

ORDINANCE NO. NS-XXX

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SANTA ANA AMENDING CHAPTERS 8 AND 14 OF THE SANTA ANA MUNICIPAL CODE TO ADOPT AND AMEND THE MOST RECENTLY ENACTED CALIFORNIA BUILDING CODE, CALIFORNIA RESIDENTIAL CODE, CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA ENERGY CODE, CALIFORNIA HISTORICAL BUILDING CODE, CALIFORNIA FIRE CODE, CALIFORNIA EXISTING BUILDING CODE, AND INTERNATIONAL PROPERTY MAINTENANCE CODE

THE CITY COUNCIL OF THE CITY OF SANTA ANA DOES HEREBY ORDAIN AS FOLLOWS:

**Section 1.** Section 8-43 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-43. - Adoption by reference.**

There is adopted by the city that certain code known as the California Building Code, 2022 Edition, based on the 2021 International Building Code as published by the International Code Council, (hereinafter referred to in this article as the "Building Code," "building code," or "California Building Code"), consisting of "Volume 1", "Volume 2" and the 2022 California Existing Building Code (together with subsequent supplements or amendments to any volume, each of which shall become effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified), of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The building code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the building code set forth in this chapter that specifically amends the Building Code. Any previously enacted, unrepealed provision of the Santa Ana Municipal Code that amended a pre-2022 edition of the "Building Code" shall also be construed as amending the applicable provision of the 2022 or later edition of the building code. The building

code, as thus amended, together with all other provisions of this article, shall be known as the city building code.

Appendices which are adopted pursuant to this section are as follows:

Appendix I, Patio Covers

Appendix J, Grading

**Section 2.** Section 8-93 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-93. - Reserved.**

**Section 3.** Section 8-96 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-96. - Time limitation of application (Volume 1, Chapter 1, Division II, Section 105.3.2)**

Section 105.3.2 is amended to read as a follows:

Sec. 105.3.2. *Time limitation of application.* An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless the permit has been issued; except that the Building Official may extend the time for action by the applicant for a period not exceeding one hundred and eighty (180) days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

An application for a certificate of occupancy shall be deemed to have been abandoned 12 months after the date of filing, unless the certificate of occupancy has been issued or the building permit associated with the certificate of occupancy has not expired; except that the Building Official may extend the time for action by the applicant for a period not exceeding one hundred and eighty (180) days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. In order to renew action on an application after expiration, the applicant shall pay a new certificate of occupancy application fee.

**Section 4.** Section 8-85 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-85. - Seismic loads (California Existing Building Code, Chapter 5, Section 506.5.3).**

Chapter 5, Section 506.5.3 of the California Existing Building Code is amended by adding the following paragraph thereto:

The conversion of any portion of an existing building to residential use shall be analyzed for 75 percent of the Design Earthquake Ground motion, as defined in Section 1613.2 of the California Building Code, but in no event shall there be a reduction in the capacity of the seismic force resisting system where such system provides a greater level of protection than the minimum requirements established by this code. Performance-based engineering analysis and design procedures may be used to evaluate the existing structure and the design of strengthening elements when approved by the Building Official. All new structural elements shall meet current detailing requirements of Section 1604 of the California Building Code.

**Section 5.** Section 8-290 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-290. - Adoption by reference.**

There is adopted by the city that certain code known as the California Plumbing Code, 2022 Edition, including the following appendices thereto: A, B, D, I and J, (hereinafter referred to in this article as the "Plumbing Code"), together with subsequent supplements or amendments, which shall become effective, adopted and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified. The plumbing code is adopted and incorporated by reference as fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the plumbing code set forth in this chapter of this Code that specifically amend the plumbing code. Any previously enacted, unrepealed provision of this Code that amended a pre-2022 edition of the "Plumbing Code" shall also be construed as amending the applicable provision of the 2022 or later edition of the plumbing code. The plumbing code as amended, together with all other provisions of this article, shall be known as the city plumbing code.

**Section 6.** Section 8-556 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-556. - Adoption by reference.**

There is adopted by the city that certain code known as the California Mechanical Code, 2022 edition (hereinafter referred to in this article as the "California Mechanical Code" "Mechanical Code" or "mechanical code"), together with subsequent supplements, amendments, or editions, which shall become effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified. The mechanical code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the mechanical code set forth in this chapter of this Code that specifically amend the mechanical code. Any previously enacted, unrepealed provision of this Code that amended a pre-2022 edition of the "Mechanical Code" shall also be construed as amending the applicable provision of the 2022 or later edition of the mechanical code. The mechanical code as amended, together with all other provisions of this article, shall be known as the city mechanical code.

**Section 7.** Section 8-667 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-667. - Adoption by reference.**

There is adopted by the city that certain code known as the California Electrical Code 2022 Edition and the administrative provisions set forth herein, (hereinafter referred to in this article as the "Electrical Code") together with subsequent supplements, amendments, or editions, which shall become effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless specifically adopted prior to that date, of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The electrical code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the electrical code set forth in this chapter of this code that specifically amend the electrical code. Any previously enacted, unrepealed provision of this Code that amended a pre-2022 edition of the "Electrical Code" shall also be construed as amending the applicable provision of the 2022 or later edition of the electrical code. The electrical code as amended, together with all other provisions of this article, shall be known as the city electrical code.

Annex which are adopted pursuant to this section are as follows:

Informative Annex A, Product Safety Standards

**Section 8.** Section 8-2000 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-2000. - Adoption by reference.**

There is adopted by the city that certain code known as the 2021 International Property Maintenance Code (hereinafter referred to as the "Property Maintenance Code"), together with subsequent supplements, amendments, or editions, which shall become effective, adopted, and incorporated by reference into this Code on each new official publication date of the International Property Maintenance Code, of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The said Code is adopted and incorporated as fully as if set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the property maintenance code set forth in this chapter of this Code that specifically amends the property maintenance code. Any previously enacted, unrepealed provision of this Code that amended a pre-2021 edition of the "Property Maintenance Code" shall also be construed as amending the applicable provision of the 2021 or later edition of the property maintenance code. The property maintenance code, as thus amended, together with all other provisions of this article, shall be known as the city property maintenance code.

**Section 9.** Section 8-2800 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-2800. - Adoption by reference.**

There is adopted by the city that certain code known as the California Residential Code, 2022 Edition, based on the 2021 International Residential Code as published by the International Code Council, (hereinafter referred to in this article as the "Residential Code" or "California Residential Code"), (together with subsequent supplements or amendments shall become effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified), of which not less than one (1) copy of said Code has been and is now on file in the office of the Clerk of the Council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The Residential code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the Residential code set forth in this chapter that specifically amends the Residential Code. The Residential

code, as thus amended, together with all other provisions of this article, shall be known as the city residential code.

Appendices which are adopted pursuant to this section, are as follows:

Appendix H, Patio Covers

Appendix J, Existing Buildings and Structures

**Section 10.** Section 8-2810 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-2810. - Climatic and Geographic Design Criteria (Table R301.2).**

Table R301.2 is revised to read:

**TABLE R301.2  
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP °	ICE BARRIER UNDERLAY- MENT REQUIRED h	FLOOD HAZARDS g	AIR FREEZING INDEX i	MEAN ANNUAL TEMP j
	Speed d (mph)	Topo- graphic effects k	Special wind region l	Windborne debris zone m		Weathering a	Frost line Depth b	Termite c					
Zero	95	No	No	No	D <sub>2</sub> or E	Negligible	12-24"	Very Heavy	43	No	See Exhibit B	0	60

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.

b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.

c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.

d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(A)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.

- e. Temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at [www.ncdc.noaa.gov/fpsf.html](http://www.ncdc.noaa.gov/fpsf.html).
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- l. In accordance with Figure R301.2(5)A, where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- m. In accordance with Section R301.2.1.2 the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- n. The jurisdiction shall fill in these sections of the table to establish the design criteria using Table 1a or 1b from ACCA Manual J or established criteria determined by the jurisdiction.

- o. The jurisdiction shall fill in this section of the table using the Ground Snow Loads in Figure R301.2(6).

**Section 11.** Section 8-2900 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-2900. - Adoption by reference.**

There is adopted by the city that certain code known as the California Green Building Standards Code, 2022 Edition, as published by the International Code Council, (hereinafter referred to in this article as the "California Green Building Standards Code"), (effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified), of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The Green Building Standards code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city. The California Green Building Standards code, as thus amended, together with all other provisions of this article, shall be known as the city Green Building Standards code.

**Section 12.** Section 8-3000 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 8-3000. - Adoption by reference.**

There is adopted by the city that certain code known as the California Energy Code, 2022 Edition, as published by the International Code Council, (hereinafter referred to in this article as the "California Energy Code"), (effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified), of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The California Energy Code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city. The California Energy Code, as thus amended, together with all other provisions of this article, shall be known as the city Energy code.

**Section 13.** Article XIX of Chapter 8 of the Santa Ana Municipal Code is hereby added to read as follows:



## **ARTICLE. XIX – CALIFORNIA HISTORICAL BUILDING CODE**

### **Sec. 8-3100. - Adoption by reference.**

There is adopted by the city that certain code known as the California Historical Building Code, 2022 Edition, as published by the International Code Council, (hereinafter referred to in this article as the "California Historical Building Code"), (effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified), of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The California Historical Building Code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city. The California Historical Building Code, as thus amended, together with all other provisions of this article, shall be known as the city Historical Building code.

**Section 14.** Section 14-1 of the Santa Ana Municipal Code is hereby amended to read as follows:

#### **Sec. 14-1. Adoption by reference.**

There is adopted by the city that certain code known as the California Fire Code 2022 Edition, based on the 2021 International Fire Code as published by the International Code Council, (hereinafter referred to in this article as the "California Fire Code" or "fire code") and the whole thereof including the Appendices therein, errata issued during and after the publishing date, save and except such portions as are hereinafter deleted or amended, of which code not less than one (1) copy has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. Said code is adopted and incorporated as fully as if set forth at length herein and, subject to all amendments set forth in this article, shall be in effect within the city from the effective date of this article. Any provision of this article amending the above mentioned codes shall be construed as amending the 2021 and 2022 editions thereof including such provisions enacted prior to this adoption of the said 2021 and 2022 editions and not thereafter repealed. The International Fire Code, 2021 edition and the California Fire Code 2022 edition, as thus amended, together with all other provisions of this article, shall be known as the "Fire Code of the City of Santa Ana."

**Section 15.** Section 14-3.1 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-3.1. - Violation penalties (Section 112.4).**

**Section 112.4 Violation penalties.**

**112.4 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or shall fail to comply with any issued orders or notices or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be subject to penalties assessed as prescribed in the OCFA Prevention Field Services adopted fee schedule. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

- (a) **Section 112.4.2 Infraction and misdemeanor** is hereby added as follows:

**112.4.2 Infraction and misdemeanor.** Persons operating or maintaining any occupancy, premises or vehicle subject to this code that shall permit any fire or life safety hazard to exist on premises under their control shall be guilty of an infraction. Persons who fail to take immediate action to abate a fire or life safety hazard when ordered or notified to do so by the chief or a duly authorized representative are guilty of a misdemeanor.

**Section 16.** Section 14-22 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-22. - General requirements (Chapter 3).**

**Chapter 3 General Requirements.** Adopt Chapter 3 in its entirety, with the exception of Sections 308.1.4, 311.5 through 311.5.5, 318, and 319, and with the following amendments:

- (a) **Section 304.1.2 Vegetation.** Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirement in urban-wildland interface areas shall be in accordance with Chapter 49. Type, amount, arrangement, and maintenance of vegetation in a fuel modification area, interior slope, or similarly hazardous area shall be in accordance with OCFA Guideline C-05 "Vegetation Management Guideline—Technical Design for New Construction, Fuel Modification Plans, and Maintenance Program."

- (b) **Section 305.6 Hazardous Conditions** is hereby added as follows:

**305.6 Hazardous conditions.** Outdoor fires burning wood or other solid fuel are not allowed when any of the following conditions applies:

1. when predicted sustained winds exceed 8 MPH and relative humidity is less than 25%, or a red flag condition has been declared
2. when an official sign was caused to be posted by the fire code official, or a public announcement is made

No outdoor fires using any fuel type are permitted when predicted sustained winds exceed 20 MPH or when such fires present a hazard as determined by the fire code official.

(c) **Section 305.7 Disposal of rubbish** is hereby added as follows:

**305.7 Disposal of rubbish.** Rubbish, trash or combustible waste material shall be burned only within an approved incinerator and in accordance with Section 307.2.1.

(d) **Section 307 OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES** is hereby added as follows:

**SECTION 307 OPEN BURNING, RECREATIONAL FIRES, FIRE PITS, FIRE RINGS, AND PORTABLE OUTDOOR FIREPLACES**

**Section 307.6 Outdoor Fireplaces, fire Pits, Fire Rings, or similar devices used at Group R Occupancies** is hereby added as follows:

**307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies.** Outdoor fireplaces, fire pits, fire rings, or similar exterior devices used at Group R shall comply with this section.

**Exception:** Barbeques, grills, and other portable devices intended solely for cooking.

**307.6.1 Gas-fueled devices.** Outdoor fireplaces, fire pits and similar devices fueled by natural gas or liquefied-petroleum gas are allowed when approved by the Building Department and the device is designed to only burn a gas flame and not wood or other solid fuel. At R-3 occupancies, combustible construction shall not be located within three feet of an atmospheric column that extends vertically from the perimeter of the device. At other R occupancies, the minimum distance shall be ten feet. Where a permanent Building Department approved hood and vent is installed, combustible construction may encroach upon this column between the bottom of the hood and the vent opening. Where chimneys

or vents are installed, they shall have a spark arrester as defined in Section 202.

**Section 307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas** is hereby amended as follows:

**307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas.** Permanent outdoor fireplaces burning wood or other solid fuel shall be constructed in accordance with the California Building Code with clearance from combustible construction and building openings as required therein. Fires in a fireplace shall be contained within a firebox with an attached chimney. The opening in the face of the firebox shall have an installed and maintained method of arresting sparks.

The burning of wood or other solid fuel in a device is not allowed within 25 feet of combustible structures, unless within an approved permanent fireplace. Conditions which could cause a fire to spread within 25 feet of a structure or to vegetation shall be eliminated prior to ignition. Fires in devices burning wood or solid fuel shall be in accordance with Sections 305, 307, and 308.

Exceptions:

1. Portable fireplaces and fire rings/pits equipped with a device to arrest sparks shall be located at least 3' from combustible construction at R-3 occupancies,
2. Portable fireplaces, and fire pits/rings equipped with a device to arrest sparks, shall be located at least 15 feet from combustible structures at other R occupancies.

**Section 307.6.2.1 Where prohibited** is hereby amended as follows:

**307.6.2.1 Where prohibited.** The burning of wood and other solid fuels shall not be conducted within a fuel modification zone, Wildfire Risk Area (WRA), Wildland-Urban Interface Area (WUI), or in locations where conditions could cause the spread of fire to the WRA or WUI.

Exceptions:

1. Permanent fireplaces that are not located in a fuel modification zone
2. Where determined by the Fire Code Official that the location or design of the device should reasonably prevent the start of a wildfire.

(e) **Section 324 Fuel Modification Requirements for New Construction** is hereby amended as follows:

**324 Fuel Modification Requirements for New Construction.** All new structures and facilities adjoining land containing hazardous combustible vegetation shall be approved and in accordance with the requirements of OCFA Guideline C-05 "Vegetation Management Guideline – Technical Design for New Construction Fuel Modification Plans and Maintenance Program."

(f) **Section 325 Clearance of brush or vegetation growth from roadways** is hereby amended as follows:

**325 Clearance of brush or vegetation growth from roadways.** The fire code official is authorized to cause areas within 10 feet (3048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic, to be cleared of flammable vegetation and other combustible growth. Measurement shall be from the flow-line or the end of the improved edge of the roadway surfaces.

**Exception:** Single specimens of trees, ornamental shrubbery or cultivated ground cover such as green grass, ivy, succulents or similar plants used as ground covers, provided that they do not form a means of readily transmitting fire.

(g) **Section 326 Unusual Circumstances** is hereby amended as follows:

**326 Unusual circumstances.** The fire code official may suspend enforcement of the vegetation management requirements and require reasonable alternative measures designed to advance the purpose of this code if determined that in any specific case that any of the following conditions exist:

1. Difficult terrain.
2. Danger of erosion.
3. Presence of plants included in any state and federal resources agencies, California Native Plant Society and county-approved list of wildlife, plants, rare, endangered and/or threatened species.
4. Stands or groves of trees or heritage trees.

5. Other unusual circumstances that make strict compliance with the clearance of vegetation provisions undesirable or impractical.

(h) **Section 327 Use of Equipment** is hereby added as follows:

**327 Use of equipment.** Except as otherwise provided in this section, no person shall use, operate, or cause to be operated in, upon or adjoining any hazardous fire area any internal combustion engine which uses hydrocarbon fuels, unless the engine is equipped with a spark arrester as defined in Section 202 maintained in effective working order, or the engine is constructed, equipped and maintained for the prevention of fire.

**Exception:**

1. Engines used to provide motor power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code of the State of California.
2. Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in good mechanical condition.

(i) **Section 327.1 Use of Equipment and Devices Generating Heat, Sparks or Open Flames** is hereby amended as follows:

**327.1 Equipment and devices generating heat, sparks or open flames.** During any time of the year within Wildfire Risk Areas, within or immediately adjacent to any forest- or brush-covered land or non-irrigated grass-covered land, no person shall use or operate any welding equipment, cutting torches, tar pots, grinding devices, or other tools or equipment that may produce a spark, fire, or flame that could result in a wildfire without doing the following:

1. First clearing away all flammable material, including snags, from the area around such operation for a distance of 30 feet or other approved method to reduce fire spread into the wildlands. If 30 foot clearing cannot be achieved then an alternate method shall be approved by the AHJ prior to work starting.
2. Maintain one serviceable round point shovel with an overall length of not less than forty-six (46) inches and one backpack pump water-type fire extinguisher fully equipped and ready for use at the immediate area during the operation.

3. Stop work when winds are 8 MPH during periods when relative humidity is less than 25%, or a red flag condition has been declared or public announcement is made, when an official sign was caused to be posted by the fire code official, or when such fires present a hazard as determined by the fire code official.

4. Keep a cell phone nearby and call 911 immediately in case of a fire.

(j) **Section 327.2 Spark arresters** is hereby added as follows:

**327.2 Spark arresters.** Spark arresters shall comply with Section 202, and when affixed to the exhaust system of engines or vehicles subject to Section 327 shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.

**Section 17.** Section 14-23 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-23. - Emergency planning and preparedness (Chapter 4).**

**Chapter 4: Emergency Planning and Preparedness.** Adopt only those sections and subsections adopted by SFM with the following amendment.

**Section 407.5** is revised as follows:

**407.5 Hazardous Materials Inventory Statement.** Where required by the fire code official, each application for a permit shall include OCFA's Chemical Classification Guideline in accordance with Section 5001.5.2.

**Section 18.** Section 14-24 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-24. - Fire service features (Chapter 5).**

**Chapter 5 Fire Service Features** is adopted in its entirety with the following amendments:

(a) **SECTION 501.1 Scope** is revised to read as follows:

**501.1 Scope.** Fire service features for buildings, structures and premises shall comply with this chapter and, where required by the fire code official, with OCFA Guideline B-01, "Fire Master Plan for Commercial & Residential Development."

(b) **Section 510.1 Emergency responder radio coverage** is revised to read as follows:

**510.1 Emergency responder radio coverage in new buildings.** All new buildings shall have approved radio coverage for emergency responders within the building based upon 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. The Emergency Responder Radio Coverage System shall comply with the Orange County Sheriff's Department, Communications and Technology Division guidelines and specifications and, where the functionality or performance requirements in the California Fire Code are more stringent, this code.

Exceptions:

1. In buildings or structures where it is determined by the fire code official that the radio coverage system is not needed, including but not limited to the following:
  - a. Existing buildings or structures, unless required by the Building Official and OCFA for buildings and structures undergoing extensive remodel and/or expansion.
  - b. Elevators.
  - c. Structures that meet all of the following:
    - i. Three stories or less, and
    - ii. Do not have subterranean storage or parking, and
    - iii. Do not exceed 50,000 square feet on any single story.
  - d. Structures that meet all of the following:
    - i. Residential structures four stories or less, and
    - ii. Constructed of wood, and
    - iii. Do not have subterranean storage or parking, and
    - iv. Are not built integral to an above ground multi-story parking structure.

Should a structure that is three stories or less and 50,000 square feet or smaller on any single story include subterranean storage or parking, then this ordinance shall apply only to the subterranean areas.

2. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a



negative impact on the normal operations of the facility, the fire code official shall have the authority to accept an automatically activated emergency radio coverage system.

**Section 19.** Section 14-30 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-30. - Fire protection and Life Safety Systems (Chapter 9).**

**Chapter 9 Fire protection and Life Safety Systems** is adopted in its entirety with the following amendments:

(a) **Section 903.2 Where required** is hereby amended as follows:

**903.2 Where required.** Approved automatic sprinkler systems in buildings and structures shall be provided when one of the following conditions exists:

1. New buildings: Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.19, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area exceeds 5,000 square feet (465 m<sup>2</sup>) as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.

**Exception:** Subject to approval by the Fire Code Official, open parking garages in accordance with Section 406.5 of the California Building Code that are smaller than the area specified in section 903.2.10 (3) or 903.2.10.1 of the California Fire Code.

2. Existing Buildings: Notwithstanding any applicable provisions of this code, an automatic sprinkler system shall be provided in an existing building when an addition occurs and one of the following conditions exists:

- a. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5000 square feet (465 m<sup>2</sup>) as defined in Section 202; or
- b. When an addition exceeds 2000 square feet (186 m<sup>2</sup>) and the resulting building area exceeds 5000 square feet (465 m<sup>2</sup>) as defined in Section 202; or

c. An additional story is added above the second floor regardless of fire areas or allowable area.

Exception: Group R-3 occupancies shall comply with Section 903.2.8.

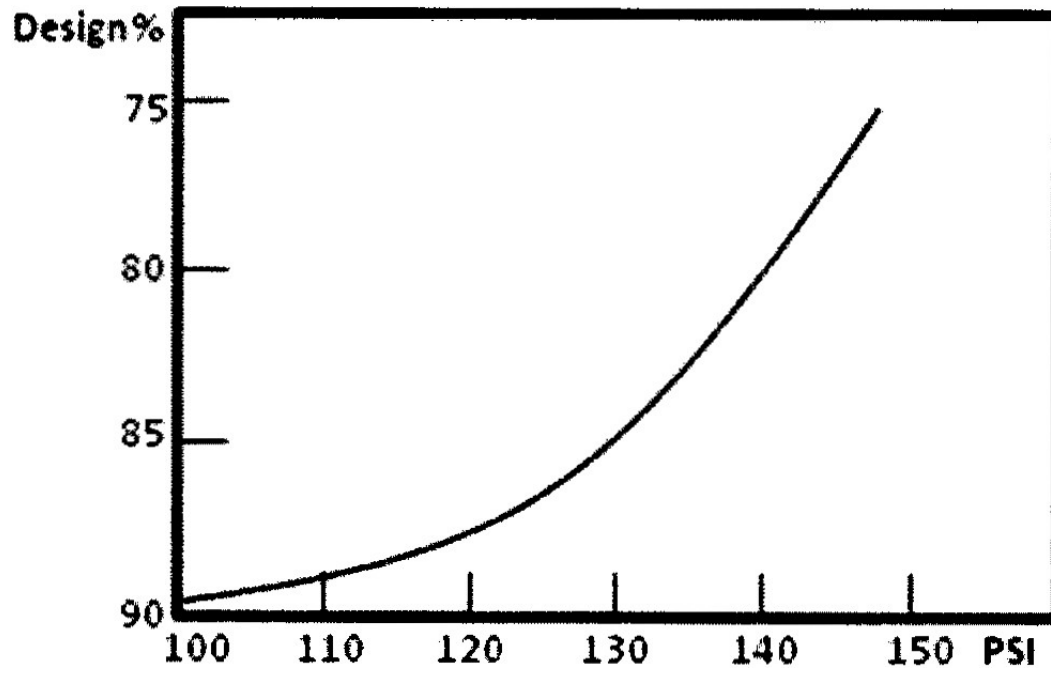
(b) **Section 903.3.5.3 Hydraulically calculated systems** is hereby added as follows:

**903.3.5.3 Hydraulically calculated systems.** The design of hydraulically calculated fire sprinkler systems shall not exceed 90% of the water supply capacity.

**Exception:** When static pressure exceeds 100 psi, and required by the Fire Code Official, the fire sprinkler system shall not exceed water supply capacity specified by Table 903.3.5.

TABLE 903.3.5.3

HYDRAULICALLY CALCULATED SYSTEMS



**Section 20.** Section 14-31 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-31. - Construction requirements for Existing Buildings (Chapter 11).**

**Chapter 11 Construction Requirements for Existing Buildings:** Adopt only those sections and subsections adopted by SFM.

**Section 21.** Section 14-32 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-32. - Energy Systems (Chapter 12).**

**Chapter 12 Energy Systems** is adopted in its entirety as amended by SFM.

**Section 22.** Section 14-34 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-34. - Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities (Chapter 28).**

**Chapter 28 Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities** is adopted in its entirety with the following amendments:

(a) **Section 2801.2 Permit** is hereby revised as follows:

**2801.2 Permit.** Permits shall be required as set forth in Section 105.6. and 105.6.29.

(b) **Section 2808.2 Storage site** is hereby revised as follows:

**2808.2 Storage site.** Storage sites shall be level and on solid ground, elevated soil lifts or other all-weather surface. Sites shall be thoroughly cleaned and approval obtained from the fire code official before transferring products to the site.

(c) **Section 2808.3 Size of piles** is hereby revised as follows:

**2808.3 Size of piles.** Piles shall not exceed 15 feet in height, 50 feet in width and 100 feet in length.

**Exception:** The fire code official is authorized to allow the pile size to be increased where a fire protection plan is provided for approval that includes, but is not limited to, the following:

1. Storage yard areas and materials-handling equipment selection, design and arrangement shall be based upon sound fire prevention and protection principles.
2. Factors that lead to spontaneous heating shall be identified in the plan, and control of the various factors shall be identified and implemented, including provisions for monitoring the internal condition of the pile.
3. The plan shall include means for early fire detection and reporting to the public fire department; and facilities needed by the fire department for fire extinguishment including a water supply and fire hydrants.
4. Fire apparatus access roads around the piles and access roads to the top of the piles shall be established, identified and maintained.
5. Regular yard inspections by trained personnel shall be included as part of an effective fire prevention maintenance program.

Additional fire protection called for in the plan shall be provided and shall be installed in accordance with this code. The increase of the pile size shall be based upon the capabilities of the installed fire protection system and features.

(d) **Section 2808.4 Pile Separation** is hereby added as follows:

2808.4. Pile separation. Piles shall be separated from adjacent piles by a minimum distance of 20 feet. Additionally, piles shall have a minimum separation of 100 feet from combustible vegetation.

(e) **Section 2808.7 Pile fire protection** is hereby revised as follows:

**2808.7 Pile fire protection.** Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system. Oscillating sprinklers with a sufficient projectile reach are required to maintain a 40% to 60% moisture content and wet down burning/smoldering areas.

- (f) **Section 2808.9 Material-handling equipment** is hereby revised as follows:

**2808.9 Material-handling equipment.** All material handling equipment operated by an internal combustion engine shall be provided and maintained with an approved spark arrester. Approved material-handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations.

- (g) **Section 2808.11 Temperature control**, is hereby added as follows:  
**2808.11 Temperature control.** The temperature shall be monitored and maintained as specified in Sections 2808.11.1 and 2808.11.2.

- (h) **Section 2808.11.1 Pile temperature control**, is hereby added as follows:  
**2808.11.1 Pile temperature control.** Piles shall be rotated when the internal temperature readings are in excess of 165 degrees Fahrenheit.

- (i) **Section 2808.11.2 New material temperature control**, is hereby added as follows:

**2808.11.2 New material temperature control.** New loads delivered to the facility shall be inspected and tested at the facility entry prior to taking delivery. Material with temperature exceeding 165 degrees Fahrenheit shall not be accepted on the site. New loads shall be monitored to verify that the temperature remains stable.

- (j) **Section 2808.12 Water availability** is hereby added as follows:

**2808.12 Water Availability.** Facilities with over 2500 cubic feet shall provide a water supply. The minimum fire flow shall be no less than 500 GPM @ 20 psi for a minimum of 1 hour duration for pile heights up to 6 feet and 2 hour duration for pile heights over 6 feet. If there is no water purveyor, an alternate water supply with storage tank(s) shall be provided for fire suppression. The water supply tank(s) shall provide a minimum capacity of 2500 gallons per pile (maximum 30,000 gallons) for piles not exceeding 6 feet in height and 5000 gallons per pile (maximum 60,000) for piles exceeding 6 feet in height. Water tank(s) shall not be used for any other purpose unless the required fire flow is left in reserve within the tank at all times. An approved method shall be provided to maintain the required amount of water within the tank(s).

- (k) **Section 2808.13 Tipping area** is hereby added as follows:

**2808.13 Tipping areas** shall comply with the following:

1. Tipping areas shall not exceed a maximum area of 50 feet by 50 feet.

2. Material within a tipping area shall not exceed 5 feet in height at any time.
3. Tipping areas shall be separated from all piles by a 20 foot wide fire access lane.
4. A fire hydrant or approved fire water supply outlet shall be located within 150 feet of all points along the perimeter of the tipping area.
5. All material within a tipping area shall be processed within 5 days of receipt.

(l) **Section 2808.14 Emergency Contact** is hereby added as follows:

**2808.14 Emergency Contact.** The contact information of a responsible person or persons shall be provided to the Fire Department and shall be posted at the entrance to the facility for responding units. The responsible party should be available to respond to the business in emergency situations

(m) **Section 2808.15 Maximum Grid of Piles and Rows** is hereby added as follows:

**2808.15 Maximum Grid of Piles and Rows,** Rows of Piles shall not exceed 500 feet by 500 feet. Grids shall be separated by a minimum 50 foot clear space used for no other purpose.

(n) **2808.16 Push-out / Clear area** is hereby added as follows:

**2808.16 Push-out / Clear area** Piles exceeding 20 cubic yards shall be provided with push-out areas. Push-out areas shall be maintained clear at all times to allow for the largest pile to be spread out to a depth of 2 feet in height. Push-out areas shall be located within 250 feet of all edges of any pile and shall be located a minimum of 20 feet from any building.

**Section 23.** Section 14-35 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-35. - Requirements for wildland-urban interface fire areas (Chapter 49).**

**Chapter 49 Requirements for Wildland-Urban Interface Fire Areas** is adopted in its entirety with the following amendment:

**Section 4903.3 Fuel Modification Plans** is hereby added as follows:

**4903.3 Fuel Modification Plans.** Fuel modification plans shall be reviewed and approved by OCFA for all new buildings to be built or installed in a wildfire risk area. Plans shall meet the criteria set forth in OCFA Guideline C-05 “Vegetation Management Guideline – Technical Design for New Construction Fuel Modification Plans and Maintenance Program.”

**Section 24.** Section 14-36 of the Santa Ana Municipal Code is hereby deleted in its entirety and reenacted in full as follows:

**Sec. 14-36. Hazardous Materials – General Provisions (Chapter 50)**

**Chapter 50 Hazardous Materials – General Provisions** is adopted in its entirety as amended by SFM with the following amendments.

- (a) **Section 5001.5.2 Hazardous Materials Inventory Statement (HMIS),** is hereby revised as follows:

**5001.5.2 Hazardous Materials Inventory Statement (HMIS).** Where required by the fire code official, an application for a permit shall include. Orange County Fire Authority’s-Chemical Classification Guideline, which shall be completed and approved prior to approval of plans, and/or the storage, use or handling of chemicals on the premises.

- (b) **Section 5003.1.1.1 Extremely Hazardous Substances** is hereby added as follows:

**5003.1.1.1 Extremely Hazardous Substances.** No person shall use or store any amount of extremely hazardous substances (EHS) in excess of the disclosable amounts (see Health and Safety Code Section 25500 et al) in a residential zoned or any residentially developed property.

**Section 25.** Section 14-38 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-38 - Explosives and fireworks (Chapter 56).**

**Chapter 56 Explosives and Fireworks** is adopted in its entirety as amended by SFM with the following amendments:

- (a) **Section 5608.2 Firing** is hereby added as follows:

**5608.2 Firing.** All fireworks display, regardless of mortar, device, or shell size, shall be electrically fired.

- (b) **Section 5608.3 Application for Permit** is hereby added as follows:



**Section 5608.3 Application for Permit.** A diagram of the grounds on which the display is to be held showing the point at which the fireworks are to be discharged, the fallout area based on 100 feet per inch of shell size, the location of all buildings, roads, and other means of transportation, the lines behind which the audience will be restrained, the location of all nearby trees, telegraph or telephone line, or other overhead obstructions shall be provided to OCFA.

**Section 26.** Section 14-39 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-39 - Flammable and combustible liquids (Chapter 57).**

**Flammable and Combustible Liquids (Chapter 57)** Adopt Chapter 57, as adopted and amended by SFM.

**Section 27.** Section 14-40 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-40. - Flammable Gases and Flammable Cryogenic Fluids (Chapter 58).**

**Chapter 58 Flammable Gases and Flammable Cryogenic Fluids** Adopt Chapter 58 in its entirety as amended by SFM.

**Section 28.** Section 14-41 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-41 - Referenced standards (Chapter 80).**

(a) **NFPA 13, 2022 Edition, Standard for the Installation of Sprinkler Systems** is hereby amended as follows:

(1) **Section 16.12.3.3** is hereby revised as follows:

**16.12.3.3** Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of 2½" inlets shall be approved by the fire code official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red or as approved. When the fire sprinkler density design

requires more than 500 gpm (including inside hose stream demand), or a standpipe system is included, four 2½" inlets shall be provided.

(2) **Section 9.4.3.1** is hereby revised as follows:

**9.4.3.1** When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:

- (1) Quick-response type as defined in 3.6.4.8
- (2) Residential sprinklers in accordance with the requirements of 8.4.5
- (3) Quick response CMSA sprinklers
- (4) ESFR sprinklers
- (5) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
- (6) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

(3) **Section 9.2.1.7** is hereby revised as follows:

**9.2.1.7** Concealed spaces filled with noncombustible insulation shall not require sprinkler protection when approved by fire code official.

(b) **NFPA 13D 2022 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes** is hereby amended as follows:

(1) **Section 7.1.2** is hereby revised as follows:

**7.1.2** The sprinkler system piping shall not have separate control valves installed unless supervised by a central station, proprietary, or remote station alarm service.

(c) **NFPA 14, 2019 Edition, Installation of Standpipe and Hose Systems** is hereby amended as follows:

Section 7.3.1.1 is hereby is deleted in its entirety.

(d) **NFPA 24, 2019 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances** is hereby amended as follows:

(1) **Section 6.2.8.1** is hereby added as follows:

**6.2.8.1** All indicating valves controlling fire suppression water supplies shall be painted OSHA red.

Exceptions:

1. Brass or bronze valves on sprinkler risers mounted to the exterior of the building may be left unpainted.
2. Where OS&Y valves on the detector check assembly are the only control valves, at least one OS&Y valve shall be painted red.

(2) **Section 6.2.9** is hereby amended as follows:

All connections to private fire service mains for fire protection systems shall be arranged in accordance with one of the following so that they can be isolated:

- (1) A post indicator valve installed not less than 40 ft (12 m) from the building
  - (a) For buildings less than 40 ft (12 m) in height, a post indicator valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the post indicator valve.
- (2) A wall post indicator valve
- (3) An indicating valve in a pit, installed in accordance with Section 6.4
- (4) A backflow preventer with at least one indicating valve not less than 40 ft (12 m) from the building
  - (a) For buildings less than 40 ft (12 m) in height, a backflow preventer with at least one indicating valve shall be permitted to be installed closer than 40 ft (12 m) but at least as far from the building as the height of the wall facing the backflow preventer.
- (5) Control valves installed in a fire-rated room accessible from the exterior
- (6) Control valves in a fire-rated stair enclosure accessible from the exterior

(3) **Section 10.1.5** is hereby added as follows:

**10.1.5** All ferrous pipe and joints shall be polyethylene encased per AWWA C150, Method A, B, or C. All fittings shall be protected with a loose 8-mil polyethylene tube or sheet. The ends of the tube or sheet shall extend past the joint by a minimum of 12 inches and be sealed with 2-inch-wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception: 304 or 316 Stainless Steel pipe and fittings

(4) **Section 10.4.1.1** is hereby revised as follows:

**10.4.1.1** All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material after installation.

Exception: Bolted joint accessories made from 304 or 316 stainless steel.

(5) **Section 10.4.1.1.1** is hereby added as follows:

**10.4.1.1.1** All bolts used in pipe-joint assembly shall be 316 stainless steel.

(6) **Section 10.4.3.2** is hereby added as follows:

**10.4.3.2.** Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 24 inches, as measured from the interior face of the exterior wall to the center of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with 10.4.3.2.1 through 10.4.3.2.4.

**Section 29.** Section 14-47 of the Santa Ana Municipal Code is hereby amended to read as follows:

**Sec. 14-47. - Appendices.**

**Appendix A** is deleted in its entirety.

**Appendix B** is adopted in its entirety.

**Appendix BB** is adopted in its entirety.

**Appendix C** is adopted in its entirety.

**Appendix CC** is adopted in its entirety.

**Appendix D** is deleted in its entirety.

**Appendix E** is deleted in its entirety.

**Appendix F** is deleted in its entirety.

**Appendix G** is deleted in its entirety.

**Appendix H** is deleted in its entirety.

**Appendix I** is deleted in its entirety.

**Appendix J** is deleted in its entirety.

**Appendix K** is deleted in its entirety.

**Appendix L** is deleted in its entirety.

**Appendix M** is deleted in its entirety.

**Appendix N** is deleted in its entirety.

**Appendix O** is deleted in its entirety.

**Section 30.** If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of Santa Ana hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

**Section 31.** This Ordinance shall become effective thirty (30) days after its adoption.

**Section 32.** The Clerk of the Council shall certify the adoption of this ordinance and shall cause the same to be published as required by law.

ADOPTED this \_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Vicente Sarmiento  
Mayor

APPROVED AS TO FORM:  
Sonia R. Carvalho  
City Attorney

By: John M. Funk  
John M. Funk  
Chief Assistant City Attorney

AYES: Councilmembers \_\_\_\_\_

NOES: Councilmembers \_\_\_\_\_

ABSTAIN: Councilmembers \_\_\_\_\_

NOT PRESENT: Councilmembers \_\_\_\_\_

### **CERTIFICATE OF ATTESTATION AND ORIGINALITY**

I, \_\_\_\_\_, Clerk of the Council, do hereby attest to and certify that the attached Ordinance No. NS-XXX to be the original ordinance adopted by the City Council of the City of Santa Ana on \_\_\_\_\_, \_\_\_\_\_ and that said ordinance was published in accordance with the Charter of the City of Santa Ana.

Date: \_\_\_\_\_

\_\_\_\_\_  
Clerk of the Council  
City of Santa Ana