ORDINANCE NO. 20200409-040

AN ORDINANCE AMENDING CITY CODE CHAPTER 25-12 TO ADOPT THE 2015 INTERNATIONAL WILDLAND-URBAN INTERFACE CODE AND LOCAL AMENDMENTS; AND CREATING OFFENSES.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. FINDINGS. Based on the information provided in Exhibit A to this ordinance, the City Council finds that the local fire environment, community values, limited resources, and land development in the Wildland-Urban Interface areas of Austin are features that can, under certain circumstances, affect emergency services. These features support adopting the International Wildland-Urban Interface Code, promulgated by the International Code Council, which is aimed at mitigating, to the extent possible, the impact of those features. More specifically, the City Council finds that:

- (1) Conditions in the local fire environment support the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.
- (2) Use of fire adapted community practices for wildfire safety further support the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.
- (3) Land development in the wildland-urban interface further supports the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.
- (4) Reducing risk of structure ignition and infrastructure impact during times of limited resources further supports the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.

PART 2. City Code Chapter 25-12 (*Technical Codes*) is amended to add Article 8 (*Wildland-Urban Interface Code*) to read as follows:

ARTICLE 8. WILDLAND-URBAN INTERFACE CODE

§ 25-12-181 INTERNATIONAL WILDLAND-URBAN INTERFACE CODE.

(A) The International Wildland-Urban Interface Code and Appendices A, B, C, and D, 2015 Edition ("2015 Wildland-Urban Code"), published by the International Code Council is adopted and incorporated by reference into this section with the deletions in Subsection (B) and amendments in Section 25-12-183 (Local Amendments to the 2015 Wildland-Urban Code).

(B) The following sections of the 2015 Wildland-Urban Code are deleted:

101.1	101.4	101.5	102.4	102.4.2	
103.1	103.2	103.3	104.1	104.2	
104.3	104.3.1	104.5	104.6	104.7	
105.1	105.2	105.3	106.1	106.2	
107.1	107.2	107.3	107.4	107.4.1	
107.4.2	107.5	107.6	107.6.1	107.7	
107.8	107.9	107.10	108.1	108.2	
108.3	108.7	108.8	108.9	108.10	
108.11	108.12	109.1	109.1.2	109.1.2.1	
109.1.2.2	109.1.2.3	109.1.3	109.1.4	109.1.4.1	
109.1.4.2	109.1.4.3	109.2	109.2.1	109.2.2	
109.3	109.4	109.4.1	109.4.2	109.4.3	
109.4.4	109.4.5	109.4.5.1	109.4.5.2	109.4.5.2.1	
109.4.5.3	109.4.5.3.1	109.4.5.4	109.4.5.5	109.4.5.6	
109.4.6	109.4.7	109.4.8	110.1	110.2	
110.3	110.4	111.1	111.2	111.3	
112.1	112.2	112.3	112.4	112.5	
113.1	113.2	114.1	114.2	114.3	
114.4	302.1	302.2	402.1.1	402.1.2	
402.2.1	402.2.2	403.1	403.2.3	403.3	
404.1	404.2	404.3	404.3.1	404.3.2	
404.4	404.5	404.6	404.7	404.8	

404.10	404.10.1	404.10.2	404.10.3	
501.2	502.1	Table 502.1	503.1	
504.1	504.3	504.5	504.7	
504.9	504.10	504.11	Sec. 505	
Sec. 506 601.1		603.2.2	603.2.3	
606.1	606.2	Appendix D		
	501.2 504.1 504.9 601.1	501.2 502.1 504.1 504.3 504.9 504.10 601.1 Sec. 602	501.2 502.1 Table 502.1 504.1 504.3 504.5 504.9 504.10 504.11 601.1 Sec. 602 603.2.2	

- (C) Section 202 (*Definitions*) is amended as set forth in Section 25-12-183 (*Local Amendments to the 2015 Wildland-Urban Code*).
- (D) The city clerk shall retain a copy of the 2015 Wildland-Urban Code with the official ordinances of the City of Austin.

§ 25-12-182 CITATIONS TO THE 2015 WILDLAND-URBAN CODE.

In the City Code, "Wildland-Urban Code" means the 2015 Wildland-Urban Code adopted and amended by Section 25-12-181 (International Wildland-Urban Interface Code) and as amended by Section 25-12-183 (Local Amendments to the 2015 Wildland-Urban Code).

§ 25-12-183 LOCAL AMENDMENTS TO THE 2015 WILDLAND-URBAN CODE.

The following provisions are local amendments to the 2015 Wildland-Urban Code. Each provision of this section is a substitute for any identically numbered provision of the 2015 Wildland-Urban Code deleted by Section 25-12-181(B) (*International Wildland-Urban Interface Code*) or is an addition to the 2015 Wildland-Urban Code:

- 101.1 Applicability and References. These regulations, hereinafter referred to as "this code", apply to wildland-urban interface areas designated by the city council. Any reference to "jurisdiction" in this code means the City.
- 101.4 Retroactivity. The provisions of this code apply to conditions that arise beginning on and after the effective date of this code.
- 101.5 Alternations and Additions. When an existing structure is altered or an additional structure is added to a site, the alteration or addition must comply with this code. An existing structure is not required to comply with this code if the alteration or addition does not create an unsafe condition. The alteration or addition creates an unsafe condition if the alteration or addition will: (a) make an existing building or structure structurally unsafe; (b) overload an existing building or structure; (c) obstruct existing exists or access; (d)

create a fire hazard; (e) reduce the minimum required fire resistance; (f) reduce access required by this code; or (g) create conditions that are dangerous to human life.

- **102.4 Referenced codes and standards.** The codes and standards referenced in this code are found in Chapter 7 (*Referenced Standards*) and Chapter 80 (*Referenced Standards*) of the Fire Code.
- **102.4.2** Conflicts. Except as otherwise provided in City Code, the provisions of this code prevail over a referenced code or standard that conflicts with this code.

SECTION 103 FIRE PREVENTION.

- 103.1 General. The Austin Fire Department, under the direction of the fire chief, is authorized to implement, administer and enforce this code.
- **107.1** General. Except as otherwise provided, a permit is required for the activities described in Section 107.2.
- **107.2 Permits Required.** Except as otherwise provided in the Land Development Code, a building or structure may not be constructed, erected, altered, repaired, moved, removed, converted, demolished, or changed in its use of occupancy without the applicable city permit.
 - 107.2.1 A permit may not be issued to construct a structure with (a) an extreme hazard severity as set forth in Table 502.1; (b) nonconforming access; (c) nonconforming water supply; and (d) nonconforming defensible space.
- 107.3 Work Exempt from Permit. Except as required by the Building Code, Fire Code, or Residential Code, a permit is not required for:
 - 1. a one-story detached accessory structure used as a tool and storage shed, playhouse, or similar use, provided the floor area is not greater than 120 square feet (11 m²) and the structure is located more than 50 feet (15,420 mm) from the nearest adjacent structure; and
 - 2. a fence that does not exceed 6 feet (1,829 mm) in height.

A structure or fence constructed without a permit, as allowed by this provision, must comply with this code.

- 108.1 General. A plan, engineering calculation, diagram, or other data described in this code must be submitted when required by the Fire Code or this code.
- 108.3 Site Plans and Residential and Commercial Building Permit Applications. A site plan or an application for a residential or commercial building permit must include (a)

landscape and vegetation details when this code requires defensible space; (b) the proposed ignition-resistant construction for each building, structure, and associated appendage; and (c) the proposed roof classification for each building.

108.7 Vicinity Plan. A site plan or an application for a residential or commercial building permit must include the lot lines, other structures, slope, vegetation, fuel breaks, water supply systems, and access roads that are located within 300 feet (91,440 mm) of the proposed building(s) and structure(s).

SECTION 202 DEFINITIONS

202.1 Amended Definitions. The definitions found in Section 202 (*General Definitions*) of the 2015 Wildland-Urban Code are amended to read as follows:

CODE OFFICIAL. The fire chief or the fire chief's designee.

FUEL, HEAVY. Vegetation consisting of round wood three to eight inches (76 to 203 mm) in diameter. See fuel models for Closed Juniper Woodland and Mixed Juniper Hardwood Forest described in Appendix D.

FUEL, LIGHT. Vegetation consisting of herbaceous plants and round wood less than ¼ inch (6.4 mm) in diameter. See fuel models for Sparse Dry Climate Grass described in Appendix D.

FUEL, MEDIUM. Vegetation consisting of round wood ¼ to three inches (6.4 mm to 76 mm) in diameter. See fuel models for Aggrading Juniper Shrub described in Appendix D.

GREEN BELT. A series of connected open spaces that may follow natural features such as ravines, creeks, or streams.

IGNITION-RESISTANT CONSTRUCTION. A construction material or method that resists ignition or sustained combustion and is applicable in wildland-urban interface areas based on fire hazard.

WILDLAND-URBAN INTERFACE AREA. An area designated by the city council as one where conditions affecting the combustibility of both wildland and built fuels allow for the ignition and spread of fire through the combined fuel complex.

202.2 Supplemental Definitions. The definitions in this subsection apply throughout this code and supplement the definitions found in Section 202 (*General Definitions*) of the 2015 Wildland-Urban Code.

DISTINCT HAZARD. A threat to life or property from a condition that affects ignition, impacts the spread or intensity of wildfire, or is described in Table 502.1 or Appendix C.

202.3 Deleted definitions. The following definitions are deleted from Section 202 (*General Definitions*) in the 2015 Wildland-Urban Code.

IGNITION-RESISTANT CONSTRUCTION, CLASS 2.

IGNITION-RESISTANT CONSTRUCTION, CLASS 3.

- **302.1 Wildland-Urban Interface Area.** Before this code applies to development, the city council must designate an area as a "wildland-urban interface area" and determine its boundaries, which must correspond to natural or man-made features. The city council must adopt findings of fact that support designating an area as a wildland-urban interface area.
- 302.2 Review of Wildland-Urban Interface Area. The fire chief is responsible for the review of wildland-urban interface areas. The review should occur at least once every three years. The fire chief should, when necessary, recommend city council amend the wildland-urban interface areas to modify boundaries, to un-designate areas, or to add new wildland-urban interface areas. The fire chief's recommendations must be consistent with the findings of facts required in 302.1. This provision is in addition to any other review city council requires.
- **402.1.1** Access. A subdivision described in City Code Chapter 25-4 (*Subdivision*) that is located within in a wildland-urban interface area and platted after the effective date of this code must provide fire apparatus access roads that comply with the Fire Code.
- **402.1.2 Water Supply.** A subdivision described in City Code Chapter 25-4 (*Subdivision*) that is located within a wildland-urban interface area and platted after the effective date of this code must provide a conforming water supply system that complies with the Fire Code.
- **402.2.1** Access. A site with a structure constructed or relocated into or within a wildland-urban interface area must provide a fire access road and driveway that complies with 403.2, the Fire Code, and the Land Development Code. The structure's fire protection equipment and the site's address markers must comply with the Fire Code.
- **402.2.2 Water Supply.** A conforming water supply system that complies with the Fire Code and the Land Development Code is required for a structure constructed or relocated into or within a wildland-urban interface area.
- 403.1 Restricted Access. The fire chief may require a property owner to install a key box in an accessible location when emergency vehicle access is limited to a secured access road

or driveway established for life-saving or fire-fighting purposes. The key box must comply with the Fire Code.

403.2.3 Service limitations. The maximum number of dwelling units a driveway may serve is eight.

Exception. If the driveway meets the requirements for a fire apparatus access road set forth in Section 503 of the Fire Code.

- 403.3 Fire Apparatus Access Road. When required, a fire apparatus access road must comply with the Fire Code.
- **404.1 General.** A conforming water supply required by this code must comply with Fire Code Section 507.3 and Appendices B105.1 and B105.2 and must protect buildings and structures from exterior fire sources or suppress structure fires.
- **501.1 Scope.** A building or structure located within a wildland-urban interface area constructed after the effective date of this code must comply, at a minimum, with this code.

Exceptions:

- 1. An accessory structure provided the floor area is not greater than 120 square feet (11 m²) and the structure is located more than 50 feet (15,420 mm) from the nearest adjacent structure.
- 2. Agricultural building located at least 50 feet (15,420 mm) from building containing habitable space.
- **501.2 Objective.** Chapter 5 of this code establishes minimum standards to locate, design, and construct buildings, structures, or portions thereof. The purpose of the minimum standards is to protect life and property, to resist damage from wildfires, and to reduce the spread of building and structures fires to wildland fuels. Minimum standards vary based on proximity to 40 or more acres of contiguous wildland fuel areas, slope, and fuel type. These standards are intended to provide, above Fire Code requirements, increased protection from the various levels of hazards in wildland-urban interface areas.

Table 502.1 Fire Hazard Severity.

	Proximity to Contiguous (40 Acres) Wildland Fuels						
Fuel	150' to 1.5 miles		< 150'				
Model	Slope (%)						
	< 10	10 to 25	> 25	< 10	10 to 25	> 25	
Light	М	M	M	М	М	Н	
Medium	М	M	Н	E	E	E	
Heavy	Н	н	Н	E	E	Е	

E= Extreme Hazard; H= High Hazard; M= Moderate Hazard.

- **502.3 Fuel Type.** The fire chief is authorized to classify fuel type based on the historic fuel type for the area.
- **503.1 General.** A building or structure constructed, modified, relocated into or within a wildland-urban interface area must comply with Section 504. A material required to be ignition-resistant must comply with Section 503.2.

SECTION 504 IGNITION-RESISTANT CONSTRUCTION.

- **504.1 General.** When ignition-resistant construction is required, it must comply with Sections 504.2 through 504.11.
- 504.3 Protection of eaves, soffits, fascia, and rafter tails.
 - 504.3.1 A building or structure within 50 feet (15,240 mm) of a 40 acre (4.05 ha) or greater contiguous area that consists of light, medium, or heavy fuel.
 - 504.3.1.1 For an eave or soffit, the exposed underside must be protected using ignition-resistant materials or by materials approved for at least one-hour fire-resistance-rated construction, two-inch (51 mm) nominal dimension lumber, one-inch (25 mm) nominal fire-retardant treated lumber, or ¾-inch (19.1 mm) nominal fire-retardant treated plywood that is identified for exterior use and meets the requirements of Building Code, Section 2303.2.
 - **504.3.1.2** For a fascia, the backside must be protected on the backside by ignition-resistant materials or materials approved for at least one-hour fire-resistance-rated construction or two-inch (51 mm) nominal dimension lumber.
 - 504.3.2 A building or structure more than 50 feet (15,240 mm) from a 40 acre (4.05 ha) or greater contiguous area that consists of light, medium, or heavy fuel.
 - **504.3.2.1** A combustible eave, fascia, or soffit must be enclosed with solid materials that are at least ¾-inch (19 mm) thick.

504.3.2.2 An exposed rafter tail must be constructed of heavy timber materials.

504.5 Exterior Walls. For a building or structure within 50 feet (15,240 mm) of a 40 acre (4.05 ha) or greater contiguous area that consists of light, medium, or heavy fuel, the exterior walls must be constructed using one or more of the following:

- 1. materials approved for exterior use and at least one-hour fireresistance-rated construction;
- 2. approved non-combustible materials;
- 3. heavy timber or log wall construction;
- 4. fire-retardant-treated wood approved for exterior use that complies with Building Code Section 2303.2; or
- 5. ignition-resistant materials approved for exterior use.

The material must extend from the top of the foundation to the underside of the roof sheathing.

- **504.7** Appendages and structures. An unenclosed accessory structure that is attached to or located within 10 feet (3,048 mm) of a building with habitable spaces and projections, such as a deck, must be constructed using at least one-hour fire-resistance-rated materials, heavy timber, or one of the following:
 - 1. approved non-combustible materials;
 - 2. fire-retardant-treated wood approved for exterior use that complies with Building Code Section 2303.2; or
 - 3. ignition-resistant building materials that comply with Section 503.2.

Exception: Fence materials located more than 10 feet (3,048 mm) from a building or structure.

- **504.8 Exterior Glazing**. An exterior window, window wall and glazed door, window within an exterior door, or a skylight within 50 feet (15,240 mm) of a 40 acre (4.05 ha) or greater contiguous area that consists of light, medium, or heavy fuel must have a fire protection rating of 20 or more minutes. Tempered glass, multilayered glazed panels, and glass block comply with this provision.
- **504.9 Exterior Doors**. An exterior door within 50 feet (15,240 mm) of a 40 acre (4.05 ha) or greater contiguous area that consists of light, medium, or heavy fuel must have a fire

protection rating of 20 or more minutes. Approved noncombustible construction materials and solid core wood that is 1 \(^3\)4-inches (44 mm) thick comply with this provision. A window within a door or a glazed door must comply with Section 504.8.

Exception. A vehicle access door.

504.10 Vents. Each attic ventilation opening, foundation or underfloor vent, or other ventilation opening in a vertical exterior wall and each vent through a roof may not exceed 144 square inches (0.0929 m²). These vents must be covered with non-combustible corrosion-resistant mesh with openings that are 1/8-inch (3.3 mm) or less or must be designed and approved to prevent flame or ember penetration into the structure.

Exceptions:

- 1. An opening that must be clear because of another Land Development Code requirement provided that any flame or ember that penetrates the opening cannot reach combustible materials or surfaces.
- 2. A dryer vent that complies with the applicable Land Development Code provision.
- **504.11 Detached Accessory Structures.** The exterior side of a detached accessory structure located within 50 feet (15,240 mm) of a 40 acre (4.05 ha) or greater contiguous area that consists of light, medium, or heavy fuel and within 50 feet (15,240 mm) of a building containing habitable space must be constructed with materials approved for at least one-hour fire resistance-rated construction, heavy timber, log wall construction, with approved non-combustible materials, or fire-retardant-treated wood that is approved for exterior use and complies with Building Code, Section 2303.2.
- **603.2.2 Trees**. Trees that comply with Section 604.4 are allowed within a defensible space.
- **603.2.3 Groundcover**. Groundcover vegetation, understory plants and shrubs, leaf litter, and mulch that does not form in a manner that transmits fire to tree canopies or structures is allowed within a defensible space.
- 604.4 Trees. A person must maintain a tree within a defensible space to prevent fire from entering or spreading through canopies as set forth in City Code requirements. Overhead electric line clearance requirements set forth in the Utilities Criteria Manual Section 1 (Austin Energy Design Criteria) apply to a tree within a defensible space.
- **606.1 General.** Liquefied petroleum gas (LP-gas) storage and related pertinent equipment may be located within a defensible space if it is installed and maintained as required by the Fire Code or, if applicable, recognized standards and NFPA 58.

606.2 Location of containers or tanks. A LP-gas container or tank may be located within a defensible space if the container or tank complies with the Fire Code and NFPA 58.

APPENDIX D. FUEL MODELS

As set forth in Section 3.2.1 of the Austin-Travis County Community Wildfire Protection Plan, fuel loads and fire behavior within the region are indicated by the following vegetation:

- Sparse, dry-climate grass, or grassland, is dominated by generally short grasses that may be sparse or discontinuous (Scott and Burgan 2005). Pastures are also considered grasslands.
- 2. Aggrading juniper shrub fuel type is dominated by live oak-juniper and juniper savanna. It is present throughout the county. It includes both Ashe juniper (*Juniperus ashei*), predominantly in western Travis County, and eastern redcedar (*Juniperus virginiana*), predominately in eastern Travis County. Juniper scorch and mortality values by size class are nearly identical between these two Juniperus species (Engle and Stritzke 1995).
- 3. Closed juniper woodland has sufficient canopy closure to limit growth of tall grass (18 inches or more tall) to less than 50 percent of the ground cover. Juniper, including Ashe juniper and/or eastern redcedar, and deciduous trees are the dominant vegetation types.
- 4. Mixed juniper hardwood forest fuel type is 25-percent juniper, 75-percent deciduous class.
- **PART 3.** Based on the Findings set forth in Part 1 of this ordinance, the City Council designates the WUI areas shown on Exhibit B to this ordinance as wildland-urban interface areas.

PART 4. This ordinance takes effect on January 1, 2021.

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Information Supporting Adoption of the Wildland-Urban Interface Code

For the reasons described below, the Fire Chief finds that the local fire environment, community values, limited resources, and land development in the Wildland-Urban Interface areas of Austin are features that can, under certain circumstances, affect emergency services. These features support adopting the International Wildland-Urban Interface Code, promulgated by the International Code Council, and designating certain areas of the City as "wildland-urban interface areas" with the goal to mitigate, to the extent possible, the impact of those features.

Finding 1: Local Fire Environment

Local climate, topography, and wildland fuels provide conditions for wildfires in the Austin area that can threaten people, cause property damage, and disrupt services. Central Texas periodic brief or long term droughts are a major contributing factor to potential large, damaging fires. Large fires between 500 and 4,000-plus acres have occurred in the years 1959, 1961, 1962, 1968, 1989, 1993, 1994, and 2011 and have affected all parts of Travis County. The fires of 2011, at the peak of a multi-year drought, destroyed many structures in Austin, Travis County, and Bastrop County. However, as demonstrated by the Pinnacle fire in April of 2011 that covered 100 acres and destroyed 10 homes, smaller fires can also be destructive.

Local topography of hilly terrain and steep slopes allows faster fire spread by channeling winds and preheating flammable materials upslope. Topography also influences where land development is allowed and operability for firefighting. Local wildland fuel models have been developed for Central Texas to analyze risk levels and aid in firefighting. Active canopy fires are rare in these fuel types, however, when they do occur during extreme drought, high temperatures, and windy conditions they can be difficult or impossible to contain and can threaten residents, first responders, structures, neighborhoods, and infrastructure.

Since past incidents show that structure ignitions occur from blowing embers as well as direct heat, the Wildland-Urban Interface areas in Austin include developed and developable properties within 1.5 miles of a 750 acre or larger wildland area or within 150 feet of a 40 acre or larger wildland. Structures in these areas within 50 feet of wildland areas would have higher potential for ignition from direct heat while all structures in the area would be at risk of ignition from blowing embers.

Conditions in the local fire environment support the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.

Finding 2: Community Values

The Austin-Travis County Community Wildfire Protection Plan, adopted by Austin City Council in 2014, identified natural community values including ecological ones of wildlife habitat, water, parks, and preserves. For this reason, in large part, the Austin-Travis County Joint Wildfire Task force that formed after the 2011 wildfire losses chose to use fire adapted community practices to improve safety from wildfires. As noted in the fire environment finding, historic fires and analysis of local conditions indicate large, damaging fires are likely to occur in Austin in the future.

Use of fire adapted community practices for wildfire safety further support the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.

Finding 3: Land Development in the Wildland-Urban Interface

The wildland-urban Interface, where urban and suburban development abuts wildland vegetation such as forests, shrub, and grasslands, provides the greatest challenge in wildfire protection and preparedness efforts and is often the source of human-caused fires. City of Austin population increase will continue to push development into previously rural, undeveloped areas putting more structures and lives at risk from wildfire.

Land development in the wildland-urban interface further supports the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.

Finding 4: Limited firefighting resources

During times of high fire activity, it is common to have multiple fires starting and burning simultaneously. As experienced during the fires of September, 2011, firefighting resources are limited and will be stretched responding to multiple incidents. Fires involving multiple structures will have a significant community impact and further challenge firefighting resources. Ignition resistant construction and maintenance of defensible space would reduce the severity of fires, reduce the impact to the community, and improve conditions for fire response.

Reducing risk of structure ignition and infrastructure impact during times of limited resources further supports the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.



