#### DOÑA ANA COUNTY ORDINANCE NO.\_

AN ORDINANCE TO AMEND THE CODE OF THE COUNTY OF DOÑA ANA, by deleting and repealing Chapter 195 thereof, Fire Prevention, and replacing it with a new Chapter 195, to be entitled Fire Code of Doña Ana County, which chapter provides for the adoption of the 2015 International Fire Code with local amendments, and certain related appendices.

Be it enacted by the Board of County Commissioners of Doña Ana County as follows:

#### Section 1.

The Code of the County of Doña Ana is hereby amended by deleting and repealing Chapter 195, Fire Prevention.

#### Section 2.

The Code of the County of Doña Ana is further amended by adding thereto a new chapter, to replace Chapter 195 hereinabove repealed, to be Chapter 195, Fire Code of Doña Ana County, to read as follows:

#### Chapter 195 Fire Code of Doña Ana County

Article I Purpose and Adoption of Code

#### **§195-1.** § **Purpose**

The Doña Ana County Fire and Emergency Services is established for the purpose of protecting the health, safety and welfare of the residents of Doña Ana County by responding to fires, emergency medical calls, hazardous material emergencies and other emergency and nonemergency incidents within the incorporated county limits. The Doña Ana County Fire and Emergency Services is further charged with preventing conditions hazardous to life,-property, and the environment from fire, explosion and hazardous materials through the adoption of the certain code known as the International Fire Code ("IFC"), 2015 edition, as amended or replaced by subsequent editions, including the following appendix chapters:

- (1) Appendix B, Fire flow requirements for buildings.
- (2) Appendix C, Fire hydrant locations and distribution.
- (3) Appendix D, Fire apparatus access roads.
- (4) Appendix I, Fire Protection Systems.
- (5) Appendix H, Hazardous Materials Management Plan.
- (6) Appendix F, Hazardous Ranking

#### §195-2. Adoption of the International Fire Code

The International Fire Code referenced in §195-1 is hereby adopted, save and except such portions as are added, deleted, modified or amended by the following sections of this code. One copy of the updated code and one copy of the International Fire Code, 2015 edition is filed in the office of the County Clerk. The International Fire Code, as amended or replaced by subsequent editions, is adopted and incorporated as fully as if set out at length in this section, and the provisions thereof shall be controlling in the unincorporated areas within the geographic boundaries of the County.

#### Article II Local Amendments to International Fire Code

The 2015 International Fire Code is hereby amended as follows:

#### **Chapter 1 Scope and Administration**

#### §195-3. Title.

Section 101.1 of the IFC shall be amended to read as follows: These regulations shall be known as the *Fire Code of Doña Ana County*, hereinafter referred to as "this code."

#### §195-4. Official records.

Section 104.6 of the IFC shall be amended to read as follows: The County Fire Chief, fire prevention personnel, or their designee shall keep official records as required by sections 104.6.1 through 104.6.4 of the IFC. Such records shall be retained in accordance with the record retention requirements established by Doña Ana County and the State of New Mexico, NMAC §1.15.3.

#### §195-5. Fire Investigations.

Section 104.10 of the IFC shall be amended to read as follows: The County Fire Chief, fire prevention personnel or their designee are authorized to investigate any fire or explosion, or attempt to cause any fire origin and circumstances of explosion in the jurisdiction. For the purpose of such investigations, the County Fire Chief, fire prevention personnel or their designee, are authorized in non-criminal cases to conduct hearings, subpoena witness, take testimony and enter upon and examine any building or premises where any fire or explosion or attempt to cause a fire or explosion shall have occurred, which at the time may be burning. The County Fire Chief, fire prevention personnel or their designee, shall also have the power to cause to be produced before them, in conjunction with Doña Ana County District attorney's office, such papers as they may require in making such examination. In addition, the County Fire Chief,

fire prevention personnel or their designee, may, in their discretion, take full control and custody of such buildings and premises and place such person in charge thereof as they may deem proper, until their examination and investigation is completed.

## §195-6. Fire prevention and police authority.

Section 104.10.2 shall be added to the IFC to read as follows:

- **A.** Members of the fire prevention services shall have the powers of a police officer in performing their duties under this code when:
  - 1. Such members of the fire prevention services have been certified by a law enforcement academy authorized by the state of New Mexico; and
  - 2. Such members have been commissioned as police officers by Doña Ana County Sheriff's Department.
- **B.** Members of the fire prevention services who meet the requirements stated in paragraphs (1) and (2) of subpart (A) of this section shall have the following powers:
  - 1. Authority to arrest and or detain suspects upon probable cause that the suspect was involved in a fire or explosion under investigation;
  - 2. Authority to carry such weapons and use such equipment necessary in the discharge of their duties pursuant to this code;
  - 3. Authority to investigate arson and related crimes if so appointed and authorized by the Doña Ana County Sheriff.
  - 4. Authority to conduct hearings, subpoena witness, take testimony in criminal cases.
- **C.** All other members of the fire department who do not meet the requirements of subpart (A) of this section shall have the power to issue citations only for violations of this code.

#### §195-7. Obstructing operations.

Section 104.11.2 of the IFC shall be amended to read as follows: No persons shall obstruct the operations of the fire department in connection with extinguishment or control of any fire, or actions relative to other emergencies, non-emergency incidents or training, or disobey any lawful

command of the fire chief or member of the fire department or any lawful order of a police officer assisting the fire department.

# §195-8. "General"

Section 105.1.1 of the IFC shall be amended to read as follows: Permits required by this code shall be obtained from the Fire Code Official. Any required permit fees shall be established by resolution adopted by the Board of County Commissioners of Doña Ana County and any required fees shall be paid to the County prior to issuance of a permit. Any person commencing work or performing any action requiring a permit under this code without first obtaining the necessary permit shall be subject to a penalty fee, as shall be established by resolution adopted by the Board of County Commissioners of Doña Ana County, in addition to the regular permit fee and other penalties set forth in Section 109.3 of this Code. Issued permits shall be kept on the premises designed therein at all times and shall be readily available for inspection from the Fire Code Official.

# §195-9. Payment required.

Section 105.1.1 of the IFC shall be amended to read as follows: A permit, although issued, shall not be valid until all required fees have been paid. All government entities are exempted from payment of the permit fees required in this chapter, provided that the facilities are owned, operated and maintained by government agencies.

# §195-10. Construction documents.

Section 105.4 of the IFC shall be amended to read as follows: Construction documents shall be in accordance with sections 105.4.1 through 105.4.6 and requirements established by the Doña Ana County Community Development Department.

# §195-11. Open Burning.

Section 105.6.32 shall be amended to read as follows:

A. "Vegetative material" means plant material, including grass, grass clippings, leaves, conifer needles, bushes, shrubs, trees, and clippings from bushes, shrubs and trees, resulting from maintenance of yards or other private or public lands; and wood waste, clean lumber, wood and wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings, which have not been painted, pigment-stained, or treated with compounds containing chromium, copper, arsenic,

pentachlorophenol, or creosote. Open burning should take place no less than three hundred (300) feet from any structure, and an extinguishing agent should be readily available.

**B.** Prohibited open burning. Open burning that is reasonably offensive or objectionable because of smoke emissions or when atmospheric conditions in accordance to State of New Mexico Air Quality Bureau or local circumstances make such fire hazardous shall be prohibited. The burning of trash, tires, plastics, rubbish or any other paper products is also prohibited. Open burning is prohibited after dark. Burning shall begin no earlier than one hour after sunrise and shall be extinguished no later than one hour before sunset.

#### C. Penalties.

- **a.** Notwithstanding any other penalties established in this chapter, violators of the open burning regulations set out herein shall be subject to the following:
- **b.** First time violators who demonstrate cooperation in compliance may be fined up to one hundred dollars (\$100.00) per violation. First time violators who fail to demonstrate cooperation in compliance may be fined up to two hundred dollars (\$200.00) per violation.
- **c.** Multiple time violators who demonstrate cooperation in compliance may be fined up to five hundred dollars (\$500.00) per violation. Multiple time violators who fail to demonstrate cooperation in compliance may be fined up to one thousand Dollars (\$1,000.00) per violation, provided, however, the penalties assessed in the field citation shall not exceed one thousand dollars (\$1,000.00) per violation or a maximum of fifteen thousand dollars (\$15,000.00).
- **d.** In determining the amount of a penalty to be assessed pursuant to this section, the person issuing the field citation shall take into account the seriousness of the violation, any good-faith effort to comply with the applicable requirements and other relevant factors as set forth by NMAC §20.2.90.111.
- D. Notification. Mesilla Valley Regional Dispatch Authority (MVRDA) (575) 526-0795 (Non-Emergency Number) shall be notified to determine whether or not burning is allowed for that day. MVRDA must also be notified prior to commencement and at the completion of open burning. Open Burning shall begin no earlier than one hour after sunrise, and shall be extinguished no later than one hour before sunset.

**Exceptions:** *Recreational fires and open burning of vegetative materials.* 

# §195-12. Required construction permits.

Section 105.7 of the IFC shall be amended to read as follows: The Fire County Chief, fire prevention personnel or their designee is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.18 and the Unified Development Code, DAC Code Chapter 350.

# §195-13. Design Safety Margin. Automatic Fire-Extinguishing Systems

Section 105.7.1.1 shall be added to the IFC to read as follows: Unless otherwise approved by the County Fire Chief, fire prevention personnel or his designee all-automatic sprinkler systems shall be designed with a minimum 10 psi safety margin.

# §195-14. Hydraulic calculations required.

Section 105.7.1.2 shall be added to the IFC to read as follows: When required by the Fire Code Official, hydraulic calculations shall be provided for modification to an existing automatic fire extinguishing system requiring the installation of additional heads when either of the following occurs:

A. Number of heads being added exceeds 10.

**B.** Number of heads being added is greater than 10 percent of total heads for the system.

The fire code official may require hydraulic calculations be submitted for any modification to an existing system when deemed necessary to adequately evaluate the impact on the systems.

# §195-15. Board of appeals established.

Section 108.1 of the IFC shall be amended to read as follows: A decision of the County Fire Chief, fire prevention personnel or their designee may be appealed by filing a request for appeal in writing to the County Fire Chief within 30 days of the aggrieved decision or action. The appeal shall be heard by the Board of County Commissioners within 90 days of such filing.

# §195-16. Limitations on authority.

Section 108.2 of the IFC shall be deleted in its entirety.

# §195-17. Qualifications.

Section 108.3 of the IFC shall be deleted in its entirety.

# §195-18. Violation penalties

Section 109.3 of the IFC shall be amended to read as follows: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of or contrary to any approved construction document, permit, certificate or directive of the fire code officials is, upon conviction, subject to a fine of not more than three-hundred (300) dollars or imprisonment of not more than 90 days. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

# §195-19. Failure to comply

Section 111.4 of the IFC shall be amended to read as follows: Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to abate a violation or unsafe condition, shall be considered to be in violation of this code and shall be subjected to the penalties as set forth herein.

# **Chapter 4 Emergency Planning and Preparedness**

# §195-20. Emergency Evacuation Drills.

Table 405.2 of the IFC ("FIRE AND EVACUATION DRILL FREQUENCY AND PARTICIPATION") shall be amended as follows: Group H occupancies as defined in chapter 2 section 202 of the IFC shall follow same guidelines as Group A occupancies in the table.

# **Chapter 5 Fire Service Features**

# §195-21. Address identification.

Section 505.1 Of the IFC shall be amended to read as follows: New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background for visibility. Numbers shall be not less than two inches in width and three inches in height.

# §195-22. Hydrant for standpipe systems.

Section 507.5.1.1 of the IFC shall be amended as follows: Fire protection in recreational vehicle, mobile home and manufactured housing parks, sales lots and storage lots shall provide and maintain fire hydrants and access roads in accordance with sections 503 and 507 of the IFC.

#### §195-23. Obstruction.

Section 507.5.4 of the IFC shall be amended to read as follows: Unobstructed access to fire hydrants shall be maintained at all times. No person shall stop, stand or park a vehicle, except when necessary to avoid conflict with other traffic-control device, within fifteen feet of a fire hydrant, within fifteen feet of a Fire Department Connection (FDC), within a fire lane or fire apparatus access road, within twenty feet of the driveway entrance to any fire station, or on the side of a street opposite the entrance to any fire station and within seventy-five feet of said entrance, when properly posted. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants. The County Fire Chief, fire prevention personnel or their designees are authorized to have towed at the owners expense any vehicle found in violation of this code regardless of the presence of the driver.

#### **Chapter 9 Fire Protection Features**

#### §195-24. Pump and riser room size.

Section 901.4.6 of the IFC shall be amended to read as follows: Where provided, fire pump rooms and automatic sprinkler system riser rooms shall be designated and have adequate space for all equipment necessary for the installation (as defined by the manufacturer), with sufficient working space around the stationary equipment. Clearances around equipment to the elements of permanent construction shall be sufficient, including other installed equipment and appliances, shall be sufficient to allow inspection, service, repair, or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly. Fire pump and automatic sprinkler systems riser rooms shall be provided with a door(s) to the exterior and an unobstructed passageway large enough to allow removal of the largest piece of equipment.

#### §195-25. Definition of "Standpipe Systems, Classes of".

Section 902.1 and Section 202 by reference, of the IFC shall be amended to read as follows:

Standpipe classes are as follows:

- **A.** Class I system. A system providing 2.5-inch (64 mm) hose connections to supply water for use by fire department and those trained in handling heavy fire streams.
- **B.** Class II system. A system providing 1.5-inch (38 mm) hose stations to supply water for uses primarily by the building occupants or by the fire department during initial response. 1.5-inch

hoses & hose cabinets shall not be provided to the building owner, unless required by the Fire Code Official.

- C. Class III System. A system providing 1.5-inch (38 mm) hose stations to supply water for use by building occupants and 2.5-inch (64 mm) hose connections to supply a larger volume of water for use by fire departments and those trained in handling heavy fire streams. 1.5-inch hoses & hose cabinets shall not be provided to the building owner, unless required by the Fire Code Official.
- **§195-26.** Section 903.2 Exception shall be deleted in its entirety.

## §195-27. Sprinkler system supervision and alarms; Exceptions.

Section 903.4, subparagraph 1 of the IFC shall be amended to read as follows:

1. Limited area systems serving fewer than 20 sprinklers in other than Group H (High Hazard) and Group I occupancies.

## Chapter 23 Motor Fuel–Dispensing Facilities and Repair Garages

## **§195-28.** Overfill Protection of the IFC

Section 2306.2.3, subparagraph 1 of the IFC shall be amended to read as follows: Existing above–ground tanks shall comply with section 2306.2.3 of the IFC.

# **Chapter 24 Flammable Finishes**

#### §195-29. Frequency.

Section 2404.9.2 of the IFC shall be amended to read as follows:

Spraying operations shall not be of a continuous nature and shall not exceed 9 square feet per day.

#### **Chapter 56 Explosives and Fireworks**

#### §195-30. Fireworks; Exceptions.

Section 5601.1.3 of the IFC shall be amended as follows: Exception 2 shall be deleted in its entirety.

#### Chapter 58 Flammable Gases and Flammable Cryogenic Fluids

## §195-31. Storage of flammable cryogenic fluids in stationary containers; Limitations.

The geographic limitations in section 5806.2 of the IFC, in which storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited, shall be in accordance with the County Unified Development Code, DAC Code Chapter 350.

## **Chapter 61 Liquefied Petroleum Gases**

## §195-32. Storage of liquefied petroleum gases.

The geographic limitations referred to in section 6104.2 of the IFC, in which storage and use of liquefied petroleum gas are restricted, shall be in accordance with the County Unified Development Code, DAC Code Chapter 350. The aggregate capacity of any one installation shall not exceed a 2,000 – gallon water capacity in residential areas, except at a multi-container location, such as a dispensing station, and at bulk facilities.

## §195-33. Fire protection; General.

Section 6108.1 of the IFC shall be amended to read as follows: Fire protection shall be provided for installations having LP-gas storage containers with a water capacity of more than 4,000 (15,140 L) gallons, as required by section 6.25 of National Fire Protection Agency 58.

#### §195-34. Penalties.

Any person who violates any of the provisions of the fire code as adopted and amended in this article, who fails to comply with the fire code, who violates or fails to comply with any order made under the fire code, who builds in violation of any order made under the fire code, who builds in violation of any detailed statement of specifications or plans submitted and approved under the fire code or any certificate or permit issued under the fire code and from which no appeal has been taken or such appeal has been denied, or who fails to comply with such an order as affirmed or modified by this article or by a court or competent jurisdiction, within the required time, shall severally for each and every such violation and noncompliance, respectively, be guilty of a misdemeanor.

#### **Appendix D Fire Apparatus Access Roads**

#### §195-35. Scope.

Section D101.1 of the IFC shall be amended to read as follows: In the case of conflict with differing codes, the more restrictive code will prevail.

§195-36. Access.

Section D102.1 of the IFC shall be amended as follows: Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighting at least 75,000 pounds (34,050 kg).

# §195-37. Minimum specifications.

Section D103 of the IFC shall be amended as follows:

- **A. D103.1 Access road width with a hydrant.** Where a fire hydrant is located on a fire apparatus road, the minimum road width shall be 26 feet (7925 mm).
- **B.** D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade unless approved by the fire code official.
- C. D103.3 Turning radius. The minimum turning radius shall be determined by the fire code official.
- D. 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 Doña Ana County Design Standards or as approved by the County Fire Chief, fire prevention personnel or their designee.
- **E. D103.5 Fire apparatus access road gates.** Where required by the fire code official, gates securing the fire apparatus access roads shall comply with all of the following criteria:
  - 1. The minimum gate width shall be 20 feet (6096 mm).
  - 2. Gates shall be of the swinging or sliding type.
  - 3. Construction of gates shall be of materials that allow manual operation by one person.
  - **4.** Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
  - 5. Electric gates shall be equipped with a means of opening that gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.
  - 6. Manual opening gates shall not be locked with a padlock or chain unless they are capable of being opened by means of forcible entry tools.
  - 7. Locking device specifications shall be submitted for approval by the fire code official.

- **8.** Electric gate operators, where provided, shall be listed in accordance with Underwriters Laboratory (UL) 325.
- **9.** Gates intended for automatic operation shall be designed, constructed and installed to comply with requirements of American Society for Testing and Materials (ASTM) F 2200.

## §195-38. Signs.

Section D103.6 of the IFC shall be amended as follows:

- **A. D103.6** Where required by the fire code official, fire apparatus access roads shall be marked with permanent signs complying with Chapter 350, Article V of the Doña Ana County Unified Devolvement Code (UDC).
- **B. D103.6.1** Fire apparatus access roads 20 to 26 feet wide shall be posted on both directions of the roadway as a fire lane.
- **C. D103.6.2** Fire apparatus access roads more than 26 feet wide to 32 feet wide shall be posted on one direction of the road as a fire lane. One side will be designated as the fire lane.

## §195-39. Commercial and Industrial Developments.

Section D104 of the IFC shall be amended as follows:

- A. D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet or three stories in height shall have at least two means of fire apparatus access for each structure, and room for fire apparatus to operate for each structure during fire suppression efforts.
- **B.** D104.2 Building exceeding 62,000 square feet in area. Buildings or facilities having a gross building area of more than 62,000 square feet shall be provided with two separate and approved fire apparatus access roads.

Exception: When approved by the Fire Code Official, projects having a gross building area of up to 124,000 total square feet (11 520 m2) shall have a single approved fire apparatus access road-with all buildings equipped throughout with approved automatic sprinkler systems.

**C. D104.3 Remoteness.** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

#### §195-40. Aerial fire apparatus access roads.

Section D105 of the IFC shall be amended as follows:

- A. D105.1 Where required. Where required by the fire code official, buildings or portions of buildings or facilities exceeding 30 feet in height above the lowest level of fire department vehicle access shall be provided with approved fire apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway.
- **B.** D105.2 Width. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet in the immediate vicinity of any building or portion of building more than 30 feet in height.

#### §195-41. Multiple-family residential developments.

Section D106 of the IFC shall be amended as follows:

**A. 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 access roads.

Exception: When approved by the fire code official, projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1 or 903.3.1.2 or 903.3.1.3 of this code.

**B.** D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

#### §195-42. One or two-family residential developments.

Section D107 of the IFC shall be amended as follows:

**D107.1 One- or two-family dwelling residential developments.** Developments of one or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with separate and approved fire apparatus access roads, and shall meet the requirements of Sec. D104.3. For this section, a structure meeting the definition of a townhouse and constructed in accordance with the 2015 International Residential Code (IRC) shall be considered a one-family dwelling.

Exception 1. When approved by the fire code official, where there are 30 or more dwelling units on a single public or private access way and all dwelling units are protected by an approved automatic sprinkler system, access from two directions shall not be required.

Exception 2. The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads are incorporated with future or planned development, as determined by the fire code official.

# ARTICLE III. FIRE-FLOW REQUIREMENTS FOR BUILDINGS AND FIRE HYDRANT LOCATIONS AS WELL AS DISTRIBUTION METHOD.

#### §195-43. Scope.

- A. Appendix B and C of this code shall be amended to read as set forth in this article.
- B. The procedure determining fire-flow requirements for buildings or portions of buildings constructed shall be in accordance with this article. Adequate fire flow shall be provided for protection of life and property. This article establishes and develops guidelines and rules for providing fire hydrant locations.

#### §195-44. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

- **A.** "Building" means any structure used or intended for supporting or sheltering any use or occupancy.
- **B.** "Fire Code Official" means the County Fire Chief, Fire Prevention Personnel or their designee.
- **C.** "Fire flow" means the flow rate of water supply, measured at 20 psi residential pressure that is available for firefighting.
- **§195-45.** "Fire flow calculation area" means the floor area, in square feet, used to determine the required fire flow.

## Modifications.

- **A. Increases:** The fire code official is authorized to increase fire flow requirements where conditions indicate an unusual susceptibility to group fires or conflagrations. An increase shall not be more than twice that required for the building under consideration.
- **B. Decreases:** The fire code official is authorized to reduce the fire flow requirements for isolated buildings or a group of buildings in rural areas or small communities where the

development of full fire-flow requirements is impractical determined by the Fire Chief, fire prevention personnel or his designee

# **195-46.** Fire-flow calculation area.

- A. **Computation**: The fire flow calculation area shall be the total floor area of all floor levels within the exterior walls, and under the horizontal projections of the roof of a building, except as modified in construction type IA and type IB.
- B. Area separation: Portions of buildings which are separated by fire walls without openings, constructed in accordance with the International Building Code, are allowed to be considered as separate fire flow calculation areas.
- C. **Type IA and type IB construction.** The fire flow calculation area of buildings constructed of type IA and type IB construction shall be based on the area of the three largest successive floors.

Exception: Fire flow calculation area for open parking garages shall be determined by the area of the largest floor.

# 195-47. Fire-flow Requirements for Buildings.

# A. One and two-family dwellings.

The minimum fire-flow requirements for one and two-family dwellings shall not be less than 1,000 gallons per minute. The fire-flow duration for one and two family dwellings shall not be less than that specified in table A of this article.

Exception: A reduction in required fire flow of 50 percent, as approved by the County Fire Chief, fire prevention personnel or their designee, is allowed when the building is provided with an approved automatic sprinkler system.

# B. Buildings other than one and two-family dwellings.

The minimum fire flow and flow duration for buildings other than one and two-family dwellings shall not be less than that specified in table A of this article.

Exception: A reduction in required fire flow of up to 75 percent, as approved by the County Fire Chief, fire prevention personnel or their designee, when the building is provided with an approved automatic sprinkler system installed in accordance with Section 903.3.1 or 903.3.1 of

this code. The resulting fire flow shall not be less than 1,500 gallons per minute in addition to the sprinkler demand for the prescribed duration as specified in table A of this article.

## **195-48.** Fire hydrant location.

- **A. Scope.** Fire hydrant shall be provided in accordance with table B of this article, for the protection of buildings or portions of buildings constructed. Fire hydrants shall be installed and operational in conjunction with fire apparatus access roads and public streets.
- **B.** Number of fire hydrants. The minimum number of fire hydrants installed and operational specifically for any building approved and permitted to be constructed shall not be less than that listed in table B of this article. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by hydrant spacing requirements listed in table B, when applied to fire apparatus access roads and perimeter public streets from which fire operations could be conducted.
- **C.** Consideration of existing fire hydrants. Existing fire hydrants on public streets are allowed to be considered as available fire flow when approved by the fire code official. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between obstructions of such roads.
- **D.** Distribution of fire hydrants. Each new development, building, or project shall be analyzed for fire flow and fire hydrant needs. Fire hydrant requirements will vary with the size and layout of the buildings, building design and construction materials, installation of approved automatic sprinkler system, and access from and proximity to the public right of way.
- **E.** Average spacing. The average spacing between fire hydrants shall not exceed that listed in table B of this article. Exceptions to this requirement are as follows:
  - **1. Exception 1**. The County Fire Chief may accept a deficiency of up to ten percent where existing fire hydrants provide all or a portion of the required fire hydrant service.
  - **2.** Exception 2. The fire hydrant spacing in one- and two-family dwelling subdivisions may be increased to 600 feet.
- **F.** Regardless of the average spacing, fire hydrants shall be located such that all points on street and access roads adjacent to a building are within the distances listed in table B of this article.

# **195-49.** Installation of fire hydrants.

Fire hydrants shall be installed in accordance with the International Fire Code Edition 2015 as amended or updated or DAC Code Chapter 350 (Unified Development Code (UDC)) standards and shall be available for use prior to the beginning of development or building construction.

#### 195-50. Tables.

Tables A and B referred to in this-section shall be as follows:

# Table A

# MINIMUM REQUIRED FIRE FLOW AND FLOW DURATION FOR BUILDINGS

Fire Area (square feet)						
x 0.0929 form <sup>2</sup>					Fire Flow (GPM) <sup>2</sup>	
Type IA and IB <sup>1</sup>	Type IIA and IIIA <sup>1</sup>	Type IV and V-A <sup>1</sup>	Type IIB and IIIB <sup>1</sup>	Type V-B <sup>1</sup>	x 3.785 for L/min.	Flow Duration (hours)
Up to	Up to	Up to	Up to	Up to	1,500	
22,700	12,700	8,200	5,900	3,600	-,	2
30,200	17,000	10,900	7,900	4,800	1,750	2
38,700	21,800	12,900	9,800	6,200	2,000	2

	-					1
48,300	24,200	17,400	12,600	7,700	2,250	2
59,000	33,200	21,300	15,400	9,400	2,500	2
70,900	39,700	25,500	18,400	11,300	2,750	
						2
83,700	47,100	30,100	21,800	13,400	3,000	
07.700	54.000	25.200	25.000	15 (00	2.250	3
97,700	54,900	35,200	25,900	15,600	3,250	3
112,700	63,400	40,600	29,300	18,000	3,500	
						3
128,700	72,400	46,400	33,500	20,600	3,750	3
145,900	82,100	52,500	37,900	23,300	4,000	
						4
164,200	92,400	59,100	42,700	26,300	4,250	
182.400	102 100	66,000	47.700	20.200	4,500	4
183,400	103,100	66,000	47,700	29,300	4,500	4
203,700	114,600	73,300	53,000	32,600	4,750	4
225,200	126,700	81,100	58,600	36,000	5,000	
						4

247,700	139,400	89,200	65,400	39,600	5,250	
						4
271,200	152,600	97,700	70,600	43,400	5,500	
						4
295,900	166,500	106,500	77,000	47,400	5,750	
						4
Greater	Greater	115,800	83,700	51,500	6,000	4
"	"	125,500	90,600	55,700	6,250	
						4
"	"	135,500	97,900	60,200	6,500	
						4
"	"	145,800	106,800	64,800	6,750	
						4
"	"	156,700	113,200	69,600	7,000	4
"	"	167,900	121,300	74,600	7,250	4
"	"	179,400	129,600	79,800	7,500	4
"	"	191,400	138,300	85,100	7,750	4
"	"	Greater	Greater	Greater	8,000	
						4

- 1. Types of construction are based upon the building code.
- 2. Measured at 20 psi (137.9 KPa). See the definitions of fire flow in this article.

# TABLE B

# NUMBER AND DISTRIBUTION OF FIRE HYDRANTS

Fire-Flow	Minimum No.	Spacing Between	Maximum Distance
Requirement (GPM)	of Hydrants	Hydrants 1, 2, 3 (feet)	From Any Point on Street or Road Frontage to Hydrant <sup>4</sup>
x 3.785 for L/min.		x 304.8 for mm	
1,750 or less	1	500	250
1,7502,250	2	450	225
2,500	3	450	225
3,000	3	400	225

3,5004,000	4	350	210
4,5005,000	5	300	180
5,500	6	300	180
6,000	6	250	150
6,5007,000	7	250	150
7,500 or more	8 or more <sup>5</sup>	200	120

- 1. Reduce by 100 feet (30 480 mm) for dead-end streets or roads.
- 2. Where streets are provided with median dividers which cannot be crossed by firefighters pulling hose lines, or arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day as per Doña Ana County Unified Development Code, hydrant spacing shall average 500 feet (152.4) on each side of the street and shall be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute (26 495 L/min.) and 400 feet (122 m) for higher fire-flow requirements.
- 3. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 foot (305m) to provide for transportation hazards or as required by the County Fire Chief.
- 4. Reduce by 50 feet (15,240mm) for dead-end streets or roads.
- 5. One hydrant for each 1,000 gallons per minute (3785 L/min.) or fraction thereof.

Section 4. Effective Date.

This ordinance shall become effective thirty days after the ordinance has been recorded in the office of the Doña Ana County Clerk.

ENACTED this \_\_\_\_\_ day of \_\_\_\_\_, 2020

# **BOARD OF COUNTY COMMISSIONERS OF DOÑA ANA COUNTY, NEW MEXICO**

Lynn J. Ellins, District 1, Chairman	For/Against	
Manuel A. Sanchez, District 5, Vice Chairman	For/Against	
Ramon S. Gonzalez, District 2	For/Against	
Shannon Reynolds, District 3	For/Against	
Isabella A. Solis, District 4	For/Against	

**ATTEST:** 

Amanda López Askin, Ph.D. County Clerk