

**ORDINANCE OF THE  
CITY OF LONE TREE**

**Series of 2018**

**Ordinance No. 18-13**

**AN ORDINANCE REPEALING AND REENACTING CHAPTER 18 OF THE LONE TREE MUNICIPAL CODE AND ADOPTING BY REFERENCE AND AMENDING THE 2018 INTERNATIONAL BUILDING CODE, THE 2018 INTERNATIONAL RESIDENTIAL CODE, THE 2018 INTERNATIONAL MECHANICAL CODE, THE 2018 INTERNATIONAL PLUMBING CODE, THE 2018 INTERNATIONAL FUEL GAS CODE, THE 2018 INTERNATIONAL FIRE CODE, THE NATIONAL ELECTRICAL CODE (2017 EDITION) AND THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE; AND TO PROVIDE PENALTIES FOR CODE VIOLATIONS.**

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LONE TREE, COLORADO:**

**ARTICLE 1 – AUTHORITY**

The City of Lone Tree (the "City") is a home rule municipality operating under the Lone Tree Home Rule Charter (the "Charter") adopted on May 5, 1998 and a Municipal Code (the "Municipal Code"), codified and adopted on December 7, 2004. Pursuant to the Charter, the Municipal Code and the authority given home rule cities, the City may adopt and amend Ordinances.

**ARTICLE 2 – DECLARATIONS OF POLICY**

- A. The City Council recognizes the need for modern, comprehensive building codes addressing the standards for the design and installation of building and related systems throughout the City that adequately protect the public health, safety and welfare.
- B. The 2018 International Building Code, the 2018 International Residential Code, the 2018 International Mechanical Code, the 2018 International Plumbing Code, the 2018 International Fuel Gas Code, and the 2018 International Fire Code, and all publications of the International Code Council, Inc., as well as the National Electrical Code, 2017 Edition, a publication of the National Fire Protection Association (collectively, the "Codes"), are recognized internationally by building professionals for their performance and prescriptive code requirements. More than just incorporating existing codes, they are designed to provide a comprehensive set of regulations for building and related systems that provide safety standards without unnecessarily increasing construction costs, or restricting or giving preferential treatment to the use of new materials, products or methods of construction.

- C. These Codes are fully compatible with each other and are part of an integrated plan for building construction and related standards for the industry.
- D. The City Council wishes to update and improve the standards for building construction and related systems in the City by adopting by reference these Codes, along with amendments reflecting the unique circumstances of the City, and to provide penalties for violations.

### **ARTICLE 3 – SAFETY CLAUSE**

The City Council hereby finds, determines, and declares that this Ordinance is promulgated under the general police power of the City, that it is promulgated for the health, safety, and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare.

### **ARTICLE 4 – REPEAL AND RE-ADOPTION**

Chapter 18 of the Municipal Code, Building Regulations, is hereby repealed in its entirety and re-adopted as provided in Exhibit A, attached to and incorporated in this Ordinance.

### **ARTICLE 5 - PROVISIONS EFFECTIVE**

The provisions of this Ordinance shall go into effect on January 1, 2019.

### **ARTICLE 6 – CAUSES OF ACTION RETAINED**

Nothing in this Ordinance or in the Building Regulations hereby adopted shall be construed to affect any suit or proceeding impending 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; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this Ordinance.

### **ARTICLE 7 – SEVERABILITY**

If any part or provision of this Ordinance, or its application to any person or circumstance, is adjudged to be invalid or unenforceable, the invalidity or unenforceability of such part, provision, or application shall not affect any of the remaining parts, provisions or applications of this Ordinance which can be given effect without the invalid provision, part or application, and to this end the provisions and parts of this Ordinance are declared to be severable.

### **ARTICLE 8 - EFFECTIVE DATE**

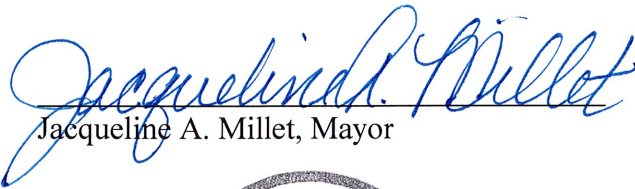
Pursuant to Article V, Section 7 of the Charter, this Ordinance shall take effect thirty (30) days following publication after the first reading if no changes are made on second reading, or twenty (20) days after publication following second reading if changes are made upon second reading.

**INTRODUCED, READ AND ORDERED PUBLISHED ON NOVEMBER 6, 2018.**

**PUBLISHED IN THE DOUGLAS COUNTY NEWS PRESS ON NOVEMBER 29, 2018, LEGAL NOTICE NO. 934460.**

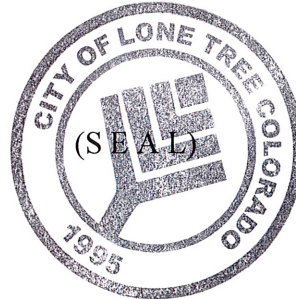
**APPROVED AND ADOPTED WITH NO CHANGES ON SECOND READING ON DECEMBER 4, 2018, TO BECOME EFFECTIVE ON JANUARY 1, 2018.**

**CITY OF LONE TREE:**

  
Jacqueline A. Millet, Mayor

**ATTEST:**

  
City Clerk



**EXHIBIT A**  
**CHAPTER 18 – BUILDING REGULATIONS**

*[Exhibit begins on the next page]*

## CHAPTER 18

### Building Regulations

#### Article I

##### General Provisions

- Sec. 18-1-10 Purpose
- Sec. 18-1-20 Valuation of work
- Sec. 18-1-30 Fees
- Sec. 18-1-40 Use Tax
- Sec. 18-1-50 Refunds
- Sec. 18-1-60 Noise mitigation
- Sec. 18-1-70 Site sanitation
- Sec. 18-1-80 Appeals
- Sec. 18-1-90 Penalties

#### Article II

##### Building Code

- Sec. 18-2-10 Title
- Sec. 18-2-20 Adoption by reference
- Sec. 18-2-30 Definition
- Sec. 18-2-40 Amendments

#### Article III

##### Residential Code

- Sec. 18-3-10 Title
- Sec. 18-3-20 Adoption by reference
- Sec. 18-3-30 Definition
- Sec. 18-3-40 Amendments

#### Article IV

##### Mechanical Code

- Sec. 18-4-10 Title
- Sec. 18-4-20 Adoption by reference
- Sec. 18-4-30 Definition
- Sec. 18-4-40 Amendments

#### Article V

##### Plumbing Code

- Sec. 18-5-10 Title
- Sec. 18-5-20 Adoption by reference
- Sec. 18-5-30 Definition
- Sec. 18-5-40 Amendments

#### Article VI

##### Fuel Gas Code

- Sec. 18-6-10 Title
- Sec. 18-6-20 Adoption by reference
- Sec. 18-6-30 Definition
- Sec. 18-6-40 Amendments

#### Article VII

##### Electrical Code

- Sec. 18-7-10 Title
- Sec. 18-7-20 Adoption by reference
- Sec. 18-7-30 Definition
- Sec. 18-7-40 Amendments

#### Article VIII

##### Fire Code

- Sec. 18-9-10 Title
- Sec. 18-9-20 Adoption by reference
- Sec. 18-9-30 Definition
- Sec. 18-9-40 Amendments

**Article IX Energy Conservation Code**  
Sec. 18-10-10 Title  
Sec. 18-10-20 Adoption by reference  
Sec. 18-10-30 Definition  
Sec. 18-10-40 Amendments

**Article X Reserved**

**Article XI Reserved**

**Article XII Repair of Construction Defects**  
Sec. 18-12-10 Purposes and applicability  
Sec. 18-12-20 Definitions  
Sec. 18-12-30 Potential claimants  
Sec. 18-12-40 Potential respondents  
Sec. 18-12-50 Claimant's notice to builder of construction defect; builder's acknowledgement;  
inspection  
Sec. 18-12-60 Builder's repair  
Sec. 18-12-70 Warranty of repairs  
Sec. 18-12-80 Subsequently discovered defects  
Sec. 18-12-90 Alternative dispute resolution provisions  
Sec. 18-12-100 Informed consent of homeowners

## **ARTICLE I**

### **General Provisions**

#### **Sec. 18-1-10. Purpose.**

The purpose of the codes adopted herein is to establish standards for and to regulate the materials, design and construction methods for the planning, design and construction of buildings and other improvements and to provide a comprehensive fire code. The standards established in this Chapter are the minimum requirements to safeguard the public safety, health and general welfare through affordability, structural strength, means of egress facilities, stability, sanitation, light and ventilation, energy conservation and safety to life and property from fire and other hazards attributed to the built environment, and to provide a reasonable level of life safety to fire fighters and emergency responders during emergency operations.

#### **Sec. 18-1-20. Valuation of work.**

The determination of value or valuation shall be established by the Building Official utilizing the most recent building valuation data printed in the Building Safety Journal, published by the International Code Council. When an applicant provides an estimated project valuation, the valuation shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the Building Official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the Building Official. Final building permit valuation shall be set by the Building Official.

#### **Sec. 18-1-30. Fees.**

- (1) Payment of fees. A permit shall not be valid until the fees, prescribed by law, have been paid; nor shall an amendment to a permit be issued until the additional fee, if any, has been paid.
- (2) Fee schedule. Fees for each permit shall be calculated and applied in accordance with the City of Lone Tree Administrative Fee Schedule, adopted by resolution of the City Council.
- (3) Related fees. The payment of the fee for the construction, alteration, removal or demolition for work done in connection to, or concurrently with the work authorized by a building permit, shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.
- (4) Elevator/escalator inspection fee. A conveyance inspection fee in accordance with the City of Lone Tree Administrative Fee Schedule shall be paid for each separate elevator/escalator installed in the city. These fees shall cover annual safety inspections and witness inspections as required by the State. Notice of the fee shall be given to each conveyance owner by the building division for the specific inspection service provided.



**Sec. 18-1-40. Use tax.**

The use tax for materials used in construction will be collected by the City at the time of the issuance of the permit, pursuant to Chapter 4 of the Lone Tree Municipal Code.

**Sec. 18-1-50. Refunds.**

- (1) The Building Official may authorize the refunding of fees for the following:
  - a. The full amount of any fee erroneously paid or collected.
  - b. Not more than 80% of the permit fee paid when no work has been done under a permit issued in accordance with this Chapter.
  - c. Not more than 80% of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.
- (2) The Building Official shall not authorize a refund of any fee paid later than 180 days after the date of fee payment, except upon written application filed by the original permittee, not later than 180 days after the date of fee payment.

**Sec. 18-1-60. Noise mitigation.**

- (1) Interior Noise Level.

All new residential structures, and the alteration or repair of existing structures, that are located in the Centennial Airport Overlay Area, requiring noise mitigation, shall comply with Table 18-1-60.

Exception:

An acoustical engineer, registered with the State of Colorado, may certify that construction practices and/or materials of the structure will achieve an interior noise level of DNL 45 dBA. The acoustical professional shall submit documentation of the proposed measures to the Building Official before permitting.

Field testing to show compliance with minimum STC ratings listed in Table 18-1-60, shall be performed and reported in accordance with ASTM E966 (current version at time of testing), 'Standard Guide for Field Measurements of Airborne Sound Insulation of Building Facades and Facade Elements'. Field measured outdoor to indoor transmission loss (OITL) ratings shall be no more than 5-points less than the minimum STC ratings listed in Table 18-1-60.

- (2) Penetrations.

All membrane or through penetrations in the construction assemblies for piping, electrical devices, recessed cabinets, bathtubs, soffits, heating, combustion, ventilation or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings.



**Table 18-1-60**  
**Minimum Sound Transmission Class (STC)<sup>a</sup>**

<b>A-weighted DNL</b>	<b>Wall, Floor and Roof Assemblies</b>	<b>Window and Door Assemblies</b>
≥75	50	42
≥ 70 to 75	45	37
≥ 65 to 70	39	28

- a. The STC of construction assemblies shall be determined by a certified sound testing laboratory.

**Sec. 18-1-70. Site sanitation.**

- (1) Sanitation facilities required.

Every building site during construction, remodeling or demolition activities, shall be furnished with approved sanitation facilities for workers pursuant to the International Plumbing Code and an appropriate enclosure or other means approved by the City to contain trash and debris.

- (2) Location.

Sanitary facilities and approved trash enclosures shall be located within three hundred (300) feet of the building site. Sanitary facilities and trash enclosures shall not be located within the public right-of-way without the approval of the Public Works Department.

**Sec. 18-1-80. Appeals**

- (1) Board of Adjustment and Appeals.

The Board of Adjustment and Appeals shall hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this Chapter, pursuant to Chapter 2, Article V of the Municipal Code.

- (2) Application.

An application for appeal shall be filed on a form obtained from the building official within 20 days after a notice of an order, decision or determination is served.

- (3) Notice of meeting.

The Board of Adjustment and Appeals shall set a reasonable time for hearing the appeal, and the Director of Community Development shall provide notice to the parties.

- (4) Board Decision.

The Board of Adjustment and Appeals shall modify or reverse the decision of the building official by a concurring vote of four of its members. The building official shall take immediate action in accordance with the decision of the board.

**Sec. 18-1-90. Penalties.**

Any person, firm or corporation violating any of the provisions of this Chapter or any code incorporated herein shall be deemed guilty of a misdemeanor, and any such person, firm or corporation shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation is committed, continued or permitted, and upon conviction of any such violations, such person, firm or corporation shall be punished as provided by Section 1-4-20 of this Code. The issuance or

granting of a permit or approval of plans and specifications shall not be deemed or construed to be a permit for or an approval of, any violation of any provisions of the codes adopted herein.

## **ARTICLE II**

### **Building Code**

#### **Sec. 18-2-10. Title.**

This Article shall be known as the *Lone Tree Building Code*.

#### **Sec. 18-2-20. Adoption by reference.**

- (1) The International Building Code, 2018 Edition, as published by the International Code Council, Inc., 4051 W. Flossmoor Road, Country Club Hills, IL 60478, is hereby adopted by reference and incorporated into this Article as though fully set forth herein as the building code of the City. Except as otherwise provided, this code is adopted in its entirety. Appendices to the code are adopted only to the extent specified.
- (2) One (1) copy of the International Building Code, 2018 Edition, as amended by this Article, certified to be a true copy by the Mayor and City Clerk, shall be on file in the office of the City Clerk and may be inspected by any interested person between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.

#### **Sec. 18-2-30. Definition.**

*Jurisdiction*, as used in this code, means the City of Lone Tree and includes all areas within the corporate limits of the City and any area annexed to the City.

#### **Sec. 18-2-40. Amendments.**

The International Building Code, 2018 Edition (“IBC”), shall be amended as follows:

- (1) IBC Section 101.1, Title, is amended by inserting “the City of Lone Tree” where indicated.
- (2) IBC Section 101.4.4, Property Maintenance, is deleted in its entirety.
- (3) A new IBC Section 105.3(8) is added to read as follows:

8. Include a soils test of the building site prepared by a professional engineer registered by the State of Colorado to be submitted with the application for a building permit. A professional engineer registered by the State of Colorado shall design the foundation in accordance with the Soils Report. When the building site is located in a hillside area, or in the opinion of the Building Official, is located in an area subject to geological hazards or steep slopes, the Building Official may require an engineering geologist, working within their field of expertise, to submit specific recommendations regarding the building site and the proposed location and design. Such recommendations shall include, but are not limited to, the relationships of site grading, structural integrity, site vegetation characteristics (or potential), location of septic drain fields, and protection of adjacent property.

- (4) A new IBC Section 105.3.1.1 is added to read as follows:

105.3.1.1 Election to proceed under previous code. Within the first 180 days following the adoption of this code, an applicant under subsection 105.3 may elect to, and if approved by the Building Official, proceed under the set of codes previously adopted and in effect on January 1, 2015; provided, however, that said election must be made certain and in writing, and under no circumstances shall an applicant be permitted to proceed partially under one set of codes and partially under the other.

- (5) IBC Section 109, Fees, is deleted in its entirety and replaced by the following:

109.1 Fees. For buildings, structures, electrical, gas, mechanical, plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the City of Lone Tree Administrative Fee Schedule.

- (6) IBC Section 110.3.1 is amended by adding a new sentence to the end of the paragraph to read as follows:

Inspections shall be performed by a Colorado licensed professional engineer. The results of such inspections shall be provided to the Building Official in a stamped written report completed by the engineer who performed the inspection.

- (7) IBC Section 113, Board of appeals, is deleted in its entirety and replaced by the following:

113.1 Means of appeal. Appeals shall be heard by the Board of Adjustment and Appeals.

113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provision of this code do not fully apply or an equally good or better form of construction is proposed. The Board of Adjustment and Appeals shall have no authority to waive the requirements of this code.

- (8) IBC Section 114.4, Violation penalties, is deleted and replaced by the following:

114.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, installs, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor and, upon conviction, shall be subject to the penalties set forth in section 18-1-90 of the Municipal Code. In addition, such person shall pay all reasonable costs and expenses, including attorneys' fees. Each day that a violation continues shall be considered a separate offense.

- (9) IBC Section 115.3, Unlawful continuance, is deleted and replaced by the following:

115.3 Unlawful continuance. It shall be a violation of this code for any person to 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.

- (10) A new IBC Section 406.5.1.1 is added to read as follows:

406.5.1.1 Crime Prevention Through Environmental Design. To enhance safety and security, while reducing risk to people and assets in open parking garages, open parking garages may be designed and constructed in accordance with the American Public Transportation Association standard, APTA SS-SIS-RP-007-10, June 24, 2010.

- (11) A new sentence to the end of IBC Section 406.6, to read as follows:

To enhance safety and security, while reducing risk to people and assets in enclosed parking garages, enclosed parking garages may be designed and constructed in accordance with the American Public Transportation Association standard, APTA SS-SIS-RP-007-10, June 24, 2010.

- (12) IBC Section 1608.2, Ground snow loads, is deleted and replaced by the following:

1608.2 Ground snow loads. The ground snow load shall be a minimum 30 pounds per square foot.

- (13) IBC Section 1609.3 is deleted and replaced by the following:

1609.3 Basic wind speed.

- a) Category I buildings and structures the ultimate design wind speed ( $V_{ult}$ ) shall be 105 miles per hour.
- b) Category II buildings and structures the ultimate design wind speed ( $V_{ult}$ ) shall be 115 miles per hour.
- c) Category III and IV buildings and structures the ultimate design wind speed ( $V_{ult}$ ) shall be 120 miles per hour.

- (14) IBC Section 1609.4.3, Exposure categories, the first sentence is amended to read as follows:

1609.4.3 Exposure categories. An exposure category shall be determined in accordance with the following, but the design wind exposure for the City of Lone Tree shall not be less than Exposure C.

- (15) IBC Section 1612.3, Establishment of flood hazard areas, is deleted and replaced by the following:

1612.3 Establishment of flood hazard areas. The establishment of the City's flood hazard areas are adopted and defined pursuant to Chapter 15, Article III of the Municipal Code.

- (16) IBC Section 1809.5, Frost protection, is amended by adding a new sentence to the beginning of the paragraph to read as follows:

The frost depth for all areas in the City of Lone Tree shall be a minimum of 36 inches below the finish grade.

## ARTICLE III

### Residential Code

#### Sec. 18-3-10. Title.

This Article shall be known as the *Lone Tree Residential Code*.

#### Sec. 18-3-20. Adoption by reference.

- (1) The International Residential Code, 2018 Edition, as published by the International Code Council, Inc., 4051 W. Flossmoor Road, Country Club Hills, IL 60478, is hereby adopted by reference and incorporated into this Article as though fully set forth herein as the residential code of the City. Except as otherwise provided, this code is adopted in its entirety. Appendices to the code are adopted only to the extent specified.
- (2) One (1) copy of the International Residential Code, 2018 Edition, as amended by this Article, certified to be a true copy by the Mayor and City Clerk, shall be on file in the office of the City Clerk and may be inspected by any interested person between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.

#### Sec. 18-3-30. Definition.

*Jurisdiction*, as used in this code, means the City of Lone Tree and includes all areas within the corporate limits of the City and any area annexed to the City.

#### Sec. 18-3-40. Amendments.

The International Residential Code, 2018 Edition (“IRC”), shall be amended as follows:

- (1) IRC Section 101.1, Title, is amended by inserting “the City of Lone Tree” where indicated.
- (2) Subsection 10 of IRC Section R105.2, under the Building heading, is deleted and replaced by the following:
  10. The replacement or repair of roofing less than one square (100 square feet).
- (3) A new IRC Section R105.3.1.2 is added to read as follows:

R105.3.1.2 Election to proceed under previous code. Within the first 180 days following the adoption of this code, an applicant under subsection 105.3 may elect to, and if approved by the Building Official, proceed under the set of codes previously adopted and in effect on January 1, 2015; provided, however, that said election must be made certain and in writing, and under no circumstances shall an applicant be permitted to proceed partially under one set of codes and partially under the other.
- (4) IRC Section 105.3, Application for permit, is amended by adding new subsections (8) and (9) to read as follows:

8. Include a soils test of the building site prepared by a professional engineer registered by the State of Colorado to be submitted with the application for a building permit. A professional engineer registered by the State of Colorado shall design the foundation in accordance with the Soils Report. When the building site is located in a hillside area, or in the opinion of the Building Official, is located in an area subject to geological hazards or steep slopes, the Building Official may require an engineering geologist, working within their field of expertise, to submit specific recommendations regarding the building site and the proposed location and design. Such recommendations shall include, but are not limited to, the relationships of site grading, structural integrity, site vegetation characteristics (or potential), location of septic drain fields, and protection of adjacent property.

9. Include a copy of the City of Lone Tree optional sprinkler form for all new dwelling units, signed by both the buyer and builder.

- (5) IRC Section 108, Fees, is deleted in its entirety and replaced by the following:

R108.1 Fees. For buildings, structures, electrical, gas, mechanical, plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the City of Lone Tree Administrative Fee Schedule.

- (6) IRC Section R109.1.1 is amended by adding a new sentence to the end of the paragraph to read as follows:

Inspections shall be performed by a Colorado licensed professional engineer or architect registered in the State of Colorado. The results of such inspections shall be provided to the Building Official in a stamped written report completed by the engineer or architect who performed the inspection.

- (7) IRC Section R112, Board of appeals, is deleted in its entirety and replaced by the following:

112.1 Means of appeal. Appeals shall be heard by the Board of Adjustment and Appeals.

112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The Board of Adjustment and Appeals shall have no authority to waive requirements of this code.

- (8) IRC Section R113.4 is deleted and replaced by the following:

R113.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, installs, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor and, upon conviction, shall be subject to the penalties set forth in section 18-1-90 of the Municipal Code. In addition, such person shall pay all reasonable costs and expenses, including attorneys' fees. Each day that a violation continues shall be considered a separate offense.

- (9) IRC Section R114.2 is deleted and replaced by the following:

R114.2 Unlawful continuance. It shall be a violation of this code for any person to 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.

- (10) IRC Table R301.2(1), Climatic and geographic design criteria, is amended to read as follows:

"TABLE R301.2(1)  
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD:	30
WIND SPEED:	115 ( $V_{ult}$ ) mph Exposure C
SEISMIC DESIGN CATEGORY:	B
SUBJECT TO DAMAGE FROM:	
Weathering	Severe
Frost line depth	36"
Termite	Slight to Moderate
WINTER DESIGN TEMP:	-3°F
ICE BARRIER UNDERLAYMENT REQUIRED:	No
FLOOD HAZARDS:	Current FEMA FIRM Maps
AIR FREEZING INDEX:	867
ANNUAL MEAN TEMP:	48.1°F"

- (11) Exception (2) under IRC Section R310.1, Emergency escape and rescue opening required, is deleted.
- (12) The Exceptions under IRC Section R313.1, Townhouse automatic fire sprinkler systems, are amended to add an additional exception and read as follows:

Exceptions:

1. An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.
2. Projects with 12 or fewer Dwelling Units, containing structures with a fire area of less than 6000 square feet and a maximum of 3 Dwelling Units per structure, are not required to have an automatic residential fire sprinkler system.



- (13) IRC Section R313.2, One- and two-family dwellings automatic fire sprinkler systems, is deleted and replaced by the following:

R313.2 One- or two-family dwelling automatic fire sprinkler systems. Although not required, if an automatic residential fire sprinkler system for a one- or two-family dwelling is desired by the purchaser, it shall be designed and installed in accordance with Section P2904 or NFPA 13D. The builder is required to offer the purchaser the option to have such sprinkler system installed.

- (14) IRC Section R905.7.4, Material standards, is deleted and replaced by the following:

R905.7.4 Material standards. Wood shingles shall have a minimum class C rating, be of naturally durable wood and comply with the requirements of Table R905.7.4.

- (15) IRC Section R905.8.5, Material standards, is deleted and replaced by the following:

R905.8.5 Material standards. Wood shakes shall have a minimum class C rating and comply with the requirements of Table R905.8.5.

- (16) IRC Sections N1101 through N1111 (R505) in Chapter 11 are deleted in their entirety and replaced with a new section N1101 to read as follows:

#### SECTION 1101 GENERAL REQUIREMENTS

N1101.1 Scope. This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code.

N1101.2 Criteria. Buildings shall be designed and constructed in accordance with the International Energy Conservation Code (IECC) as adopted and amended by the City of Lone Tree. The climate zone for the City of Lone Tree is established as Zone 5B.

- (17) Subsections (3) and (4) of IRC Section G2406.2 (303.3), Prohibited locations, are deleted.
- (18) IRC Sections G2417.4 (406.4) and G2417.4.1 (406.4.1) are deleted and replaced by the following:
- G2417.4 Test pressure measurement.
- G2417.4.1 (406.4.1) Test pressure. The test pressure to be used shall be 20 psi (137.8 kPa) gauge pressure. For pipe conveying gas at or exceeding a 14-inch (356 mm) water column, the test pressure shall be 60 psi (413.4 kPa) gauge pressure.
- (19) Subsection (7) in IRC Section G2425.8, Appliances not required to be vented, is deleted.
- (20) IRC Section G2445 (621), Unvented room heaters, is deleted in its entirety.
- (21) IRC Chapters 34 through 43 are deleted in their entirety and replaced by a new Chapter 34, General Requirements, which shall to read as follows:

CHAPTER 34  
GENERAL REQUIREMENTS

E3401.1 Scope. This chapter governs all electrical components, equipment and systems used in buildings and structures regulated by this code.

E3401.2 Criteria. All electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of NFPA 70 (National Electric Code, NEC), as adopted and amended by the City of Lone Tree.

**ARTICLE IV**

**Mechanical Code**

**Sec. 18-4-10. Title.**

This Article shall be known as the *Lone Tree Mechanical Code*.

**Sec. 18-4-20. Adoption by reference.**

- (1) The International Mechanical Code, 2018 Edition, as published by the International Code Council, Inc., 4051 W. Flossmoor Road, Country Club Hills, IL 60478, is hereby adopted by reference and incorporated into this Article as though fully set forth herein as the mechanical code of the City. Except as otherwise provided, this code is adopted in its entirety. Appendices to the code are adopted only to the extent specified.
- (2) One (1) copy of the International Mechanical Code, 2018 Edition, as amended by this Article, certified to be a true copy by the Mayor and City Clerk, shall be on file in the office of the City Clerk and may be inspected by any interested person between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.

**Sec. 18-4-30. Definition.**

*Jurisdiction*, as used in this code, means the City of Lone Tree and includes all areas within the corporate limits of the City and any area annexed to the City.

**Sec. 18-4-40. Amendments.**

The International Mechanical Code, 2018 Edition (“IMC”), shall be amended as follows:

- (1) IMC Section 101.1, Title, is amended by inserting “the City of Lone Tree” where indicated.
- (2) IMC Section 106.5, Fees, is deleted in its entirety and replaced by the following:

106.5 Fees. For buildings, structures, electrical, gas, mechanical, plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the City of Lone Tree Administrative Fee Schedule.

- (3) IMC Section 108.4, Violation penalties, is deleted and replaced by the following:

108.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, installs, constructs, alters or repairs mechanical work 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 code, shall be guilty of a misdemeanor and, upon conviction, shall be subject to the penalties set forth in section 18-1-90 of the Municipal Code. In addition, such person shall pay all reasonable costs and expenses, including attorneys' fees. Each day that a violation continues shall be considered a separate offense.

- (4) The last sentence of IMC Section 108.5, Stop work orders, is deleted and a new Section 108.5.1 is added to read as follows:

108.5.1 Unlawful continuance. It shall be a violation of this code for any person to 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.

- (5) IMC Section 109, Means of appeal, is deleted in its entirety and replaced by the following:

109.1 Means of appeal. Appeals shall be heard by the Board of Adjustment and Appeals.

109.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The Board of Adjustment and Appeals shall have no authority to waive requirements of this code.

## ARTICLE V

### Plumbing Code

**Sec. 18-5-10. Title.**

This Article shall be known as the *Lone Tree Plumbing Code*.

**Sec. 18-5-20. Adoption by reference.**

- (1) The International Plumbing Code, 2018 Edition, as published by the International Code Council, Inc., 4051 W. Flossmoor Road, Country Club Hills, IL 60478, is hereby adopted by reference and incorporated into this Article as though fully set forth herein as the plumbing code of the City. Except as otherwise provided, this code is adopted in its entirety. Appendices to the code are adopted only to the extent specified.
- (2) One (1) copy of the International Plumbing Code, 2018 Edition, as amended by this Article, certified to be a true copy by the Mayor and City Clerk, shall be on file in the office of the City Clerk and may be inspected by any interested person between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.

**Sec. 18-5-30. Definition.**

*Jurisdiction*, as used in this code, means the City of Lone Tree and includes all areas within the corporate limits of the City and any area annexed to the City.

**Sec. 18-5-40. Amendments.**

The International Plumbing Code, 2018 Edition (“IPC”), shall be amended as follows:

- (1) IPC Section 101.1 is amended by inserting “the City of Lone Tree” where indicated.
- (2) IPC Section 106.6, Fees, is deleted in its entirety and replaced by the following:

106.6 Fees. For buildings, structures, electrical, gas, mechanical, plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the City of Lone Tree Administrative Fee Schedule.

- (3) IPC Section 108.4, Violation penalties, is deleted and replaced by the following:

108.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, installs, constructs, alters or repairs plumbing work 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 code, shall be guilty of a misdemeanor and, upon conviction, shall be subject to the penalties set forth in section 18-1-90 of the Municipal Code. In addition, such person shall pay all reasonable costs and expenses, including attorneys' fees. Each day that a violation continues shall be considered a separate offense.

- (4) The last sentence of IPC Section 108.5 is deleted and a new Section 108.5.1 is added to read as follows:

108.5.1 Unlawful continuance. It shall be a violation of this code for any person to 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.

- (5) IPC Section 109, Means of appeal, is deleted in its entirety and replaced by the following:

109.1 Means of appeal. Appeals shall be heard by the Board of Adjustment and Appeals

109.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provision of this code do not fully apply or an equally good or better form of construction is proposed. The Board of Adjustment and Appeals shall have no authority to waive requirements of this code.

- (6) IPC Section 305.4.1, Sewer depth, is deleted.

- (7) IPC Section 903.1, Roof extension, is deleted and replaced by the following:

903.1 Roof extension. All open vent pipes that extend through a roof shall be terminated at least twelve (12) inches above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extension shall terminate not less than 7 feet above the roof.

## ARTICLE VI

### Fuel Gas Code

**Sec. 18-6-10. Title.**

This Article shall be known as the *Lone Tree Fuel Gas Code*

**Sec. 18-6-20. Adoption by reference.**

- (1) The International Fuel Gas Code, 2018 Edition, as published by the International Code Council, Inc., 4051 W. Flossmoor Road, Country Club Hills, IL 60478, is hereby adopted by reference and incorporated into this Article as though fully set forth herein as the fuel gas code of the City. Except as otherwise provided, this code is adopted in its entirety. Appendices to the code are adopted only to the extent specified.
- (2) One (1) copy of the International Fuel Gas Code, 2018 Edition, as amended by this Article, certified to be a true copy by the Mayor and City Clerk, shall be on file in the office of the City Clerk and may be inspected by any interested person between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.

**Sec. 18-6-30. Definition.**

*Jurisdiction*, as used in this code, means the City of Lone Tree and includes all areas within the corporate limits of the City and any area annexed to the City.

**Sec. 18-6-40. Amendments.**

The International Fuel Gas Code, 2018 Edition (“IFGC”), shall be amended as follows:

- (1) IFGC Section 101.1, Title, is amended by inserting “the City of Lone Tree” where indicated.
- (2) IFGC Section 106.6, Fees, is deleted in its entirety and replaced by the following:

106.6 Fees. For buildings, structures, electrical, gas, mechanical, plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the City of Lone Tree Administrative Fee Schedule.

- (3) IFGC Section 108.4, Violation penalties, is deleted and replaced by the following:

108.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, installs, constructs, alters or repairs work 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 code, shall be guilty of a misdemeanor and, upon conviction, shall be subject to the penalties set forth in section 18-1-90 of the Municipal Code. In addition, such person shall pay all reasonable costs and expenses, including attorneys' fees. Each day that a violation continues shall be considered a separate offense.

- (4) The last sentence of IFGC Section 108.5, Stop work orders, is deleted and a new Section 108.5.1 is added to read as follows:

108.5.1 Unlawful continuance. It shall be a violation of this code for any person to 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.

- (5) IFGC Section 109, Means of appeal, is deleted in its entirety and replaced by the following:

109.1 Means of appeal. Appeals shall be heard by the Board of Adjustment and Appeals

109.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provision of this code do not fully apply or an equally good or better form of construction is proposed. The Board of Adjustment and Appeals shall have no authority to waive requirements of this code.

- (6) IFGC Section 303.3(3) and (4), Prohibited locations, are deleted.

- (7) IFGC Sections 406.4 and 406.4.1 are deleted and replaced by the following:

406.4 Test pressure measurement.

406.4.1 Test pressure. The test pressure to be used shall be 20 psi (137.8 kPa) gauge pressure. For pipe conveying gas at or exceeding a 14 inch (356 mm) water column, the test pressure shall be 60 psi (413.4 kPa) gauge pressure.

- (8) Subsection (8) of IFGC Section 501.8, Equipment not required to be vented, is deleted and the remaining subsection are renumbered as is appropriate.

- (9) IFGC Section 621, Unvented room heaters, is deleted in its entirety.

## **ARTICLE VII**

### **Electrical Code**

**Sec. 18-7-10. Title.**

This Article shall be known as the *Lone Tree Electrical Code*.

**Sec. 18-7-20. Adoption by reference.**

- (1) The National Electrical Code, 2017 Edition, as published by the National Fire Protection Association, One Batterymarch Park, Quincy, MA 02169, is hereby adopted by reference and incorporated into this Article as though fully set forth herein as the electrical code of the City. Except as otherwise provided, this code is adopted in its entirety. Appendices to the code are adopted only to the extent specified.
- (2) One (1) copy of the National Electrical Code, 2017 Edition, as amended by this Article, certified to be a true copy by the Mayor and City Clerk, shall be on file in the office of the City Clerk and may be inspected by any interested person between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.

**Sec. 18-7-30. Definition.**

*Jurisdiction*, as used in this code, means the City of Lone Tree and includes all areas within the corporate limits of the City and any area annexed to the City.

**Sec. 18-7-40. Amendments.**

The National Electrical Code, 2017 Edition (“NEC”), shall be amended as follows:

- (1) NEC Section 210.23(A), 15- and 20-ampere branch circuits, is amended by adding a new sentence to the end of the paragraph to read as follows:

In dwelling units, the general-purpose branch circuits shall be limited to no more than 10 openings on a 15-ampere circuit (minimum #14 gauge wire) and no more than 12 openings on a 20-ampere circuit (minimum #12 gauge wire). Lighting only circuits shall be allowed to be calculated at the manufactures maximum wattage for the fixtures, the calculated load shall not exceed 80% of the branch circuit.

- (2) NEC Section 210.52(B)(3), Kitchen Receptacle Requirements, is amended by deleting and replacing the first sentence to read as follows:

Receptacles installed in a kitchen to serve countertop surfaces shall be supplied by no fewer than two small-appliance branch circuits each permitted to supply no more than four openings per circuit, either or both of which shall also be permitted to supply receptacle outlets in the same kitchen and in other rooms specified in 210.52(B)(1).

- (3) The provisions of Appendix K from the 2018 International Building Code (IBC), Administrative Provisions, are hereby adopted.

- (a) Appendix K is amended by the addition of a new Section K103.3, to read as follows:

K103.3 Fees. For buildings, structures, electrical, gas, mechanical, plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the City of Lone Tree Administrative Fee Schedule.

- (b) Appendix K is amended by the addition of a new Section K111.8, to read as follows:

K111.8 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, installs, constructs, alters or repairs work 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 code, shall be guilty of a misdemeanor and, upon conviction, shall be punished by a fine not exceeding one thousand dollars (\$1,000.00) or by imprisonment not exceeding one (1) year or by both such fine and imprisonment. In addition, such person shall pay all reasonable costs and expenses, including attorney's fees. Each day that a violation continues shall be considered a separate offense.

- (c) Appendix K is amended by the addition of a new Section K111.9, to read as follows:

K111.9 Unlawful continuance. It shall be a violation of this code for any person to 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.



- (d) Appendix K is amended by the addition of a new Section K112, Means of appeal, to read as follows:

K112.1 Means of appeal. Appeals shall be heard by the Board of Adjustment and Appeals

K112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provision of this code do not fully apply or an equally good or better form of construction is proposed. The Board of Adjustment and Appeals shall have no authority to waive requirements of this code.

## **ARTICLE VIII**

### **FIRE CODE**

#### **Sec. 18-9-10. Title.**

This Article shall be known as the *Lone Tree Fire Code*.

#### **Sec. 18-9-20. Adoption by reference.**

- (1) The International Fire Code, 2018 Edition, as published by the International Code Council, Inc., 4051 W. Flossmoor Road, Country Club Hills, IL 60478, is hereby adopted by reference and incorporated into this Article as though fully set forth herein as the fire code of the City. Except as otherwise provided, this code is adopted in its entirety. Appendices to the code are adopted only to the extent specified.
- (2) One (1) copy of the International Fire Code, 2018 Edition, as amended by this Article, certified to be a true copy by the Mayor and City Clerk, shall be on file in the office of the City Clerk and may be inspected by any interested person between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.

#### **Sec. 18-9-30. Definition.**

*Jurisdiction*, as used in this code, means the City of Lone Tree and includes all areas within the corporate limits of the City and any area annexed to the City.

#### **Sec. 18-9-40. Amendments.**

The International Fire Code, 2018 Edition (“IFC”), shall be amended as follows:

- (1) IFC Section 101.1, Title, is amended by inserting “the City of Lone Tree” where indicated.
- (2) The following Appendices are hereby adopted as part of this code:
  - Appendix B, Fire-Flow Requirements for Buildings, as amended.
  - Appendix C, Fire Hydrant Locations and Distribution.
  - Appendix D, Fire Apparatus Access Roads, as amended.

- (3) IFC Section 103.1, General, is deleted and replaced by the following:

103.1 General. The South Metro/Cunningham Fire Rescue Authority, operating on behalf of South Metro Fire Rescue Fire Protection District and Cunningham Fire Protection District is hereby designated as the department of fire prevention within the jurisdiction of the City under the direction of the fire code official. The function of the department shall be the implementation, administration and enforcement of the provisions of this code.

- (4) IFC Section 103.2, Appointment, is deleted and replaced by the following:

103.2 Appointment. The Fire Marshal of the South Metro/Cunningham Fire Rescue Authority, operating on behalf of South Metro Fire Rescue Fire Protection District and Cunningham Fire Protection District or a designee is hereby appointed as the fire code official for the department of fire prevention.

- (5) IFC Section 105.6.36, Outdoor assembly event, is deleted and replaced by the following:

105.6.36 Outdoor assembly event. An operational permit is required to conduct an outdoor assembly event where planned attendance exceeds 500 persons.

- (6) IFC Section 105.6.47, Temporary membrane structures and tents, is deleted and replaced by the following:

105.6.47 Temporary membrane structures and tents. An operational permit is required to operate a membrane structure, air-inflated membrane structure, air-supported membrane structure, a temporary special event structure, or a tent having an area in excess of 400 square feet (37 m<sup>2</sup>).  
Exceptions:

1. [no change]
2. [no change]

- (7) IFC Section 105.7, Required construction permits, is amended to read as follows:

105.7 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Section 105.7.1 through 105.7.26

- (8) IFC Section 105.7.25, Temporary membrane structures and tents, is deleted and replaced by the following:

105.7.25 Temporary membrane structures and tents. A construction permit is required to erect a membrane structure, air-inflated membrane structure, air-supported membrane structure, a temporary special event structure, or a tent having an area in excess of 400 square feet (37 m<sup>2</sup>).  
Exceptions:

1. [no change]
2. [no change]
3. [no change]

- (9) A new IFC Section 105.7.26 is added to read as follows:

105.7.26 Buildings and facilities. Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change occupancy of a building, or structure, or facility, or to cause any such work to be performed, shall first make application to the fire code official and obtain the required permit.

- (10) IFC Section 109.1, Board of appeals established, is deleted and replaced by the following:

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 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.

- (11) IFC Section 109.4 is deleted and replaced by the following:

109.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, installs, constructs, alters, repairs or does work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor and, upon conviction, shall be subject to the penalties set forth in section 18-1-90 of the Municipal Code. In addition, such person shall pay all reasonable costs and expenses, including attorneys' fees. Each day that a violation continues shall be considered a separate offense.

- (12) IFC Section 111.4 is deleted and replaced by the following:

111.4 Failure to comply. It shall be a violation of this code for any person to 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.

- (13) IFC Section 503.1, Where required, is deleted and replaced by the following:

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 Appendix D.

- (14) IFC Section 503.1.1, Buildings and facilities, is deleted and replaced by the following:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

Exceptions:

1. The fire code official is authorized to increase the dimension of 150 feet (45 720mm) where any of the following conditions occur:

1.1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 (NFPA 13), the dimension shall be unlimited, as approved, provided access roads are extended to within 150 feet (45 720mm) of at least one, approved side of the building or structure. Fire hydrant requirements of Section 507 may necessitate additional roads to serve hydrants near large buildings.

1.2. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.2 (NFPA 13R) or 903.3.1.3 (NFPA 13D), the dimension shall be increased to 200 feet (60 960mm).

1.3. The fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.

1.4. There are not more than two Group R-3 or Group U occupancies.

2. Where approved by the fire code official, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities.

(15) IFC Section 503.2, Specifications, is amended to read as follows:

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and Appendix D.

(16) IFC Section 503.2.3, Surface, is deleted and replaced by the following:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus weighing up to 80,000 pounds and shall be surfaced so as to provide all-weather driving capabilities and in accordance with Section D102.

(17) IFC Section 503.2.7, Grade, is deleted and replaced by the following:

503.2.7 Grade. The grade of the fire apparatus access road shall be a maximum of 6% or as otherwise determined by the fire code official based on fire district apparatus specifications.

(18) IFC Section 503.3, Marking, is deleted and replaced by the following:

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

(19) IFC Section 503.4, Obstruction of fire apparatus access roads, is deleted and replaced by the following:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances in Sections 503.2.1, 503.2.2, and Appendix D shall be maintained at all times.

- (20) IFC Section 503.6, Security gates, is deleted and replaced by the following:

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be approved by the fire code official and shall be in accordance with Section D103.5.

- (21) IFC Section 507.3, Fire flow, is deleted and replaced by the following:

507.3 Fire flow. Fire flow requirements for buildings or portions of buildings and facilities shall be determined in accordance with Appendix B or by a method approved by the fire code official.

- (22) IFC Section 507.5, Fire hydrant systems, is deleted and replaced by the following:

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6 and Appendix C.

- (23) IFC Section 510.1, Emergency responder radio coverage in new buildings, is deleted and replaced by the following:

510.1 Emergency responder radio coverage in new buildings. New buildings shall have approved radio coverage for emergency responders within the building based on the existing coverage levels of the public safety communication systems utilized by the jurisdiction, measured at the exterior of the building. This section shall not require improvement of the existing public safety communication systems.

Exceptions:

1. Where approved by the fire code official, a wired communication system in accordance with Section 907.2.12.2 shall be permitted to be installed or maintained instead of an approved radio coverage system.
2. [no change]
3. [no change]

- (24) IFC Section 903.3, Installation requirements, is amended to read as follows:

903.3 Installation requirements. Automatic sprinkler systems shall be designed and installed in accordance with Section 903.3.1 through 903.3.9

- (25) A new IFC Section 903.3.9 is added and reads as follows:

903.3.9 Spare sprinklers. Spare sprinklers shall be provided per NFPA 13, NFPA 13R, NFPA 13D and in accordance with the fire code official's supplemental documents outlining specific provisions for multiple buildings under the same ownership.

- (26) Subsection (1) of IFC Section 905.4, Location of Class I standpipe hose connections, is amended to read as follows:

1. In every required interior exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at the main floor landing unless otherwise approved by the fire code official.

Exception: Deleted in its entirety.

- (27) Subsection (3) of IFC Section 1103.7.6, Group R-2, is amended to read as follows:

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 1027.6, Exception 3.2 to 3.5.

- (28) IFC Section 1103.7.6(3) Group R-2, is amended to read as follows:

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 1027.6, Exception 3.2 to 3.5.

- (29) IFC Section 5601.1.3 Fireworks, is deleted and replaced by the following:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

1. The use of fireworks for display as allowed in Section 5608.
  2. The possession, storage, sale, handling and use of permissible fireworks, as defined by Section 24-33.5-2001, C.R.S.
- (30) IFC Section 5704.2.9.6.1, Locations where above-ground tanks are prohibited, is deleted in its entirety.
- (31) IFC Section 5706.2.4.4, Locations where above-ground tanks are prohibited, is deleted in its entirety.
- (32) IFC Section 5806.2, Limitations, is deleted in its entirety.
- (33) IFC Section 6104.2, Maximum capacity within established limits, is deleted in its entirety.

- (34) IFC Section B105.1, One- and two-family dwellings, Group R-3 and R-4 buildings and townhouses, in Appendix B is deleted and replaced by the following:

B105.1 One- and two-family dwellings, Group R-3 and R-4 buildings. The minimum fire-flow and flow duration requirements for one- and two-family dwellings, Group R-3 and R-4 buildings having a fire flow calculation area that does not exceed 3,600 square feet (344.5 m<sup>2</sup>) shall be 1,000 gallons per minute (3785 L/min) for 1 hour. Fire-flow and flow duration for one- and two-family dwellings, Group R-3 and R-4 buildings having a fire-flow calculation area in excess of 3,600 square feet (344.5 m<sup>2</sup>) shall not be less than that specified in Table B105.1.

Exception: A reduction in required fire-flow of 25 percent, as approved, is allowed when the building is equipped with an approved automatic fire sprinkler system.

- (35) IFC Section B105.2, Buildings other than one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses, in Appendix B is deleted and replaced by the following:

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

Exception: A reduction in required fire-flow of 50 percent, as approved, is allowed when the building is equipped with an approved automatic fire sprinkler system installed in accordance with Section 903.3.1.1. A reduction in required fire-flow of 25 percent, as approved, is allowed when the building is equipped with an approved automatic fire sprinkler system installed in accordance with Section 903.3.1.2. The resulting fire-flow shall not be less than 1,500 gallons per minute (5678 L/min) for the prescribed duration in Table B105.1.

- (36) IFC Section B105.3, Water supply for buildings equipped with an automatic sprinkler system, in Appendix B is deleted in its entirety.
- (37) IFC Table B105.1(1), Required fire flow for one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses, in Appendix B is deleted in its entirety.
- (38) IFC Table B105.2, Required fire flow for buildings other than one- and two-family dwellings, is deleted in its entirety.
- (39) IFC Table B105.1(2) title only is amended to read as follows:

“Table B105.1: MINIMUM REQUIRED FIRE-FLOW AND FLOW DURATION FOR BUILDINGS”.

- (40) IFC Section D102.1, Access and loading, is deleted and replaced by the following:

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing up to 80,000 pounds (34 050 kg).

- (41) IFC Section D103.1, Access road width with a hydrant, is deleted in its entirety.

- (42) IFC Section D103.2, Grade, is deleted and replaced by the following:



D103.2 Grade. The grade of the fire apparatus access road shall be a maximum of 6% or as otherwise determined by the fire code official based on fire district apparatus specifications.

- (43) IFC Section D103.4, Dead ends, is deleted and replaced by the following:

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4 and the city of Lone Tree roadway design standards.

- (44) IFC Section D103.6, Signs, is deleted in its entirety.

- (45) IFC Section D104.1, Buildings exceeding three stories or 30 feet in height, is deleted and replaced by the following:

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm) or three stories in height shall have not fewer than two means of fire apparatus access for each structure. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.

- (46) IFC Section D106.1, Projects having more than 100 dwelling units, is deleted and replaced by the following:

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads.

Exception: Deleted in its entirety.

## ARTICLE IX

### Energy Conservation Code

#### Sec. 18-10-10. Title.

The provisions of this Article shall be known and cited as the *Lone Tree Energy Conservation Code*.

#### Sec. 18-10-20. Adoption by reference.

- (1) The International Energy Conservation Code, 2018 Edition, as published by the International Code Council, Inc., 4051 W. Flossmoor Road, Country Club Hills, IL 60478, is hereby adopted by reference and incorporated into this Article as though fully set forth herein as the energy code of the City. Except as otherwise provided, this code is adopted in its entirety. Appendices to the code are adopted only to the extent specified.

- (2) One (1) copy of the International Energy Conservation Code, 2018 Edition, as amended by this Article, certified to be a true copy by the Mayor and City Clerk, shall be on file in the office of the City Clerk and may be inspected by any interested person between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.

**Sec. 18-10-30. Definition.**

*Jurisdiction*, as used in this code, means within the corporate limits of the City and any area annexed to the City.

**Sec. 18-10-40. Amendments.**

The 2018 International Energy Conservation Code (“IECC”) shall be amended as follows:

- (1) IECC Section C101.1, Title, is amended by inserting “the City of Lone Tree” where indicated.
- (2) IECC Section C103.6.3, Systems operation control, is deleted in its entirety.
- (3) IECC Section C104, Fees, is deleted in its entirety and replaced by the following:

C104.1 Fees. For buildings, structures, electrical, gas, mechanical, plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the City of Lone Tree Administrative Fee Schedule.

- (4) IECC Section C108.4 is deleted and replaced by the following:

C108.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, installs, constructs, alters, repairs or does work in violation of the approved construction documents or directive of the building code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor and, upon conviction, shall be subject to the penalties set forth in section 18-1-90 of the Municipal Code. In addition, such person shall pay all reasonable costs and expenses, including attorneys' fees. Each day that a violation continues shall be considered a separate offense.

- (5) A new IECC Section C108.5 is added to read as follows:

C108.5 Unlawful continuance. It shall be a violation of this code for any person to 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.

- (6) IECC Section C109, Board of appeals, is deleted in its entirety and replaced by the following:

C109.1 Means of appeal. Appeals shall be heard by the Board of Adjustment and Appeals

C109.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The Board of Adjustment and Appeals shall have no authority to waive requirements of this code.

- (7) IECC Section C404.5, Heated water supply piping, is deleted in its entirety

- (8) IECC Section R402.4.1.2, Testing, is amended by deleting the first sentence and replacing it with the following:

The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour or 0.30 cubic feet per minute for multi-family units and not exceeding three air changes per hour or 0.24 cubic feet per minute for all other residential buildings and dwelling units.

## **ARTICLE X**

**Reserved**

## **ARTICLE XI**

**Reserved**

## ARTICLE XII

### Repair of Construction Defects

#### Sec. 18-12-10. - Purposes and applicability.

(a) The purposes of this Article are to:

- (1) Encourage the construction of owner-occupied, multi-family developments in the City;
- (2) Facilitate the implementation of the comprehensive plan and zoning ordinance, both of which contemplate owner-occupied, multi-family developments in transit-oriented areas and throughout the City;
- (3) Reassure homeowners that most, if not all, construction defects will be promptly investigated and addressed by builders;
- (4) Motivate all parties to resolve disputes involving construction defects quickly to avoid the need for expensive and time-consuming litigation; and
- (5) Provide homeowners in communities with homeowners associations with an enhanced opportunity to participate in the governance of their community by empowering individual owners to give or withhold their informed consent with respect to actions the board of the homeowners association may desire to pursue regarding construction defects.

(b) Applicability. This Article shall apply only to new construction commenced after the effective date of this Article.

#### Sec. 18-12-20. - Definitions.

*Builder* means any non-governmental entity or individual, including but not limited to a builder, developer, general contractor, contractor, subcontractor, architect, engineer or original seller, who performs or furnishes the design, supervision, inspection, construction or observation of any improvement to real property that is intended to be occupied as a dwelling or to provide access or amenities to such an improvement.

*Common interest community* means real estate described in a declaration with respect to which a person, by virtue of such person's ownership of a unit, is obligated to pay for real estate taxes, insurance premiums, maintenance, or improvement of other real estate described in a declaration.

*Condominium* means a common interest community in which portions of the real estate are designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of the separate ownership portions. A common interest community is not a condominium unless the undivided interests in the common elements are vested in the unit owners.

*Construction defect* means any instance in which a structure or portion thereof does not conform in all material respects to the applicable sections of the building code in force at the time of construction, or does not conform to the manufacturer's specifications in force at the time of construction, if those specifications are stricter than the applicable provisions of the building code.

*Cooperative* means a common interest community in which the real property is owned by an association, each member of which is entitled by virtue of such member's ownership interest in the association to exclusive possession of a unit.

*Declarant* means any person or group of persons acting in concert who:

- a. As part of a common plan, promotional or otherwise, intends to or offers to dispose of to a purchaser such declarant's interest in a unit not previously disposed of to a purchaser; or
- b. Reserves or succeeds to any special declarant right.

*Homeowner* means any person who owns a unit in a condominium or cooperative, but shall not include any declarant or any person having an interest in a unit solely as security for an obligation.

*Homeowners association* means a unit owners' association formed to represent the interests of homeowners owning units in a condominium or cooperative.

**Sec. 18-12-30. - Potential claimants.**

An original homeowner or a subsequent homeowner, or a homeowners association representing the interests of homeowners, may make a construction defect claim and provide the notice of a claim of a construction defect, provided the notice is sent within the applicable time period.

**Sec. 18-12-40. - Potential respondents.**

Any person or entity within the definition of a builder as defined in this Article is subject to the requirements of this Article.

**Sec. 18-12-50. - Claimant's notice to builder of construction defect; builder's acknowledgement; inspection.**

(a) Claimant's notice. Upon the discovery of any alleged construction defect, a claimant shall provide written notice of a claim via certified mail or personal delivery to the party alleged to have caused or contributed to the defect, in the manner prescribed in this Section, indicating that one (1) or more construction defect exists to any improvement in or on the claimant's real property or residence, or, with respect to any homeowners association, that one (1) or more construction defect exists to any improvement in or on any real property, residence, common area or facility governed by the association.

The notice must be dated and:

- (1) Provide the claimant's name, address and preferred method of contact;
- (2) State that the claimant alleges a construction defect pursuant to this Article against the builder;
- (3) Describe the claim in reasonable detail sufficient to determine the nature and location of the alleged construction defect; and
- (4) Provide sufficient dates and times, between seven (7) and twenty-eight (28) days from the date of the claimant's notice, to the builder to accommodate inspection and testing of the alleged construction defect regarding the claim. Reasonable scheduling and access shall be provided by the claimant to the builder.

(b) Builder's responsibilities. After receiving notice of a potential construction defect claim, a builder must do each of the following:

(1) Acknowledge claim in writing.

- a. A builder who receives a notice under this Article shall acknowledge receipt of the notice, in writing, within fourteen (14) days after receipt. The acknowledgement shall be sent to the claimant and to any attorney the builder knows to be representing the claimant in connection with the notice. If the builder has retained legal counsel, said counsel shall thereafter communicate with the claimant's legal representative, if any.
- b. If the builder fails to acknowledge receipt of a notice within the time specified, this Article shall not apply and the claimant shall be released from the requirements of this Article and may proceed with the filing of an action against the builder, unless notice and consent are required by Section 18-12-100.

(2) Maintain an agent for notice with the secretary of state; and

(3) If specifically asked to do so by the claimant and within fourteen (14) days of such a request, provide the claimant or the claimant's legal representative with:

- a. copies of all relevant plans, specifications, grading plans, soils reports and available engineering calculations pertaining to the claimant's residence, common areas and facilities that are the subject of the claim;
- b. all maintenance and preventative maintenance recommendations pertaining to the claimant's allegations; and
- c. contractual warranty information.

(c) A builder responding to a claimant's request for documents may charge reasonable copying costs and may allow inspection of the documents to be made onsite.

(d) Builder's election to inspect property. In addition to the requirements set forth in this Section, a builder may elect to inspect and conduct tests regarding the claimed construction defect. If a builder elects to do so, the builder shall complete the initial inspection and testing, if any, no later than twenty-eight (28) days after the date of the notice of claim by the claimant or at a mutually agreeable date and time. The builder shall bear all costs of inspection and testing, including any damage caused by the inspection and testing. Upon request, the builder shall supply the claimant with proof of liability insurance coverage before entering onto the premises. The builder shall allow the inspection to be observed, recorded and photographed. Nothing that occurs during a builder's inspection may be used or introduced as evidence to support a defense of spoliation of evidence by any potential party in subsequent litigation.

(e) A builder who fails to comply with any of the requirements of this Section within the time specified shall not be entitled to the protections of this Article; the claimant shall be released from the requirements of this Article and may proceed with the filing of an action, unless notice and consent are required by Section 18-12-100.

(f) If a notice is sent to the builder in accordance with Section 18-12-50 within the time prescribed for the filing of an action under any applicable statute of limitations or repose, then the statute of

limitations or repose is tolled until sixty (60) days after the completion of the notice process described in Section 18-12-50. If the builder elects to repair pursuant to Section 18-12-60, then the statute of limitations or repose is tolled until sixty (60) days after the completion of repairs.

**Sec. 18-12-60. - Builder's repair.**

(a) Within thirty (30) days of the initial inspection and testing, if any, or within fourteen (14) days of the builder's acknowledgement of receipt of notice of claim, whichever is later, the builder may elect to repair the construction defect and shall deliver a notice to repair to the claimant. Any notice to repair:

- (1) Shall offer to compensate the claimant for all applicable damages, if any, during the timeframe set for repair;
- (2) Shall be accompanied by a detailed, step-by-step explanation of the particular defect being repaired; and
- (3) Shall set forth a reasonable starting and completion date for the repair work. The notice shall also include the contact information for any contractors the builder intends to employ for the repairs.

(b) Within ten (10) days after receipt of the builder's notice to repair, a claimant may deliver to the builder a written objection to the proposed repair if the claimant believes in good faith that the proposed repairs will not remedy the alleged defect. Within ten (10) days of receipt of the written objection, the builder may elect to modify the proposal in accordance with the claimant's objection to the claimant's satisfaction, or may propose alternatives to the scope of work set forth in the original proposal. A claimant may deliver to the builder a written objection to the proposed alternatives within ten (10) days, after which the claimant may continue to negotiate with the builder or proceed with the filing of an action against the builder, unless notice and consent are required by Section 18-12-100. A builder shall not make repairs while an objection is pending without the written consent of the claimant.

(c) Builder's failure to comply. If the builder fails to send a notice to repair or otherwise strictly comply with this Article within the specified time frames, or if the builder does not complete the repairs within the time set forth in the notice to repair, the claimant shall be released from the requirements of this Article and may proceed with the filing of an action against the builder, unless notice and consent are required by Section 18-12-100. Notwithstanding the foregoing, if the builder notifies the claimant in writing at least five (5) days before the stated completion date that the repair work will not be completed by the completion date, the builder shall be entitled to one (1) reasonable extension of the completion date, not to exceed ten (10) days unless otherwise agreed.

(d) Completion of repairs. The builder shall notify the claimant when repairs have been completed. The claimant shall have ten (10) days following the completion date to have the premises inspected to verify that the repairs are complete and satisfactorily resolved the alleged defects. A claimant who believes in good faith that the repairs made do not resolve the defects may proceed with the filing of an action unless notice and consent are required by Section 18-12-100.

(e) Nothing in this Article shall preclude the claimant and builder from reaching a mutual agreement regarding a full or partial settlement and withdrawal of the construction defect claim.



**Sec. 18-12-70. - Warranty of repairs.**

The repair work performed by the builder shall be warranted against material defects in design and construction for a period of two (2) years, which warranty shall be in addition to any express warranties on the original work.

**Sec. 18-12-80. - Subsequently discovered defects.**

If notice of a particular construction defect is not given to a builder by claimant with an opportunity to repair the defect, any alleged construction defect discovered after any repairs have been completed shall be subject to the same requirements of this Article.

**Sec. 18-12-90. - Alternative dispute resolution provisions.**

Nothing in this Article shall preclude the claimant and builder from reaching a mutual agreement regarding alternative dispute resolutions. If a provision found in the declaration, bylaws or rules and regulations of a homeowners association or a common interest community requires that construction defect claims be submitted to mediation or arbitration, that requirement constitutes a commitment on the part of the unit owner and the association upon which a developer, contractor, architect, builder or other person involved in the construction of the community is entitled to rely. Consequently, a subsequent amendment to the declaration, bylaws or rules and regulations that removes or amends the mediation or arbitration requirement shall not be effective in regard to any construction defect claim that is based on an alleged act or omission previously discovered.

**Sec. 18-12-100. - Informed consent of homeowners.**

Homeowners are entitled to be kept informed by boards of homeowners associations of the board's consideration of actions regarding construction defects and to have meaningful input and a right to make a considered judgment and give or withhold informed consent. Accordingly, if a board of an association considers or intends to institute an action asserting one (1) or more construction defect, the board must do each of the following:

(1) At least sixty (60) days before filing any action under Section 13-20-803.5, C.R.S., the claimant must mail or deliver written notice to each homeowner at the homeowner's last known address.

(2) The notice must be signed by a person other than, and not employed or otherwise affiliated with, the attorney or law firm that represents or will represent the homeowners association in the construction defects claim.

(3) The notice required by this section must contain the following information:

- a. The nature of the action and the relief sought;
- b. The amount of expenses and fees the board anticipates will be incurred, directly or indirectly, in prosecuting the action, including attorney's fees, consultant fees, expert witness fees and court costs (whether incurred by the association directly or for which it may be liable if it is not the prevailing party), or if it does not proceed with action;
- c. The estimated cost of repairing the defect, or if the defect is not repaired, the estimated reduction in value of the unit;

- d. The estimated impact on the marketability of units that are not the subject of the action, including any impact on the ability of the homeowners to refinance their property during and after the action;
- e. The manner in which the association proposes to fund the cost of the action, including any proposed special assessments or the use of any revenues;
- f. The anticipated duration of the action and the likelihood of success;
- g. Whether the builder has offered to make any repairs and, if so, whether the builder has made repairs; and
- h. The steps taken by the builder in accordance with this Article to address the alleged defect, including any acknowledgement, inspection, election to repair or offered repairs.

(4) The homeowners association may not commence an action unless the board obtains the written consent of homeowners holding at least a majority of the total voting rights in the association, not including declarants, after giving the notice required by this Section. Homeowners may vote either directly or through a proxy directed in writing by the homeowner and confirmed in writing by the proxy. Such consent must be obtained within sixty (60) days after such notice is provided; otherwise the homeowner shall be deemed to have declined to provide informed consent to such action.