as follows:

In addition to the requirements of Section 1103.5.2, existing buildings of Group I-2, Condition 2 occupancy shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The automatic sprinkler system shall be installed as established by the adopting ordinance.

Section 3103.2 – **Approval required** – is amended in part to read as follows, however, the exceptions remain unchanged:

Tents and membrane structures having an area in excess of seven hundred (700) square feet shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official.

A new Section 3106.4.1.1 – **Standby emergency medical services** – is added and reads as follows:

Public assembly events with an anticipated attendance of 350 persons or more shall require the standby services of at least one basic life support ambulance staffed with at least two
EMT-Basics. Public assembly events with an anticipated attendance of more than 1,000 persons shall require the standby services of at least one advance life support ambulance staffed with at least one (1) EMT-Paramedic and one EMT-Basic. The fire code official is authorized to grant exceptions and/or alternate plans for the provision of standby emergency medical services.

Section 5001.1 – Scope – Exception No. 10, is amended to read as follows:

10. The production, processing and storage of distilled spirits and wines in wooden barrels and casks when the facility is in conformance with the most recently published edition of the Distilled Spirits Council of the United States (DISCUS) “Recommended Fire Protection Practices for Distilled Spirits Beverage Facilities” and Chapter 40 of this code. Where requirements of Chapter 40 of this code and DISCUS conflict, the more restrictive shall apply.

Section 5601.1.3 – Fireworks – is amended to read as follows:

The possession, manufacture, storage, sale, handling and use of fireworks are prohibited unless permitted by state and local laws.

Section 5601.1.3 – Fireworks – Exception No. 4, is amended to read as follows:

4. The possession, storage, sale, handling and use of permissible fireworks in accordance with the criteria established by the fire code official.

Section 5601.2.2 – Sale and retail display – is amended to read as follows:

Persons shall not construct a retail display nor offer for sale explosives, explosive materials or fireworks on highways, sidewalks, public property or in any permanent building.

Section 5602 – Definitions – is amended by the addition of a new defined term to read as follows:

PERMISSIBLE FIREWORKS. Permissible fireworks are as defined in C.R.S. Section 12-28-101(8).

A new Section 5610 – Permissible Fireworks – is added and reads as follows:

SECTION 5610 PERMISSIBLE FIREWORKS

5610.1 General. Permissible fireworks use shall be as detailed in this section and in accordance with state and local laws.

5610.2 Use of Fireworks. The use of permissible fireworks shall be in accordance with Sections 5610.2.1 through 5610.2.4.

5610.2.1 It shall be unlawful for any person to possess, store, offer for sale, expose for sale, sell at retail, or use, or discharge any fireworks, other than permissible fireworks.
5610.2.2 It shall be unlawful for any person to knowingly furnish to any person under the age of sixteen (16) years of age, by gift, sale, or any other means, any fireworks, or permissible fireworks.

5610.2.3 It shall be unlawful for any person under sixteen (16) years of age to purchase fireworks, including permissible fireworks.

5610.2.4 It shall not be unlawful for a person under sixteen (16) years of age to possess and discharge permissible fireworks if such person is under adult supervision throughout the act of possession and discharge.

Section 5701.2 – Nonapplicability – item number 10 is amended to read as follows:

10. The production, processing and storage of distilled spirits and wines in wooden barrels and casks when the facility is in conformance with the most recent edition of the Distilled Spirits Council of the United States (DISCUS) “Recommended Fire Protection Practices for Distilled Spirits Beverage Facilities” and Chapter 40 of this code. Where requirements of Chapter 40 of this code and DISCUS conflict, the more restrictive shall apply.

Subsection 5704.2.9.6.1 – Locations where above-ground tanks are prohibited – is amended to read as follows:

Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law in accordance with ordinances adopted by the [City of Loveland, Town of Johnstown or Larimer County, as applicable]

   **Exception:** Above-ground tank storage of aviation fuels at the Northern Colorado Regional Airport fuel farm.

Section 5704.2.14.1 – Removal – is amended to add an item number 7 to read as follows:

7. Removal of above ground and underground tanks shall be in accordance with federal, state and local regulations.

Section 5704.3.3 – Indoor storage – is amended to read as follows:

Storage of flammable and combustible liquids inside buildings in containers and portable tanks shall be in accordance with Sections 5704.3.3.1 through 5704.3.3.10.

**Exceptions:**

1. Liquids in the fuel tanks of motor vehicles, aircraft, boats, or portable or stationary engines.

2. The production, processing and storage of distilled spirits and wines in wooden barrels and casks when the facility is in conformance with the most recent edition of the Distilled Spirits Council of the United States (DISCUS) “Recommended Fire Protection Practices for Distilled Spirits Beverage Facilities” and Chapter 40 of this code. Where requirements of Chapter 40 of this code and DISCUS conflict, the more restrictive shall apply.
Section 5706.2.4 – Permanent and temporary tanks – is amended to read as follows:

Unless a larger amount is approved in writing by the code official, the capacity of permanent above-ground tanks containing Class I or Class II liquids shall not exceed five hundred (500) gallons. The capacity of temporary above-ground tanks containing Class I or Class II liquids shall not exceed two thousand (2,000) gallons. Tanks shall be of single-compartment design.

Section 5706.2.4.4 – Locations where above-ground tanks are prohibited – is amended to read as follows:

The storage of Class I and II liquids in above-ground storage tanks is prohibited within the limits established by law in accordance with ordinances adopted by the [City of Loveland, Town of Johnstown or Larimer County, as applicable].

Section 5706.3 – Well drilling and operating – is amended by adding the following subsections:

5706.3.9 Portable fire extinguishers. Portable fire extinguishers shall be located throughout the site in locations approved by the fire code official.

5706.3.10 Identification of hazards. All hazardous materials tanks or containers shall be appropriately labeled in accordance with NFPA 704, or other standard as approved by the fire code official. All hazard markings shall be maintained by the operator.

5706.3.11 Access roads. All access roads to well drilling and operating facilities shall comply with Section 505.1 and Appendix D of this code.

5706.3.12 Facility security. All fences and gates installed to provide facility security shall comply with Section 503.6 of this code. The fire code official may require a Knox Box, Knox switch, or Knox padlock to be installed by the operator to provide fire department access to the site.

5706.3.13 Safety regulations. All oil and gas locations shall comply with all Colorado Oil and Gas Conservation Commission (COGCC) rules. COGCC Rule 600 shall be specifically addressed for all site safety requirements.

Section 5806.2 – Limitations – is amended to read as follows:

Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits established by law in accordance with ordinances adopted by the City of Loveland.

Section 6104.2 – Maximum capacity within established limits – is amended to read as follows:

Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed the limits established by ordinance and/or zoning regulation adopted by the local government with jurisdiction.

Exception: In particular installations, this capacity limit shall be determined by the fire code official, after consideration of special features such as topographical conditions, nature of occupancy, and proximity to buildings, capacity of proposed LP-gas
containers, degree of fire protection to be provided and capabilities of the local fire
department. These provisions shall not be interpreted so as to conflict with the
provisions of Colorado Revised Statutes Title 34 as amended. In the event of any
conflict, the more restrictive provision shall prevail.

Chapter 80 – **Referenced Standards** – is amended by adding the following additional referenced
standards in alphabetical and numeral sequence:

**COGCC**
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203
*Rule 600: Safety Regulations*
Referenced in Section 5706.3.13

**DISCUS**
Distilled Spirits Council of the United States
1250 Eye Street, NW Suite 400
Washington, DC 20005
Referenced in Sections 5001.1, 5701.2 and 5704.3.3

**NFPA**
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471
Referenced in Section 105.5.32

*Section B105.1 – One- and two-family dwellings, Group R-3 and R-4 buildings and
townhouses – is amended to read as follows:*

In the urban fire-flow area, the minimum fire-flow and flow duration requirements for one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses up to 3,600 square feet in area shall be 1,000 gpm, with a flow duration of 1 hour. In rural fire-flow areas, minimum fire-flow and flow duration shall be 500 gallons per minute and 1 hour for one- and two-family dwellings, Group R-3 and R-4 and townhomes less than 3,600 square feet in area. For any one- and two-family dwellings, Group R-3 and R-4 and townhouses exceeding 3,600 square feet in area per unit, regardless of location, minimum fire-flow and flow duration requirements shall be as specified in Table B105.1.

**Exception:** The fire code official is authorized to decrease the minimum required
fire-flow and flow duration for one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses protected by an approved automatic sprinkler system.

Section B105.2 – Buildings other than one- and two-family dwellings, Groups R-3 and R-4 and townhouses – is amended to read as follows:

The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be as specified in Tables B105.1 and B105.2.

Table B105.1(1) – Required fire flow for one- and two-family dwellings, Groups R-3 and R-4 buildings and townhomes – is deleted in its entirety.

Table B105.1(2) – Reference table for Tables B105.1(1) and B105.2 – is renamed “Table B105.1 – Area, Fire Flow and Duration”

Table B105.2 – Required fire flow for buildings other than one- and two-family dwellings, group R-3 and R-4 buildings and townhomes – is amended in full 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

<table>
<thead>
<tr>
<th>AUTOMATIC SPRINKLER SYSTEM (Design standard)</th>
<th>MINIMUM FIRE FLOW (gallons per minute)</th>
<th>FLOW DURATIONS (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No automatic sprinkler system</td>
<td>Value in Table B105.1</td>
<td>Duration in Table B105.1</td>
</tr>
<tr>
<td>Section 903.1.1 of the International Fire Code</td>
<td>25% of the value in Table B105.1(^a)</td>
<td>Duration in Table B105.1 at the reduced flow rate</td>
</tr>
<tr>
<td>Section 903.3.1.2 of the International Fire Code</td>
<td>25% of the value in Table B105.1(^b)</td>
<td>Duration in Table B105.1 at the reduced flow rate</td>
</tr>
</tbody>
</table>

\(^a\) 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

Section B106 – Referenced standards – is amended by the deletion of IRC-21 Table B105.1(1).
Section C101.1 – Scope – is amended to read as follows:

In addition to the requirements of Section 507.5.1, fire hydrants shall be provided in accordance with this appendix for the protection of buildings, or portions of buildings, hereafter constructed or moved into the jurisdiction. The fire code official is authorized to modify the location, number and distribution of fire hydrants based on site-specific constraints and hazards.

Table C102.1 – Required number and spacing of fire hydrants – is amended by (1) renaming it “Required Number of Fire Hydrants,” (2) deleting columns “average spacing between hydrants” and “maximum distance from any point on street or road frontage to a hydrant,” and (3) deleting all footnotes.

Section C103 – Fire hydrant spacing – Table C103.1 is added as follows:

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>SPACING BETWEEN HYDRANTS (feet) a,b</th>
<th>MAXIMUM DISTANCE FROM THE CLOSEST POINT ON A BUILDING TO A HYDRANT (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings other than one- and two-family dwellings, Group R-3 and R-4, and townhouses</td>
<td>350</td>
<td>400c</td>
</tr>
<tr>
<td>Urban One- and Two-Family Dwellings, Group R-3 and R-4, and townhouses</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>Rural One- and Two-Family Dwellings, Group R-3 and R-4, and townhouses</td>
<td>1,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

a. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or are arterial streets, hydrant spacing shall average 350 feet on each side of the street and be arranged on an alternating basis.
b. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at
spacing not to exceed 1,000 feet to provide for transportation hazards.
c. For buildings equipped with a fire department connection, see Section 507.5.1.1.

Section C103.1 – **Hydrant spacing** – is amended to read as follows:

Fire apparatus access roads and public streets providing required access to buildings in accordance with Section 503 shall be provided with one or more fire hydrants, as determined by Section C102.1. Where more than one fire hydrant is required, the distance between required fire hydrants shall be in accordance with Sections C103.2 and C103.3.

Section C103.2 – **Spacing between hydrants** – is amended to read as follows and by deleting the exception:

The spacing between fire hydrants shall be in accordance with Table C103.1.

Sections C103.3 – **Spacing from hydrants to a building** – is amended to read as follows:

The maximum spacing from fire hydrants to a structure shall be in accordance with Table C103.1.

Section C105 – **Referenced standard** – is deleted in its entirety.

Section D102.1 – **Access and loading** – is amended to read as follows:

Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road capable of supporting the imposed load of fire apparatus weighing at least 80,000 pounds (36,287 kg).

Section D102 – **Required access** – is amended by the addition of a new Section D102.2 and subsection D102.2.1 to read as follows:

D102.2 Roadway surface. All access roadways must be all-weather driving surfaces capable of supporting fire apparatus. Surfaces shall be asphalt or concrete and maintained in a usable condition at all times. Compacted road base or other all-weather surfaces engineered and capable of supporting the imposed loads may be approved for outdoor vehicle storage, ground-mounted solar installations, cell towers and similar isolated facilities and structures when approved by the fire code official.

D102.2.1 Access during construction. Compacted road base, chip or other all-weather surfaces shall be used only for temporary emergency access. All required access roads must be installed and serviceable before aboveground construction begins. Temporary access shall be available as long as the site is under construction. Thereafter, permanent fire lanes confirming with D102.1 and D102.2 shall be accessible and unobstructed at all times.

*Figure D103.1 – **Dead-end fire Apparatus Access Road Turnaround** – is amended to reflect the following:*
Table D103.4 – Requirements for dead-end fire apparatus access roads – is amended to read as follows:

<table>
<thead>
<tr>
<th>LENGTH (feet)</th>
<th>WIDTH (feet)</th>
<th>TURNAROUNDS REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-150</td>
<td>20</td>
<td>None required</td>
</tr>
<tr>
<td>151 and longer</td>
<td>20</td>
<td>100-foot hammerhead, 100-foot cul-de-sac in accordance with Figure D103.1</td>
</tr>
</tbody>
</table>

Section D103.3 – Turning radius – is amended to read as follows:

The minimum turning radii shall be 25 feet inside radius and 50 feet outside radius.

Section D103.5 – Fire apparatus access road gates – is amended by the addition of a new exception to read as follows:

Exception: Private driveways serving one single-family residence.

Section D103.6 – Signs – is amended to read as follows:

Where required by the fire code official, fire apparatus access roads shall be marked with
permanent NO PARKING – FIRE LANE signs complying with Diagram 1418 of the Larimer County Urban Area Street Standards. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

Section D104 – **Emergency vehicle access to all developments** – is amended to read as follows:

**Section D104 EMERGENCY VEHICLE ACCESS TO ALL DEVELOPMENTS**

**D104.1 Multiple access.** A minimum of two approved fire-apparatus access roads shall be provided to each developed lot within the jurisdiction. If multiple fire apparatus access roadways cannot be provided and the single, dead-end roadway is in excess of 660 feet in length, as measured from the centerline of the last roadway providing access to the dead-end road, all occupiable structures located beyond 660 feet shall be protected with an approved automatic fire sprinkler system.

**D104.2 Access to buildings.** A minimum of two approved fire-apparatus access driveways shall be provided to each building or portion of building hereafter constructed or moved into the jurisdiction.

**Exception:** A driveway to a one- or two-family dwelling.

**D104.3 Remoteness.** Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses. If all structures are protected by an approved automatic fire-sprinkler system, the access roadways may be placed a distance apart equal to not less than one-third the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line.

Section D106 – **Multiple-family Residential Developments** – is deleted in its entirety

Section D107 – **One- or Two-family Residential Developments** – is deleted in its entirety

Section D108 – **Referenced Standards** – is deleted in its entirety

Appendix E – **Hazard Categories** – is adopted in its entirety

Appendix F – **Hazard Ranking** – is adopted in its entirety

Appendix G – **Cryogenic Fluids – Weights and Volume Equivalents** – is adopted in its entirety

Appendix H – **Hazardous Material Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS)** – is adopted in its entirety

Appendix I – **Fire Protection Systems – Noncompliant Conditions** – is adopted in its entirety

A new Appendix O – **Wildfire Risk Reduction** – is added and reads as follows:
APPENDIX O
WILDFIRE RISK REDUCTION

SECTION O101 – GENERAL

O101.1 Scope. It is the intent of Loveland Fire Rescue Authority (LFRA) and Larimer County to reduce wildfire risk in a cost-effective manner, while maintaining the aesthetic qualities of the wildland urban interface area. Wildfire risk reduction requirements shall be in accordance with this appendix and all other applicable requirements of the locally adopted 2021 International Fire Code, 2021 International Building Code, and 2021 International Residential Code. Where requirements of this code and any other codes or polices are in conflict, the most restrictive shall apply.

0101.2 Community risk reduction. Residing in or near wildland urban interface areas involves increased wildfire risks that may not apply in more urbanized developed areas. Wildfire risk reduction utilizes a combination of ignition-resistant materials and construction (structure hardening), fuels management, and community education to reduce the risk of wildfire ignition and spread in the Wildland Urban Interface as defined in this appendix.

O101.3 Applicability. Unless other more restrictive requirements apply, this appendix shall be applicable to all new buildings, additions, and repairs in the Wildland Urban Interface area, including buildings designed and constructed in accordance with the International Residential Code and the International Building Code.

Exceptions:

1. One-time addition not exceeding 200 square feet in area.
2. Replacement of siding or roof not exceeding 100 square feet in a 12-month period.
3. Replacement of one attic vent.

SECTION O102 – GENERAL DEFINITIONS

CLASS A FIRE RATED ROOF ASSEMBLY. Roof assemblies that are effective against severe fire test exposures, in accordance with UL 790 (ASTM E 108). The system consists of a roof covering component serving as both a roof covering and a roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly can include an underlayment, a thermal barrier, insulation or a vapor retarder. Approved Class A materials include but are not limited to asphalt shingles, clay tile, concrete (standard weight and lightweight), metal or stone-coated metal, slate and hybrid composite synthetic. Solid wood materials are prohibited.

CLASS B FIRE RATED ROOF ASSEMBLY. Roof assemblies that are effective against moderate fire test exposures, in accordance with UL 790 (ASTM E 108).

COMMUNITY WILDFIRE PROTECTION PLAN (CWPP). A collaborative plan developed by a community in an area at-risk from wildfire. The process is the collaboration between
communities and agencies interested in reducing wildfire risk. The plan identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure and recommends measures to reduce structural ignitebility throughout the at-risk community. The plan may address issues such as wildfire response, hazard mitigation, community preparedness or structure protection, or all of the above. (National Wildfire Coordinating Group, 2023)

**FUELS MANAGEMENT.** The modification of vegetation. Fuels management is intended to protect structures from wildfire as well as to reduce fire from spreading to the wildland urban interface.

**IGNITION RESISTANT MATERIALS.** A type of building material that resists ignition or sustaining flaming combustion sufficiently as to reduce losses from wildland urban interface conflagrations under worst-case weather and fuel conditions with wildfire exposure of burning embers and small flames.

**WILDFIRE.** An uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures.

**WILDLAND.** An area in which development is essentially nonexistent, except for roads, railroads, power lines and similar facilities.

**WILDLAND URBAN INTERFACE AREA (WUI).** That geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

**SECTION 0103 – IGNITION-RESISTANT MATERIALS AND CONSTRUCTION**

**O103.1 Structure hardening.** The following requirements shall be enforced for all homes constructed or reconstructed or completing an addition of more than 200 square feet or replacing more than 100 square feet of roof or siding in a 12-month period, unless otherwise permitted by the fire code official.

**O103.1.1 Roof.** A Class A roof assembly shall be installed on all residential occupancies and a minimum Class B roof covering shall be installed on other occupancies, unless otherwise permitted by the fire code official.

**O103.1.2 Exterior cladding, eaves and soffits.** Exterior cladding, eaves and soffits shall be constructed of ignition-resistant materials approved by the fire code official. Approved materials include, but are not limited to fiber-cement board, stucco, masonry/brick, manufactured stone and similar materials. Natural wood siding, cedar siding, hardboard, vinyl and similar combustible materials are not allowed.

**Exception 1:** Natural wood or plastic products used for fascia, trim board materials and trim accents, such as corbels, false rafter tails, faux trusses, shutters and decorative vents material are allowed when painted or as approved by the fire code official, and heavy timber or dimensional log construction.

**Exception 2:** Heavy timber or dimensional log construction for exterior cladding/siding.
O103.1.3 **Overhangs and projections.** For any portion of the attached structure with projections or overhangs, the area below the projections or overhangs shall have all horizontal under-floor areas enclosed with ignition resistant materials.

**Exception:** Heavy timber or dimensional log construction is allowed.

O103.1.4 **Exterior doors.** Exterior doors shall be noncombustible or solid core not less than 1 ¾-inches thick. Windows within doors and glazed doors shall be tempered safety glass or multi-layered glazed panels.

**Exception:** Decorative single pane glazing in front entry doors is allowed.

O103.1.5 **Windows.** Exterior windows shall be a minimum double pane. Tempered panes are preferable but not required.

O103.1.6 **Attic vents.** All attic vents shall be screened with wire mesh or hardware cloth having openings no larger than 1/8-inch unless an alternative design or product is allowed by the fire code official. Soffit vents are allowed. Gable vents may be allowed but only as approved by the fire code official.

O103.1.7 **Gutters and downspouts.** Gutters and downspouts that are of non-combustible construction shall be installed such that the leading edge of the roof is finished with a metal drip edge so that no wood sheathing is exposed. The drip edge shall extend into the gutter. Vinyl gutters may be allowed but must have a non-combustible landing area on the ground below the roof line, that is a minimum 5-foot distance from the side of the structure or foundation. NOTE: Although not required, gutter caps are highly recommended to prevent combustible debris from collecting in the trough.

O103.1.8 **Decks.** Decks and other habitable spaces shall be of ignition resistant or non-combustible decking materials, such as composite or metal decking. Wood is not permitted to be used for the decking surface but can be used for all large structural components and railings.

O103.1.9 **Exterior walls, posts and columns.** The base of exterior walls, posts or columns shall be protected on the bottom side with provisions such as fire-resistant foam or wire mesh having openings no larger than 1/8-inch to protect them from ember intrusion and still allow for weeping and moisture control.

O103.1.10 **Spark arrestor or cap.** Chimneys serving fireplaces, as well as other heating appliances in which solid or liquid fuels are used, shall have an approved spark arrestor or cap.

O103.2 **Alternative materials.** Alternative materials or construction methods not specifically addressed in Section O103 may be considered on a case-by-case basis if found to have comparable ignition-resistant properties and as approved by the fire code official.
SECTION 0104 – FUELS MANAGEMENT

O104.1 General. Fuels management shall comply with this section, unless otherwise approved by the fire code official.

O104.2 Landscaping materials. Landscaping shall comply with O104.2.1 to O104.2.4.

O104.2.1 Mulch and decorative rock. Only ignition-resistant mulch, including but not limited to, decorative rock, gravel and pavers shall be used within 5 feet of the exterior of the home and in planting beds in common areas, parks and open space. Combustible mulch, such as shredded hardwood or bark chips, is not allowed. Organic mulches may be applied around the dripline of trees and shrubs (maximum circumference to conserve fuel moisture.

O104.2.2. Clearance to main structure. No highly combustible brush, trees or shrubs shall be placed within 15 feet of a home or accessory structures such as sheds, decks, or pergolas. The trunks of deciduous trees may be allowed to be planted up to 10 feet from structures when approved by the fire code official.

O104.2.3 Pruning of limbs. Trees shall be pruned to a height of up to 6 feet above the ground and shall not have limbs overlap other trees. Tree clusters may be allowed if sufficient clear area is provided and approved by the fire code official.

O104.2.4 Clearance of tree branches to structures or appurtenances. Tree branches shall not extend over or under the roof or eaves and shall not be within 15 feet of a deck or similar combustible projection, wood burning appliance or chimney.

O104.3 Approved plants. Plant species within the wildland urban interface shall comply with a FireWise plant list approved by the fire code official.

O104.4 Fences. Fences shall comply with 104.4.1 to 104.4.3

104.4.1 Fences connecting to structures. The last 4 feet a fence or gate that connects to a home or accessory structure shall be constructed of ignition-resistant materials, such as metal, stone or composite products.

O104.4.2 Fences adjacent to open spaces. Fences constructed adjacent to parks, common areas, open space, and environmentally sensitive areas shall be an open two- or three-rail design. Wire mesh may be placed on the interior side of the fence.

O104.4.3 Privacy fences. Privacy fences shall have a minimum 2-inch separation between the bottom of the fence and the ground, and the planks shall not have separation gaps of more than 1 inch. Wire mesh may be placed on the interior side of the fence. Back-to-back fences and shadow box fences are prohibited.

O104.5 Park common areas. Play structures, picnic shelters, benches, trash receptacles and other similar structures within parks, open space and common areas shall be constructed of ignition resistant materials.
SECTION 0105 – PERMIT REVIEW REQUIREMENTS

O105.1 Construction permit review requirements. All construction permit submittals must be reviewed and approved by the fire code official prior to permit issuance and prior to final inspections. As part of the permit review process, the fire code official or designee will provide specific recommended wildfire mitigation measures. A final LFRA inspection to verify compliance will be required prior to issuance of the Certificate of Occupancy by the Larimer County Building Division.
FIGURE 0102.1 LFRA WILDLAND URBAN INTERFACE AND WILDFIRE ZONE

Legend
- Wildfire Zone
- Municipal Boundary
- LFRA Wildland Urban Interface
- LFRA Boundary
RESOLUTION APPROVING THE LOVELAND FIRE RESCUE AUTHORITY
2021 INTERNATIONAL FIRE CODE AND AMENDMENTS

The request of the Loveland Fire Rescue Authority ("LFRA") for approval to apply the 2021 International Fire Code and those standards, appendices, modifications, and regulations shown on Exhibit "A" (collectively "Fire Code") within that area of the LFRA District located in unincorporated Larimer County, Colorado, has been filed with the Board of County Commissioners of Larimer County.

1. Section 32-1-1002(1)(d), C.R.S. 2007 provides that the board of any fire protection district has the power to adopt and enforce fire codes, as the board deems necessary, but no such code shall apply within the unincorporated portion of any county unless the governing body of such county adopts a resolution stating that such code or specific portions thereof shall be applicable within the fire protection district’s boundaries.


3. The Loveland Fire Rescue Authority has proposed that the Fire Code be approved by Larimer County for application within that area of the LFRA District located in unincorporated Larimer County. Larimer County will have no responsibility for enforcement of the Fire Code.

4. Allowing the Fire Code to be applied within that area of the LFRA District located in unincorporated Larimer County will benefit and promote the safety and welfare of the citizens of Larimer County.

RESOLUTION

WHEREAS, the Board of County Commissioners has made its findings upon the request of the Loveland Fire Rescue Authority for approval to apply the 2021 International Fire Code and those standards, appendices, modifications, and regulations shown on Exhibit "A" within that area of the LFRA District located in unincorporated Larimer County, Colorado, which findings precede this Resolution and by reference are incorporated herein and made a part hereof, and

WHEREAS, the Board of County Commissioners has carefully considered the request and has given the same such weight as it in its discretion deems proper, and is now fully advised in the premises.

NOW, THEREFORE, BE IT RESOLVED that the request of the Loveland Fire Rescue Authority for approval to apply the 2021 International Fire Code and those standards, appendices, modifications, and regulations shown on Exhibit "A"
(Resolution R-156, Loveland Fire Rescue Authority, collectively “Fire Code”) within that area of the LFRA District located in unincorporated Larimer County, Colorado, be and the same is hereby granted subject to the following conditions:

1. Said Fire Code shall be effective only within that area of the Loveland Fire Rescue Authority’s district located in unincorporated Larimer County.

2. Approval of the Fire Code shall be effective on the date of this Resolution.

3. Larimer County will have no responsibility for enforcement of the Fire Code.

Dated and Effective this 20th day of June, 2023.

BOARD OF COUNTY COMMISSIONERS OF LARIMER COUNTY, COLORADO

By: ______________
Chair

ATTEST:

__________________________
Deputy Clerk to the Board

Date: June 8, 2023
Approved as to form:

______________
Senior Assistant County Attorney