101.1 Title. These regulations shall be known as the *Fire Code* of Sedona Fire District, hereinafter referred to as "this code".

101.2.2 Appendices. Sedona Fire District adopts the following appendices;

Appendix B – Fire-Flow Requirements for Buildings

Appendix C – Fire Hydrant Locations and Distribution

Appendix D – Fire Apparatus Access Roads

Appendix E – Hazard Categories

Appendix F – Hazard Ranking

Appendix G – Cryogenic Fluids – Weight and Volume Equivalents

Appendix H – Hazardous Materials Management Plan (HMMP) And Hazardous Materials Inventory Statement (HMIS) Instructions

Appendix I – Fire Protection Systems – Noncompliant Conditions

102.4 Application of Building Code. The design and construction of new structures shall comply with the applicable Building Codes. Repairs, alterations, and additions to existing structures shall comply with all applicable Building Codes.

ADD, this is a new section.

104.2.1 Fees. The Division of Community Risk Management is authorized to develop a fee schedule in accordance with the Arizona Revised Statutes (A.R.S.) Chapter 5 Article 1 Section: 48-805 (B) 14. Fees shall be charged as approved by the District's Governing Fire Board. The fee schedule shall be made available to the public and attached to this code.

Fees for plan reviews shall be received by the Community Risk Management Division prior to the start of any construction process.

Refer to Exhibit A for the Fee Schedule.

ADD, this is a new section.

Section 611

Enhanced 9-1-1 For Multi-Line Telephone Systems

611.1 Scope. Any voice delivering technology including but not limited to Multi-line Telephone Systems (MLTS), Voice Over Internet Protocol systems (VoIPs), private telephone networks, voice transmission systems and wireless voice systems shall meet the requirements of this section. All installations shall provide the public safety answering point (PSAP) a sufficient precise indication of the caller's location.

611.1.1 Definitions. The following definitions shall be used in conjunction with this section.

- a. **Alternative Methods of Notification**. Having the ability to locate the emergency caller and initiate emergency response.
- b. **Alternative Methods to support Enhanced 9-1-1**. Methods used by a systems' Operator to permit 9-1-1 emergency response team reasonable opportunity to quickly locate a caller as alternatives to the systems' signaling needed to produce the automatic display of caller location information on the video terminal of the call-taker.
- c. **Automatic Location Identification (ALI)**. The automatic display at the PSAP of the caller's telephone number, the address/location of the telephone and supplementary emergency services information.
- d. **Automatic Number Identification (ANI)**. The telephone number associated with the access line from which a call originates.
- e. **Building Unit Identifier (BUI)**. A room number or equivalent designation of a portion of a structure/building.
- f. **Call back Number**. A number used by the PSAP to re-contact the location from which the 9-1-1 call was placed. The number may or may not be the number of the station used to originate the 9-1-1 call.
- g. **Direct inward Dialing (DID)**. The ability for a caller outside a company to call an internal extension without having to pass through a switchboard operator or attendant.
- h. **Emergency Location Identification Number (ELIN)**. A valid North American Numbering Plan format telephone number assigned to the systems' Operator by the appropriate authority that is used to route the call to a PSAP and is used to retrieve the ALI for the PSAP. The ELIN may be the same number as the ANI. The North American Numbering Plan number may in some cases not be a dialable number.
- i. **Emergency Response Location**. A location to which a 9-1-1 emergency response team may be dispatched. The location should be specific enough to provide a reasonable opportunity for the emergency response team to quickly locate a caller anywhere within it.

- j. **Key Telephone System**. A type of Multiple-line Telephone System designed to provide shared access to several outside lines through buttons or keys, typically offering identified access lines with direct line appearance or termination on a given telephone set.
- k. Location Notification. A system capability whereby a call to 9-1-1 from an extension is directed through the 9-1-1 Network to a PSAP and simultaneously to a switchboard operator, attendant or designated personnel where assistance can be provided to the PSAP to locate the caller and/or to assist in directing response. For Local Notification, the call back number shall be a phone number that can be dialed from the PSTN, which will be answered by the switchboard operator, attendant or designated personnel. Local notification must include the capability for the switchboard operator, attendant or designated personnel to identify the location of telephones that have dialed 9-1-1.
- 1. **Multi-line Telephone System (MLTS)**. A multi-line Telephone System comprised of common control units(s), telephone sets and control hardware and software. This includes network and premises based systems such as Centrex and PBX, Hybrid and Key Telephone Systems as classified by the F.C.C. under Part 68 Requirements and includes systems owned or leased by governmental agencies and non-profit entities as well as for profit businesses.
- m. **Operator**. The entity that either owns or leases or rents from a third party and operates a voice system through which a caller may place a 9-1-1 call through the public switched network.
- n. **Master Street Address Guide (MSAG)**. Master Street Address Guide is a database of street names and house number ranges within the associated communities defining emergency services zones and their associated emergency services numbers to enable proper routing of 9-1-1 calls.
- o. **Private 9-1-1 Emergency Answering Point**. An answering point operated by non-public safety entities with functional alternative and adequate means of signaling and directing response to emergencies. This includes training to individuals intercepting calls for assistance that is in accordance with applicable local emergency telecommunications requirements. Private 9-1-1 Emergency Answering Points are an adjunct to public safety response and as such must provide incident reporting to the public safety emergency response centers.
- p. Public Switch Telephone Network (PSTN).
- q. Public Safety Answering Point (PSAP). A facility equipped an staffed to receive 9-1-1 calls.
- r. **Shared Residential voice system Service**. The use of a voice system to provide service to residential facilities even if the service is not delineated for purposes of billing. For purposes of this definition residential facilities shall be liberally constructed to mean single family and multifamily occupancies including extended care facilities and dormitories.
- s. **Shared Telecommunications Services**. Provisions of telecommunications and information management services and equipment within a user group located in discrete private premises in building complexes, campuses or high-rise buildings by a commercial shared services provider or by a user association through privately owned customer premises equipment and associated

- data processing and information management services and includes the provision of connections to the facilities of a local exchange and to inter-exchange telecommunications companies.
- t. **Station Identification**. A telephone number dialable from the public switched network which provides sufficient information to permit a return call by the PSAP to the caller or a telephone nearby the caller.
- u. Voice over Internet Protocol System (VoIPs) delivers voice information as data packets using the Internet. VoIP is a set of facilities for managing the delivery of voice information using the Internet Protocol (IP). This means sending voice information in digital form in discrete packets rather than using the traditional circuit-committed protocols of the public switched telephone network (PSTN).
- v. **Workspace**. The physical building area where work is normally performed. This is a net square footage measurement which includes hallways, conference rooms, restrooms, break rooms but does not include wall thickness, shafts, heating, ventilation and air-conditioning equipment spaces mechanical/electrical spaces or similar areas where employees do not normally have access.
- w. **9-1-1 Service Provider**. An entity providing one or more of the following 9-1-1 elements: Network, CPE or database services.
- **611.2 Shared Residential Voice System Service**. Operators of shared System service serving residential customers are required to assure that the telecommunications system is connected to the public switched network such that calls to 9-1-1 result in one distinctive automatic Number Identification (ANI) and Automatic Location Identification (ALI) for each living unit.

Exception: If the facility maintains at all times an Alternative Methods to Support Enhanced 9-1-1.

- **611.3 Business Voice Systems.** For a Voice Systems connected to the public switched network and serving business locations of one employer, the Operator shall deliver the 9-1-1 call with an Emergency Location Identification Number (ELIN) which will result in one of the following:
 - a. An ERL which provides a minimum of the building and floor location of the caller, or
 - b. An ability to direct response through an alternative and adequate means of signaling by the establishment of a private answering point, or
 - c. A connection to a switchboard operator, attendant or a designated individual which provides for the establishment of Local Notification capability.

Exceptions:

- a. Workspace less than 7000 square feet and located on a single contiguous property is not required to provide more than one ERL.
- b. Key Telephone Systems are not required to provide more than one ERL.
- c. MTLS Operators with less than 49 stations installed and occupying not more than 40,000 square feet and located on a single contiguous property are not required to provide more than one ERL.

- **611.4 Shared Telecommunications Services**. Providers of shared Telecommunications Services shall assure that the system is connected to the public switched network such that calls to 9-1-1 from any telephone result in Automatic Location identification for each respective ERL, as defined in this section, of each entity sharing the telecommunications services.
- **611.6 Maintenance**. Voice system operators shall arrange to update the ALI database with appropriate MSAG valid address and callback information for each voice system telephone such that the location information specifies the ERL of the caller. These updates shall be made as soon as practical for new installations or within one business day of record completion of the actual changes for previously installed systems. Information in the ALI database is proprietary to operators and may not be disclosed or used for any purpose other than facilitating emergency response to a 9-1-1 call.
- **611.7 Dialing Instructions**. Voice system services requiring a caller to dial a prefix, typically the number 9 before dialing any outgoing call shall have proper notices posted. Posting shall inform the callers of the proper procedure for calling for emergency assistance.
- **611.8 Voice System Signaling**. Voice systems shall support Enhanced 9-1-1 calling by using any generally accepted industry standard signaling protocol designed to produce an automatic display of caller information on the video terminal of the PSAP call-taker.

Exception: The system operator is exempt or a waiver has been granted in accordance with State rules and regulations.

901.6 Inspection, Testing and Maintenance. Fire detection, alarm and extinguishing systems shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Non-required fire protection systems and equipment shall be inspected, tested, and maintained or removed. The building owner shall be responsible for assuring that each fire protection system is maintained in an operable condition at all times per the applicable standard for that specific system. If a backflow prevention assembly is installed as part of a fire sprinkler system, it shall be tested. Individuals or businesses conducting inspections, testing, repair or maintenance of fire protection systems shall possess an appropriate valid fire protection system tests shall be performed at the same time as the annual automatic fire sprinkler system tests. All work and periodic testing/maintenance shall be performed in accordance with the applicable standard for the fire protection system. Non-required systems shall be maintained in accordance with nationally recognized standards per section 901.4.2.

901.6.2 Records: Records of all system inspection, tests and maintenance required by the referenced standards shall be maintained on the premises for a minimum of 3 years and shall be made available to the fire code official upon request. All individuals/businesses performing tests, maintenance, and/or repair on any fire protection system, shall forward itemized reports of such work to The Compliance Engine, www.complianceengine.com within 30 days of the work performed.

Exception: R3 occupancies not including residential care facilities.

Add to existing language

901.8.1 Removal of or tampering with appurtenances. Locks, gates, doors, barricades, chains, enclosures, signs, tags or seals which have been installed by or at the direction of the *fire code official* shall not be removed, unlocked, destroyed, tampered with or otherwise vandalized in any manner.

901.8.1 Removal of or tampering with appurtenances. Locks, gates, doors, barricades, chains, enclosures, signs, tags or seals which have been installed by or at the direction of the *fire code* official shall not be removed, unlocked, destroyed, tampered with or otherwise vandalized in any manner. Padlocks required by the Sedona Fire District (SFD) may be purchased through the SFD. Required padlocks shall only be SFD approved padlocks unless provisions are made for multiple locks to be installed in tandem with an SFD padlock. SFD approved padlocks shall be installed at the direction of the Fire Marshal.

Note: This applies to the installation requirement for fire sprinklers. These sections breakdown the installation requirements based on occupancy classification. Sedona Fire District's current requirements are all inclusive, that is all commercial buildings constructed and are required to have an automatic fire sprinkler system installed. Installation of an automatic fire sprinkler system for residential occupancies in based on revised Section 903.2 and 903.2.1.

Delete Section 903.2. Through 903.2.11.3 and keep current 2003 Sedona Fire Code Language:

903.2. [2003 SFC] Where Required. An automatic fire sprinkler system shall be installed in accordance with the National Fire Protection Association's Standard #13 in all new occupancies here after constructed. Group R Division 3 Occupancies shall have fire sprinkler systems installed in accordance with Section 903.3.

Exception 1: Group R Division 3 Occupancies, not including residential care or assisted living care facilities located in Group R Division 3 occupancies, having a gross floor area equal to or less than 3,600 square feet (344.5 m²).

Exception 2: Group R Divisions 1, 2 and 4 Occupancies shall have an automatic fire sprinkler system installed in accordance with the National Fire Protection Association's Standard #13R.

Exception 3: (Keep original language from 903.2 Exception)

Exception 4: Permissible sprinkler omissions may include the following locations:

- 1. Manufactured homes built on a permanent chassis, designed and constructed as a dwelling unit and not having any of the listed conditions of Section 903.3.
- 2. Recreational vehicles that are not site built and are mobile or portable.
- 3. Detached gazebos and ramadas.
- 4. Detached restroom facilities associated with golf courses, parks and similar uses.
- 5. Detached guard houses less than 300 square feet in gross floor area.
- 6. Detached carports less than 5,000 square feet in roof area.
- 7. Detached non-residential buildings less than 360 square feet in floor area.
- 8. Detached non-combustible canopies less than 5,000 square feet in roof area used exclusively for vehicle washing facilities or vehicle fuel dispensing stations.
- 9. Other buildings or structures accessory to and located on the same lot with one and two family dwellings or R-3 occupancies not including residential care or assisted living facilities in R-3 occupancies.
- 10. Shade canopies less than 5,000 square feet; not closer than 5 feet to any building, property line or other shade canopy and shading one of the following: vehicles for sale at a dealership, playground equipment or outdoor eating areas without cooking.
- 11. Shipping containers used for storage purposes and not closer than 5 feet to any building, property line or other container.
- 12. Exterior roofs, overhangs or canopies of Type I, II or III construction with no combustible storage beneath.

- 13. Exterior covered/enclosed walkways of Type I, II or III construction with enclosing walls that are at least 50% open.
- 14. Airport control towers.
- 15. Open parking garages.
- 16. Occupancies in Group F-2

903.3 [2003 SFC] Group R Division 3 Occupancies. All Group R Division 3 occupancies shall be equipped with a residential style automatic fire sprinkler system installed in accordance with the National Fire Protection Association's Standard #13D when any of the following conditions are present.

- 1. The building has a gross floor area greater than 3,600 square feet (344.5 m²)
- 2. The building is more than 500 feet (152.4 m) from a fire hydrant capable of producing the required fire flow
- 3. The required fire flow is not available through approved means
- 4. Fire apparatus access roadways are obstructed by any of the following:
 - a. Low water crossing(s)
 - b. Security gate(s)
 - c. Speed bump(s)
- 5. The building is located in a sub-division having a single fire apparatus access point
- 6. The fire apparatus access roadway has a grade greater than 12%
- 7. The building is located more than five road miles (8.04km) from the nearest fire station on an approved route as measured by the Fire Marshal
- 8. The building is located on a cul-de-sac which exceeds 1000 feet (304.8m) from the nearest thoroughfare's intersection
- 9. The building is located more than 150 feet (45.72m) from the closest point of fire apparatus access
- 10. The building is located within the established urban-wildland interface area.

903.2.5 [2003 SFC] Change of Occupancy. An automatic sprinkler system complying with Section 903.3 shall be provided for an existing building or portion thereof undergoing a change of occupancy as follows, based upon the relative hazard levels indicated in Table 903.2.2:

- 1. When a change of occupancy is made to a higher hazard level as shown in Table 903.2.2, the building shall be provided with an automatic fire sprinkler system.
- 2. When a change of occupancy is made to a lower hazard level or within a hazard level (except hazard level 1), as shown in Table 903.2.2, the building is not required to be provided with an automatic fire sprinkler system.
- 3. When a change of occupancy is made within hazard level 1 as shown in Table 903.2.2, the building shall be provided with an automatic fire sprinkler system.

TABLE 903.2.5 [2003 SFC]

EXISTING BUILDING HAZARD LEVELS

HAZARD LEVEL	BUILDING OCCUPANCY TYPE
1 (Highest)	H, I, R-1, R-2, R-4
2	A-2, A-5
3	A-1, A-3, A-4
4	E, F-1, $M \ge 3600$ sq. ft,, S-1
5 (Lowest)	B, F-2, R-3, S-2, U, M < 3600 sq.ft.

Note: Occupancies as defined in this Code.

This Section is not intended to indicate all instances or circumstances where fire sprinkler systems are required; refer to this Code.

Section 903.2.6 [2003 SFC] Building Additions. All additions to existing buildings or structures and all buildings or structures that are expanded by an addition(s) shall be provided with an automatic fire protection system complying with Section 903.3 as applicable.

Exceptions:

- 1. Existing non-sprinklered one and two family dwelling units and R-3 occupancies complying with the Sedona Residential Code, but not including residential care facilities, having a gross floor area less than 3,600 square feet including the addition.
- 2. An existing non-sprinklered building or structure and additions to such existing building, provided the occupancy of the existing building is not changed, the addition is the same occupancy, and the resultant gross area of all such additions and building do not exceed 3,600 square feet.

These exceptions do not relieve the building from other Sedona City Code requirements.

Section 903.2.4 Rubbish and Linen Chutes. An automatic sprinkler system shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes extending through three or more floors shall have additional sprinkler heads installed within such chutes at alternate floors. Chute sprinklers shall be accessible for servicing.

903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for *automatic sprinkler systems*, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

ADD the following new section.

903.4.4 Post Indicator Valves. When automatic fire sprinkler control valves are equipped with a post indicator valve (PIV) the PIV shall have the post painted red with the address of the building being served stenciled on the post in white numbers. Post indicator valves shall be locked open utilizing a Sedona Fire District padlock.

REVISED TO, add exception 3

905.9 Valve Supervision. Valves controlling water supplies shall be supervised in the open position so that a change in the normal position of the valve will generate a supervisory signal at the supervising station required by Section 903.4. Where a fire alarm system is provided, a signal shall also be transmitted to the control unit.

Exceptions:

- 1. Valves to underground key or hub valves in roadway boxes provided by the municipality or public utility do not require supervision.
- 2. Valves locked in the normal position and inspected as provided in this code in buildings not equipped with a fire alarm system.
- 3. Valves locked in the normal position by a Sedona Fire District padlock and inspected as provided in this code in buildings not equipped with a fire alarm system.

 Existing fire protection system control valves shall be provided with an SFD padlock when electronic supervision is not installed. Owners and or operators of fire protection systems shall be responsible for the security and supervision of all control valves.

ADD the following new section

905.9.1 Post Indicator Valves. When the standpipe control valve is provided with a post indicator valve (PIV) the PIV shall be painted red with the address of the building being served stenciled on the post in white numbers. Post indicators valves shall be locked open utilizing a Sedona Fire District padlock.

Keep existing 2003 SFC language

912.1.1 [2003 SFC] Number of Fire Department Connection requirements. For all commercial occupancies requiring an automatic fire sprinkler system at least one fire department connection (FDC) shall be installed as approved by the Fire Marshal. The FDC shall provide a single 2½" (63.5mm) National Standard Thread female hose inlet for systems requiring a design flow of 500GPM or less. Systems of a design flow greater than 500GPM shall provide two 2½" (63.5mm) National Standard Thread female hose inlet connections.

All residential automatic fire sprinkler systems shall provide at least one fire department connection having a single $1\frac{1}{2}$ " (38.1mm) National Standard Thread female hose inlet.

Exception: R-3 occupancies when the gross floor area is less than 3,600 square feet.

914.2.1. Automatic Sprinkler System. The covered mall building and buildings connected shall be provided throughout with an automatic sprinkler system in accordance with Section 903.2 which shall comply with the following:

- 1. The automatic sprinkler system shall be complete and operative throughout occupied space in the mall building prior to occupancy of any of the tenant spaces. Unoccupied tenant spaces shall be similarly protected unless provided with approved alternative protection.
- 2. Sprinkler protection for the mall of a covered mall building shall be independent from that provided for tenant spaces or anchor buildings.
- 3. Sprinkler protection for the tenant spaces of an open mall building shall be independent from that provided for anchor buildings.
- 4. Sprinkler protection shall be provided beneath exterior circulation balconies located adjacent to an open mall.
- 5. Where tenant spaces are supplied by the same system, they shall be independently controlled.

914.3.1. Automatic Sprinkler Systems. Buildings and structures shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2 and a secondary water supply where required by Section 903.3.5.2.

Exception: An *automatic sprinkler system* shall not be required in spaces or areas of: Telecommunications equipment buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour *fire barriers* constructed in accordance with Section 707 of the *International Building Code* or not less than 2-hour *horizontal assemblies* constructed in accordance with Section 711 of the *International Building Code*, or both.

914.4.1. Automatic Sprinkler Protection. An approved automatic sprinkler system shall be installed throughout the entire building.

914.5.1. Automatic Sprinkler System. The highest level of exit discharge serving the underground portions of the building and all levels below shall be equipped with an automatic sprinkler system installed in accordance with Section 903.2. Water-flow switches and control valves shall be supervised in accordance with Section 903.4.

914.6.1. Automatic Sprinklers System. Stages shall be equipped with an automatic fire-extinguishing system in accordance with **Section 903.2.** The system shall be installed under the roof and gridiron, in the tie and fly galleries, and in places behind the proscenium wall of the stage and in dressing rooms, lounges, workshops, and storerooms accessory to such stages.

Exceptions:

1. Sprinklers are not required under stage areas less than 4 feet (1219 mm) in clear height utilized exclusively for storage of tables and chairs, provided the concealed space is separated from the adjacent spaces by not less than 5/8-inch (15.9 mm) Type X gypsum board.

914.7.1. Automatic Sprinkler System. Special amusement buildings shall be equipped throughout with an automatic sprinkler system in accordance with Section 9.3.2. Where the special amusement building is temporary, the sprinkler water supply shall be of an approved temporary means.

Exception: Automatic fire sprinklers are not required where the total floor area of a temporary special amusement building is less than 1,000 square feet (93 m2) and the travel distance from any point to an exit is less than 50 feet (15240 mm).

914.8.2. Fire Suppression. Aircraft hangars shall be provided with a fire suppression system as required in Section 903.2 and designed in accordance with NFPA 409, based upon the classification for the hangar given in Table 914.8.2.

ADD the following new section.

1006.4 No Exit Signage. Any door, passage, or stairway that is neither an exit nor a way of exit access and that is located or arranged so that it is likely to be mistaken for an exit shall be identified by a sign that reads NO EXIT. The NO EXIT sign shall consist of letters having a principal stroke of not less than 0.75 inch (19.1 mm) wide and at least 6 inches (152 mm) high on a contrasting background.

FOR FUTURE CONSIDERATION Section 807 ICC Construction Cost