

ORDINANCE NO. 26-2019

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ELK GROVE
AMENDING CHAPTER 17.04 OF THE ELK GROVE MUNICIPAL CODE RELATING
TO THE CALIFORNIA FIRE CODE AND ADOPTING BY REFERENCE THE 2019
CALIFORNIA FIRE CODE, AS AMENDED**

WHEREAS, pursuant to California Government Code Section 50022.1 *et seq.* the City of Elk Grove ("City") may adopt by reference the 2019 California Fire Code, based on the International Fire Code, 2018 Edition, with errata, published by International Code Council (ICC), as adopted by the State of California pursuant to Title 24, Part 9 of the California Code of Regulations ("2019 California Fire Code"); and

WHEREAS, California Health & Safety Code Sections 17958.5 and 18941.5 authorize cities to adopt the 2019 California Fire Code with changes and modifications determined to be reasonably necessary because of local climatic, topographical or geological conditions; and

WHEREAS, the City desires to adopt the 2019 California Fire Code, based on the International Fire Code, 2018 Edition, with errata, published by International Code Council, with necessary amendments to assure the 2019 California Fire Code is tailored to the particular fire protection needs of the City as required by local climatic, topographical and geological conditions and assure that a maximum level of fire protection is provided to residents, businesses and other occupants; and

WHEREAS, The Cosumnes Community Services District (CCSD) is the fire protection district serving the City of Elk Grove, and the CCSD Board of Directors has been presented the local amendments to the California Fire Code.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Elk Grove hereby ordain as follows:

Section 1: Purpose and Authority

The purpose of this Ordinance is to adopt by reference the 2019 edition of the California Fire, Title 24 – Part 9 of the California Code of Regulations subject to the definitions, clarifications, and the amendments set forth in this Ordinance. The Purpose of this Ordinance is also to provide minimum requirements and standards for the protection of public safety, health, property and welfare of the City of Elk Grove. This Ordinance is adopted under the authority of Government Code subsection 50022.2 and Health and Safety Code Sections 17958.5 and 18941.5.

Section 2: Amendments to Elk Grove Municipal Code Chapter 17.04 California Fire Code

Chapter 17.04 of the Elk Grove Municipal Code is hereby amended to read as follows:

(Deletions are shown in strikethrough and additions are in bold)

Chapter 17.04

CALIFORNIA FIRE CODE

Sections:

17.04.010 Adoption of California Fire Code.

17.04.020 Enforcement.

17.04.030 Definitions.

17.04.040 Appeals.

17.04.050—Penalties. ***Deleted.***

17.04.060 High explosives.

17.04.070—Public safety radio building amplification system. ***Deleted.***

17.04.080 Flammable and combustible liquids and liquefied petroleum gases – Permits.

17.04.090 Structural fires.

17.04.010 Adoption of California Fire Code.

~~The City hereby adopts in its entirety, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, the 2016 California Fire Code, Title 24, California Code of Regulations (the “fire code”). The code is on file with the Chief Building Official of the City of Elk Grove.~~

The City hereby adopts the 2019 California Fire Code, Title 24, California Code of Regulations (the “Fire Code”), as amended below, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion. The Fire Code is on file with the Chief Building Official of the City of Elk Grove. Local Amendments to the 2019 California Fire Code are as follows:

(Bolded text is to be added to EGMC; Local Amendments to the Fire Code are shown with deletions in strike-through and additions underlined)

(A) CALIFORNIA FIRE CODE SECTION 105.6.4 “CARNIVALS AND FAIRS” IS AMENDED AS FOLLOWS:

Section 105.6.4 Carnivals, fairs, festivals, or exhibitions. An operational permit is required to conduct a carnival, ~~or fair,~~ festival, or exhibition.

(B) CALIFORNIA FIRE CODE SECTION 105.7 “REQUIRED CONSTRUCTION PERMITS” IS AMENDED AS FOLLOWS:

Section 105.7. Required Construction Permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.265.

(C) SECTION 105.7.26 “ELECTRIFIED SECURITY FENCES” IS ADDED TO THE CALIFORNIA FIRE CODE AS FOLLOWS:

Section 105.7.26 Electrified security fences. Those installing an electrified security fence, where the fence is permitted by the Municipal Code of the local jurisdiction, installer must provide written notice of the location of the electrified security fence to the fire code official prior to installation.

(D) CALIFORNIA FIRE CODE SECTION 110.4 “VIOLATION PENALTIES” IS AMENDED AS FOLLOWS:

Section 110.4 Violation penalties. Persons 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 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 guilty of ~~[SPECIFY OFFENSE], punishable by a fine of not more than an infraction or a misdemeanor punishable by a fine of not less than [AMOUNT] one hundred dollars (\$100) and not more than one thousand dollars (\$1,000), or by imprisonment not exceeding [NUMBER OF DAYS] 180 days,~~ or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

(E) CALIFORNIA FIRE CODE SECTION 112.4 “FAILURE TO COMPLY” IS AMENDED AS FOLLOWS:

Section 112.4 Failure to comply. 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 remove a violation or unsafe condition, shall be guilty of an infraction or a misdemeanor punishable by a fine of not less than ~~[AMOUNT] one hundred (\$100) dollars or more than [AMOUNT] one thousand (\$1,000) dollars.~~

(F) CALIFORNIA FIRE CODE SECTION 202 GENERAL DEFINITIONS IS AMENDED AS FOLLOWS:

1. “ALL-WEATHER DRIVING SURFACE” IS ADDED AS FOLLOWS:

ALL WEATHER DRIVING SURFACE. A roadway with a minimum surface finish of one layer of asphalt or concrete that is designed to carry the imposed weight loads of fire apparatus.

Exception: R-3 occupancies located on Agricultural or Agricultural-Residential zoned lots.

2. "FALSE ALARM" IS AMENDED AS FOLLOWS:

FALSE ALARM. The willful and knowing or negligent initiation or transmission of a signal, message or other notification of an event of fire when no such danger exists.

3. "SUPERVISING STATION" IS AMENDED AS FOLLOWS:

APPROVED SUPERVISING STATION. An alarm service provider's UL listed, Type A, Full Service Central Station. The approved supervising station shall have the ability to relay the alarm to the (a) Sacramento Regional Fire/EMS Communications Center. A facility that receives signals and at which personnel are in attendance at all times to respond to these signals.

(G) SECTION 503.1.2.1 "ONE OR TWO-FAMILY DWELLING RESIDENTAL DEVELOPMENTS" IS ADDED TO THE CALIFORNIA FIRE CODE AS FOLLOWS:

Section 503.1.2.1 "One- or Two- Family Dwelling Residential Developments. All subdivisions of forty (40) or more lots shall have at least two (2) fire apparatus access roads unless otherwise approved by both the city engineer and the fire code official. If the local jurisdiction's Municipal Code conflicts with this standard, the local jurisdiction's Municipal Code shall prevail.

(H) CALIFORNIA FIRE CODE SECTION 505.1 "ADDRESS IDENTIFICATION" IS AMENDED AS FOLLOWS:

Section 505.1 Address Identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4-6 inches (102-152.4 mm) high with a minimum stroke width of one-half inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

(I) SECTION 505.1.1 "ILLUMINATION" IS ADDED TO THE CALIFORNIA FIRE CODE AS FOLLOWS:

Section 505.1.1 Illumination. Address identification shall be internally or externally illuminated on all new buildings and on existing buildings undergoing alterations requiring a building permit. An illuminated directory board shall be required at every entrance where deemed necessary by the fire code official.

(J) SECTION 507.1.1 “CONNECTION” IS ADDED TO THE CALIFORNIA FIRE CODE AS FOLLOWS:

Section 507.1.1 Connection. When required by the fire code official, buildings without a public water supply shall be connected to the public water supply once the public water connectivity becomes available at their property frontage. This would not apply to properties exempt from connection in the rural area so long as provided for in the General Plan.

Exception: Group R-3 and Group U occupancies.

(K) CALIFORNIA FIRE CODE SECTION 507.5.1 “WHERE REQUIRED” IS AMENDED AS FOLLOWS:

Section 507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than ~~400~~300 feet (~~122~~91.4 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains capable of supplying the required fire flow shall be provided where required by the fire code official.

Exception:

1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).

~~2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.1.3, the distance requirement shall be not more than 600 feet (183m).~~

(L) CALIFORNIA FIRE CODE SECTION 507.5.1.1 “HYDRANT FOR STANDPIPE SYSTEMS” IS AMENDED AS FOLLOWS:

Section 507.5.1.1 Hydrant for standpipe systems. Buildings equipped with a standpipe system installed in accordance with Section 905 shall have a fire hydrant within ~~100~~40 feet (~~30.480~~12.192 m) of the fire department connection.

Exception: The distance shall be permitted to exceed be increased up to 100 feet (30.480 m) where approved by the fire code official.

(M) CALIFORNIA FIRE CODE SECTION 901.4.6 “PUMP AND RISER ROOM SIZE” IS AMENDED AS FOLLOWS:

Section 901.4.6 Pump and riser room size. Where provided, Approved fire pump rooms and/or automatic sprinkler system riser rooms shall be provided in all new buildings protected by an automatic sprinkler system. Fire pump rooms and automatic sprinkler system riser rooms shall be designed with 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 elements of permanent construction, 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 system riser rooms shall be provided with doors and unobstructed passageways large enough to allow removal of the largest piece of equipment.

Exception: Group R-3 Occupancies.

(N) CALIFORNIA FIRE CODE SECTION 901.4.6.2 “MARKING ON ACCESS DOORS” IS AMENDED AS FOLLOWS:

Section 901.4.6.2 Marking on access doors. Access doors for automatic sprinkler system riser rooms and fire pump rooms shall be labeled with an approved sign. The lettering shall be in contrasting color to the background. Letters shall have a minimum height of 2 4 inches (51-101.6 mm) with a minimum stroke of 3/8-one-half inch (40-12.7mm).

(O) CALIFORNIA FIRE CODE SECTION 901.4.6.4 “LIGHTING” IS AMENDED AS FOLLOWS:

901.4.6.4 Lighting. Permanently installed artificial illumination and emergency illumination shall be provided in the automatic sprinkler system riser rooms and fire pump rooms.

(P) CALIFORNIA FIRE CODE SECTION 903.2 “WHERE REQUIRED” IS AMENDED AS FOLLOWS:

Section 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. 20. For the provisions of this section, portions of buildings separated by fire walls shall not be considered separate buildings.

Exception:

- 1. Non-combustible, detached canopies open on four sides not exceeding the basic allowable area in CBC Table 506.2 used exclusively for the parking or storage of private or recreational vehicles and non-combustible storage (includes fuel islands).**

(Q) CALIFORNIA FIRE CODE SECTION 903.2.1.1 “GROUP A-1” IS AMENDED AS FOLLOWS:

903.2.1.1 Group A-1. An automatic sprinkler system shall be provided throughout stories containing Group A-1 occupancies and throughout all stories from the Group A-1 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

- 1. The fire area exceeds 12,000-3,599 square feet (1115-334.6 m²).**
- 2. The fire area has an occupant load of 300 or more.**
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.**
- 4. The fire area contains a multi-theater complex**

(R) CALIFORNIA FIRE CODE SECTION 903.2.1.2 "GROUP A-2" IS AMENDED AS FOLLOWS:

903.2.1.2 Group A-2. An automatic sprinkler system shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

- 1. The fire area exceeds ~~5,000~~3,599 square feet (~~464~~334.36 m²);**
- 2. The fire area has an occupant load of 100 or more.**
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.**
- 4. *The structure exceeds ~~5,000~~3,599 square feet (~~465~~334.36 m²), contains more than one fire area containing a Group A-2 occupancy, and is separated into two or more buildings by fire walls of less than 4-hour fire-resistance rating without openings.***

(S) CALIFORNIA FIRE CODE SECTION 903.2.1.3 "GROUP A-3" IS AMENDED AS FOLLOWS:

903.2.1.3 Group A-3. An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

- 1. The fire area exceeds ~~12,000~~3,599 square feet (~~1115~~334.36 m²).**
- 2. The fire area has an occupant load of 300 or more.**
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.**
- 4. *The structure exceeds ~~12,000~~3,599 square feet (~~1155~~334.36m²), contains more than one fire area containing exhibition and display rooms, and is separated into two or more buildings by fire walls of less than 4-hour fire-resistance rating without openings.***

(T) CALIFORNIA FIRE CODE SECTION 903.2.1.4 "GROUP A-4" IS AMENDED AS FOLLOWS:

903.2.1.4 Group A-4. An automatic sprinkler system shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

- 1. The fire area exceeds ~~12,000~~3,599 square feet (~~1115~~334.36 m²).**
- 2. The fire area has an occupant load of 300 or more.**
- 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.**

(U) SECTION 903.2.2.1 "GROUP B" IS ADDED TO THE CALIFORNIA FIRE CODE AS FOLLOWS:

Section 903.2.2.1 Group B occupancies. An automatic sprinkler system shall be provided throughout stories containing Group B occupancies and throughout all stories from the Group B occupancy to and including the levels of exit discharge serving that occupancy where the fire area exceeds 3,599 square feet (334.36 m²).

(V) CALIFORNIA FIRE CODE SECTION 903.2.3 "GROUP E" IS AMENDED AS FOLLOWS:

903.2.3 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

- 1. Throughout all Group E fire areas greater than ~~12,000~~ 3,599 square feet (~~1115~~ 334.36 m²) in area.**
- 2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.**

Exception: In buildings where every classroom has not fewer than one exterior exit door at ground level, an automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area.

- 3. The Group E fire area has an occupant load of 300 or more.**
- 4. *In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in quantities not exceeding the maximum allowable quantity are used or stored.***
- 5. *Throughout any Group E structure greater than ~~12,000~~ 3,599 square feet (~~1115~~ 334.36 m²) in area, which contains more than one fire area, and which is separated into two or more buildings by fire walls of less than 4-hour fire resistance rating without openings.***
- 6. *For public school state funded construction projects see Section 903.2.19.***
- 7. *For public school campuses, Kindergarten through 12th grade, see Section 903.2.20***

(W) CALIFORNIA FIRE CODE SECTION 903.2.4 "GROUP F-1" IS AMENDED AS FOLLOWS:

903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

- 1. A Group F-1 fire area exceeds ~~12,000~~ 3,599 square feet (~~1115~~ 334.36 m²).**
- 2. A Group F-1 fire area is located more than three stories above grade plane.**
- 3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds ~~24,000~~ 3,599 square feet (~~2230~~ 334.36 m²).**
- 4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).**

(X) CALIFORNIA FIRE CODE SECTION 903.2.7 "GROUP M" IS AMENDED AS FOLLOWS:

903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

- 1. A Group M fire area exceeds ~~12,000~~3,599 square feet (~~1115~~334.36 m²).**
- 2. A Group M fire area is located more than three stories above grade plane.**
- 3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds ~~24,000~~3,599 square feet (~~2230~~334.36 m²).**
- 4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses ~~5,000~~3,599 square feet (~~464~~334.36 m²).**
- 5. *[SFM] The structure exceeds ~~24,000~~3,599 square feet (~~465~~334.36 m²), contains more than one fire area containing a Group M occupancy, and is separated into two or more buildings by fire walls of less than 4-hour fire resistance rating without openings.***

(Y) CALIFORNIA FIRE CODE SECTION 903.2.8.1.1 "GROUP R-3 MANUFACTURED HOUSING" IS ADDED AS FOLLOWS:

Fire sprinkler systems shall be installed in new manufactured homes (HSC Sections 18007 and 18009) and multifamily manufactured homes with two dwelling units (HSC 18008.7) in accordance with Title 25 of the California Code of Regulations.

(Z) CALIFORNIA FIRE CODE SECTION 903.2.8.3 "GROUP R-4" IS AMENDED AS FOLLOWS:

903.2.8.3 Group R-4. An automatic sprinkler system installed in accordance with Section 903.3.1.2₁ shall be provided in Group R-4 occupancies.

(AA) CALIFORNIA FIRE CODE SECTION 903.2.9 "GROUP S-1" IS AMENDED AS FOLLOWS:

903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

- 1. A Group S-1 fire area exceeds ~~12,000~~3,599 square feet (~~1115~~334.36 m²).**
- 2. A Group S-1 fire area is located more than three stories above grade plane.**
- 3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds ~~24,000~~3,599 square feet (~~2230~~334.36 m²).**
- 4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds ~~5,000~~3,599 square feet (~~464~~334.36 m²).**
- 5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).**

(BB) CALIFORNIA FIRE CODE SECTION 903.2.9.1 "REPAIR GARAGES" IS AMENDED AS FOLLOWS:

903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the California Building Code, as shown:

- 1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding ~~10,000~~ 3,599 square feet (~~929~~ 334.36 m²).**
- 2. Buildings no more than one story above grade plane, with a fire area containing a repair garage exceeding ~~12,000~~ 3,599 square feet (~~1115~~ 334.36 m²).**
- 3. Buildings with repair garages servicing vehicles parked in basements.**
- 4. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area exceeds ~~5,000~~ 3,599 square feet (~~464~~ 334.36 m²).**

(CC) CALIFORNIA FIRE CODE SECTION 903.2.10 "GROUP S-2 ENCLOSED PARKING GARAGES" IS AMENDED AS FOLLOWS:

903.2.10 Group S-2 enclosed parking garages. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 as follows:

- 1. Where the fire area of the enclosed parking garage exceeds ~~12,000~~ 3,599 square feet (~~1115~~ 334.36 m²); or**
- 2. Where the enclosed parking garage is located beneath other groups.**

Exception: Enclosed parking garages located beneath Group R-3 occupancies.

(DD) CALIFORNIA FIRE CODE SECTION 903.2.10.1 "COMMERCIAL PARKING GARAGES" IS AMENDED AS FOLLOWS:

903.2.10.1 Commercial parking garages. An automatic sprinkler system shall be provided throughout buildings used for storage of commercial motor vehicles where the fire area exceeds ~~5,000~~ 3,599 square feet (~~464~~ 334.36 m²).

(EE) CALIFORNIA FIRE CODE SECTION 903.2.18.1 "GROUP U PRIVATE GARAGES AND CARPORTS" IS ADDED AS FOLLOWS:

903.2.18.1 Group U private garages and carports. Carports and garages within 6-feet of a Group R occupancy equipped with automatic fire sprinklers, shall be protected by fire sprinklers in accordance with NFPA 13D or NFPA 13, as applicable.

(FF) CALIFORNIA FIRE CODE SECTION 903.3.1.2 “NFPA 13R SPRINKLER SYSTEMS” IS DELETED

~~903.3.1.2 NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet (18 288 mm) in height above grade plane shall be permitted to be installed throughout in accordance with NFPA 13R as amended in Chapter 80.~~

~~The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 of the California Building Code shall be measured from the horizontal assembly creating separate buildings.~~

(GG) CALIFORNIA FIRE CODE SECTION 903.3.8.4 “SUPERVISION” IS AMENDED AS FOLLOWS:

Section 903.3.8.4 Supervision. Control valves shall not be installed between the water supply and sprinklers unless the valves are of an approved indicating type that are supervised ~~or~~ and secured in the open position.

(HH) CALIFORNIA FIRE CODE SECTION 903.3.9 “FLOOR CONTROL VALVES” IS AMENDED AS FOLLOWS:

903.3.9 Floor control valves. *Floor control valves and waterflow detection assemblies shall be installed at each floor in multi-story buildings, at an approved location, where any of the following occur:*

- ~~1. Buildings where the floor level of the highest story is located more than 30 feet above the lowest level of fire department vehicle access.~~
- ~~2. Buildings that are four or more stories in height.~~
- ~~3. Buildings that are two or more stories below the highest level of fire department vehicle access.~~

Exception: *Group R-3 and R-3.1 occupancies floor control valves and waterflow detection assemblies shall not be required.*

(II) CALIFORNIA FIRE CODE SECTION 903.4.2 “ALARMS” IS AMENDED AS FOLLOWS:

Section 903.4.2 Alarms. One exterior approved audible/visual device shall be located on the exterior of the all buildings, including one and two-family dwellings, in an approved location, and shall be connected to each automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. ~~Visible alarm notification appliances shall not be required except when required by Section 907.~~

(JJ) CALIFORNIA FIRE CODE SECTION 903.4.3 "FLOOR CONTROL VALVES" IS AMENDED AS FOLLOWS:

Section 903.4.3 Floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in ~~high-rise buildings and Group I-2 occupancies having occupied floors located more than 75 feet above the lowest level of fire department vehicle access multi-story buildings.~~

(KK) CALIFORNIA FIRE CODE SECTION 903.6 "WHERE REQUIRED IN EXISTING BUILDINGS AND STRUCTURES" IS AMENDED AS FOLLOWS:

Section 903.6 Where required in existing buildings and structures. An automatic sprinkler system shall be provided in existing buildings and structures where required in Chapter 11 and as follows:-

- 1. When there is a change of occupancy that results in an increased life safety or fire risk, as determined by the fire code official, and the structure exceeds 3,599 square feet (334.36 m²), an automatic fire sprinkler system shall be installed throughout the building.**
- 2. In existing buildings and structures exceeding 3,599 square feet (334.36 m²), where the floor area of the building or structure is increased.**

Exception: When the building increase is to accommodate state mandated ADA improvements and the improvement is less than 500 (46.45 m²) square feet.

- 3. In existing buildings and structures less than 3,600 (334.45 m²) square feet, where the floor area of the building or structure is increased to exceed 3,599 square feet (334.36 m²).**

Exception: When the building increase is to accommodate state mandated ADA improvements and the improvement is less than 500 (46.45 m²) square feet.

(LL) CALIFORNIA FIRE CODE SECTION 903.6.1 "MONITORING" IS ADDED AS FOLLOWS:

Section 903.6.1 Monitoring. When required by the fire code official, valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures, and water flow switches on all existing sprinkler systems shall be monitored by an approved supervising station.

(MM) CALIFORNIA FIRE CODE SECTION 1008.3.3 "ROOMS AND SPACES" IS AMENDED AS FOLLOWS:

Section 1008.3.3 Rooms and spaces. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

1. Electrical equipment rooms.
2. Fire command centers.
3. Fire pump and riser rooms.
4. Generator Rooms.
5. Public restrooms with an area greater than 300 square feet (27.87 m²).

(NN) CALIFORNIA FIRE CODE SECTION 1028.5.1 “EXIT DISCHARGE SURFACE” IS ADDED AS FOLLOWS:

Section 1028.5.1 Exit discharge surface. Exterior exit pathway surfaces shall be suitable for pedestrian use in inclement weather and shall terminate at a public way as defined in the California Building Code.

(OO) CALIFORNIA FIRE CODE SECTION 1203.1.3.1 “EMERGENCY AND STANDBY POWER SYSTEMS” IS ADDED AS FOLLOWS:

Section 1203.1.3.1 All buildings, other than one- and two-family dwelling units, and agricultural buildings not used for commercial purposes, with stand-by power shall have a shunt trip device that disconnects all power sources to the building, when required by the Fire Code Official.

(PP) CALIFORNIA FIRE CODE SECTION 1206.2 “STATIONARY STORAGE BATTERY SYTEMS” IS AMENDED AS FOLLOWS:

Section 1206.2 Stationary storage battery systems. Stationary storage battery systems having capacities exceeding the values shown in Table 1206.2 shall comply with NFPA 855 and Section 1206.2.1 through 1206.2.12.6, as applicable.
SECTION 1206.3 “CAPACITOR ENERGY STORAGE SYSTEMS” IS AMENDED AS FOLLOWS:

(QQ) CALIFORNIA FIRE CODE SECTION 1206.3 “CAPACITOR ENERGY STORAGE SYTEMS” IS AMENDED AS FOLLOWS:

Section 1206.3 Capacitor energy storage systems. Capacitor energy storage systems having capacities exceeding 3 kWh (10.8 megajoules) shall comply with NFPA 855 and Sections 1206.3 through 1206.3.2.6.1.

(RR) CALIFORNIA FIRE CODE SECTION 3310.3 “PREMISE IDENTIFICATION FOR BUILDINGS UNDER CONSTRUCTION” IS ADDED AS FOLLOWS:

Section 3310.3 “Premise Identification for Buildings Under Construction”. Prior to and during construction, an approved address sign(s) that is visible during inclement weather shall be provided at each fire and emergency vehicle access road entry into the project.

(SS) CALIFORNIA FIRE CODE SECTION 5003.9.1.2 “EMERGENCY RESPONSE SUPPORT INFORMATION” IS ADDED AS FOLLOWS:

Section 5003.9.1.2 Emergency response support information. Ready access to floor plans, safety data sheets (SDS), Hazardous Materials Management Plans (HMMP),

Hazardous Material Inventory Statement (HMIS), shall be provided, as determined by the fire code official. This location may be in cabinets located outside the facilities or buildings. Information may be required in a specific electronic format.

(TT) CALIFORNIA FIRE CODE CHAPTER 80 “REFERENCED STANDARDS” IS AMENDED AS FOLLOWS:

~~NFPA 13R—16 Installation of Sprinkler Systems in Residential Occupancies up to and including Four Stories in Height as amended*.~~

NFPA 855 –20 Standard for the Installation of Stationary Energy Storage Systems 1206.2, 1206.3

(UU) CALIFORNIA FIRE CODE APPENDIX B TABLE NO. B105.1 (1) “REQUIRED FIRE-FLOW FOR ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES” IS AMENDED AS FOLLOWS:

TABLE NO. B105.1 (1)
REQUIRED FIRE-FLOW FOR ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

FIRE FLOW CALCULATION AREA (square feet)	AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE-FLOW (gallons per minute)	FLOW DURATION (hours)
0 – 3,600	No automatic sprinkler system	1,000	1
3,601 and greater	No automatic sprinkler system	Value in Table B105.1 (2)	Duration in Table B105.1 (2) at the required flow rate
0 – 3,600	Section 903.3.1.3 of the California Fire Code or Section 313.3 of the California Residential Code	<u>500-1,000</u>	$\frac{1}{2}$
3,601 and greater	Section 903.3.1.3 of the California Fire Code or Section 313.3 of the California Residential Code	$\frac{1}{2}$ -value in Table B105.1 (2) ^a	1

For SI: 1 square foot = 0.0929 m², 1 gallon per minute = 3.785 L/m.

- a. The reduced fire-flow shall not be less than 1,000 gallons per minute for a duration of 1 hour.

(VV) CALIFORNIA FIRE CODE SECTION B105.2 “BUILDINGS OTHER THAN ONE AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES,” IS AMENDED AS FOLLOWS:

Section B105.2 Buildings other than one- and two-Family dwellings, Group R-3 and R-4 buildings and townhouses. The minimum fire flow and flow duration for buildings other than one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be as specified in Tables B105.2 and B105.1(2).

Exceptions:

- 1. [SFM] Group B, S-2 and U occupancies having a floor area not exceeding 1,000 square feet, primarily constructed of noncombustible exterior walls with wood or steel roof framing, having a Class A roof assembly, with uses limited to the following or similar uses:**
 - 1. California State Parks buildings of an accessory nature (restrooms).**
 - 2. Safety roadside rest areas, (SRRA), public restrooms.**
 - 3. Truck inspection facilities, (TIF), CHP office space and vehicle inspection bays.**
 - 4. Sand/salt storage buildings, storage of sand and salt.**
- 2. Group U occupancies accessory to a one or two-family dwelling.**
- 3. A reduction in required fire flow of up to 50 percent is permitted when the building is provided with an automatic sprinkler system installed in accordance with 903.3.1.1. The resulting fire flow shall not be less than 1500 gallons per minute (5677.5 L/min.). Reduction of fire flow does not apply to required fire flow duration.**
- 4. A reduction in required fire flow of up to 75 percent is permitted for warehouse buildings of Type I, Type II, and Type III-B construction and provided with early suppression fast response fire sprinkler systems. The resulting fire flow shall not be less than 1500 gallons per minute (5677.5 L/min.). Reduction of fire flow does not apply to required fire flow duration.**

(WW) CALIFORNIA FIRE CODE APPENDIX B, TABLE NO. B105.2, REQUIRED FIRE-FLOW FOR BUILDINGS OTHER THAN ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES IS AMENDED AS FOLLOWS:

**TABLE NO. B105.2
REQUIRED FIRE-FLOW FOR BUILDINGS OTHER THAN ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES.^a**

AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE-FLOW (gallons per minute)	FLOW DURATION (hours)
No automatic sprinkler system	Value in Table B105.1 (2)	Duration in Table B105.1 (2)
Section 903.3.1.1 of the California Fire Code	25% of the Value in Table B105.1 (2)^a	Duration in Table B105.1 (2) at the reduced flow rate
Section 903.3.1.2 of the California Fire Code	35% of the value in Table B105.1.(2)^b	Duration in Table B105.1(2) at the reduced flow rate

For SI: 1 gallon per minute = 3.785L/m.

- ~~a. The reduced fire flow shall not be less than 1,000 gallons per minute~~
- ~~b.a The reduced fire flow shall not be less than 1,500 gallons per minute.~~

(XX) CALIFORNIA FIRE CODE TABLE NO. C102.1 “REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS” IS AMENDED AS FOLLOWS:

TABLE NO. C102.1
REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS ^{hg}

FIRE FLOW REQUIREMENT (gpm)	MINIMUM NO. OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS <small>a, b, e, f, g^d</small> (Ft.)	MAXIMUM DISTANCE FROM HYDRANT TO ANY POINT ON STREET OR ROADWAY FRONTAGE (Ft.) ^{d, f, g}
1,750 or less	1	500 <u>300</u>	250 <u>150</u>
1,751-2,250	2	450 <u>300</u>	225 <u>150</u>
2,251-2,750	3	450 <u>300</u>	225 <u>150</u>
2,751-3,250	3	400 <u>300</u>	225 <u>150</u>
3,251-4,000	4	350 <u>300</u>	210 <u>150</u>
4,001-5,000	5	300	180 <u>150</u>
5,001-5,500	6	300	180 <u>150</u>
5,501-6,000	6	250	150
6,001-7,000	7	250	150
7,001 or more	8 or more ^{ec}	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

- ~~a. Reduce by 100 feet for dead-end streets or roads.~~
- ~~b.a. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day or street width is in excess of 88 feet (26.82 m), hydrant spacing shall average 500/300 feet on each side of the street and be arranged on an alternating basis.~~
- ~~e.b. 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 feet (305m) to provide for transportation hazards. In addition, there shall be at least one hydrant at each intersection.~~
- ~~d. Reduce by 50 feet for dead-end streets or roads.~~
- ~~e.c. One Hydrant for each 1,000 gallons per minute or fraction thereof.~~
- ~~f. A 50-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the California Fire code or Section P2904 of the California Residential Code.~~

~~g.d. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of The California Fire Code or Section P2904 of the California Residential Code. Average spacing between fire hydrants may be extended to 500 feet (152.4 m) on streets serving one- and two- family dwellings.~~

h.e. The fire code official is authorized to modify the location, number and distribution of fire hydrants based on site-specific constraints and hazards.

17.04.020 Enforcement.

The Chief of the Cosumnes Community Services District Fire Department, or his or her **authorized** designee, shall have authority to enforce this chapter and issue citations for violations of the Fire Code, as adopted herein.

17.04.030 Definitions.

A. "Chief" shall mean the Chief of the Cosumnes Community Services District Fire Department, or authorized designee, unless otherwise specified in this Code.

AB. "Fire Code" shall mean the California Fire Code, Title 24, California Code of Regulations, Part 9.

BC. "Fire Code Official" shall mean an individual designated by the Fire Chief to enforce some aspect of the Fire Code.

GD. "Municipality" shall mean the City of Elk Grove.

DE. "R-3" shall mean single-family residences.

~~E. "Chief" shall mean the Chief of the Cosumnes Community Services District Fire Department, or his or her designee, unless otherwise specified in this Code.~~

....

17.04.050 ~~Penalties. Deleted~~

~~A. Any person who does any of the following shall be guilty of a misdemeanor:~~

- ~~1. Fails to comply with the provisions of the fire code; or~~
- ~~2. Violates or fails to comply with any lawful order made by the Chief; or~~
- ~~3. Builds a structure in violation of any detailed statement of specifications or plans related to fire safety; or~~
- ~~4. Fails to comply with a lawful fire safety order as affirmed or modified by the Board of Directors of the Cosumnes Community Services District.~~

~~B. The imposition of one (1) penalty for any violation shall not excuse the violation or permit it to continue, and all persons shall be required to correct or remedy such violation or defects within a reasonable time as determined by the Chief. When not otherwise specified each day or portion thereof during which any violation occurs or continues shall constitute a separate offense.~~

~~C. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.~~

17.04.060 High explosives.

In accordance with the provisions of Division 11, Explosives, Part 1, High Explosives, of the Health and Safety Code (Sections 12000 through 12401), the Chief of Police shall have the primary responsibility for the enforcement of the provisions therein. Whenever references to explosives are found in the ~~2016~~ **2019** California Fire Code, the enforcing authority shall be the Chief of Police. Any references in the Fire Code to the "Chief" in sections referencing explosives shall be a reference to the Chief of Police.

~~17.04.070 Public safety radio building amplification system.~~ **Deleted**

~~A. Requirement for Approved Emergency Responder Radio Coverage in Buildings. All buildings shall have approved indoor radio coverage for emergency responders. Except as otherwise provided, no person shall erect, construct, change the use of or provide an addition of more than twenty (20%) percent to any building or structure or any part thereof, or cause the same to be done which fails to support adequate radio coverage for the City of Elk Grove and Sacramento Regional Fire and Emergency (SRFECC) radio communication system. Determining the existence of approved radio coverage and the correction of any deficiencies shall be the responsibility of the building owner. Existing buildings, buildings of one (1) or two (2) single family dwellings, or those below minimum areas as determined by the Fire Code Official may be exempted from this requirement by the Fire Code Official.~~

~~B. Approved Radio Coverage. Approved radio coverage shall conform to the current standards of the Cosumnes Fire Department. These standards shall define the acceptable indoor signal levels to provide ninety (90%) percent reliability of the Elk Grove and SRFECC Public Safety Radio System inside structures. The Fire Code Official may determine exceptions and additions to these standards as required to protect the integrity of the Public Safety Radio System and provide acceptable signal levels in structures critical to public health and safety.~~

~~C. Indoor Public Safety Radio Enhancement Systems. Any indoor public safety radio enhancement system must comply with current standards set by the Cosumnes Fire Department, and the regulations of the Federal Communications Commission. Systems shall be inspected, maintained, and modified as necessary to provide approved emergency responder radio coverage. If changes in FCC regulations or modifications to the Cosumnes Fire Department and SRFECC Public Safety Radio System require modifications to a public safety radio enhancement system, the building owner shall make necessary changes to conform to the existing standard.~~

~~1. Annual Tests. When an in-building radio system is required, the building owner shall test all active components of the system, including but not limited to amplifiers, power supplies and backup batteries. Testing shall occur at a minimum of once (1) every twelve (12) months. Amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance. Backup batteries and power supplies shall be tested under load for a period of one (1) hour to verify that they will properly operate during an actual power outage. If within the one (1) hour test period, in the opinion of the testing technician, the battery exhibits symptoms of failure, the test shall be extended for additional one (1) hour periods until the testing technician confirms the integrity of the battery. All other active components shall be checked to determine that they are operating within the manufacturer's specifications for the intended purpose.~~

~~2. Five (5) Year Tests. In addition to the annual test, the building owner shall perform a radio coverage test a minimum of once (1) every five (5) years to ensure that radio system continues to meet the requirements of the original acceptance test. The procedure set forth above shall apply to such tests.~~

~~3. Qualifications of Testing Personnel. All tests shall be conducted, documented and signed by a person in possession of a current FCC license, or a current technician certification issued by the Associated Public Safety Communications Officials International (APCO) or the Personal Communications Industry Association (PCIA). All test records shall be retained on the inspected premises by the building owner and a copy submitted to the Fire Code Official.~~

~~D. Field Testing. Police and Fire Code Official, after providing reasonable notice to the owner or his representative, shall have the right to enter onto the property to conduct field testing to be certain that the required level of radio coverage is present.~~

~~E. Exemptions. This section shall not apply to buildings less than five thousand (5,000 ft²) square feet or any R-3 occupancy.~~

...

Section 3: Findings

In connection with the amendments enacted by Section 2 relating to the 2019 California Fire Code and its appendices, the City Council of the City of Elk Grove makes the following findings pursuant to Health and Safety Code Section 17958.5, 17958.7 and 18941.5. The changes are reasonably necessary because of local climatic, topographical or geological conditions.

The City Council of the City of Elk Grove ("Council") does hereby adopt pursuant to Section 18941.5 of the California Health and Safety Code, the following findings of fact:

(a) Under this adopting ordinance, specific amendments have been established which are more restrictive of nature than those adopted by the State of California (State Buildings Standards Code, State Housing & Community Development Codes) commonly referred to as Title 24 and Title 25 of the California Code of Regulations. These amendments to the California Fire Code 2019 edition, have been recognized by the Council to address the fire problems, concerns and future direction by which the City can establish and maintain an environment which will afford a level of fire and life safety to all who live and work within its boundary.

(b) The International Code Council has assumed responsibility for the International Fire Code and International Fire Code Standards. The International Code Council provided a means for participation by all code enforcement officials from throughout the country, as well as industry representatives, consultants, and other private parties with an interest in the International Fire Code.

(c) The International Fire Code, being the 2018 edition thereof, published by the International Code Council, is the nationally recognized compilation of proposed rules, regulations and standards of said Association.

(d) Said International Fire Code has been printed and published as a Code in book form within the meaning of Section 50022.1 of the Government Code of the State of California.

(e) Under the provisions of Section 18941.5 of the Health and Safety Code, local amendments are based on climatic, topographical and geological conditions. The findings of fact contained herein address each of these situations and present the local situation, which either singularly or in combination, caused the aforementioned amendments to be adopted.

LOCAL CONDITIONS

A. This amendment is justified on the basis of a local climatic condition. The City of Elk Grove is subject to precipitation, relative humidity, temperature extremes, and high velocity winds.

1. Precipitation and relative humidity

a. Conditions

Monthly precipitation ranges from .05 to 2.87 inches with an average of approximately 17.2 inches per year. The majority of this precipitation falls during the months of November through April. This is a dry period of at least six (6) months each year. Additionally, the area is subject to occasional drought. Relative humidity remains in the middle range most of the time. It ranges from twenty-nine (29) to thirty-eight (38) percent during spring, summer, fall, and from fifty-seven (57) to ninety (90) percent in the winter. It occasionally falls as low as fifteen (15) percent. (National Weather Service Sacramento Branch average of historical data (<https://wrcc.dri.edu/cgi-bin/clilcd.pl?ca23232>.)

b. Impact

Locally experienced dry periods cause extreme dryness of untreated wood shakes and shingles on buildings and non-irrigated grass, brush, and weeds, which are often near buildings with wood roofs and sidings. Such dryness causes these materials to ignite very readily and burn rapidly and intensely.

Due to dryness, a rapidly burning grass fire or exterior building fire can quickly transfer to other buildings by means of radiation or flying brands, sparks, and embers. A small fire can rapidly grow to a magnitude beyond the control capabilities of the Fire District resulting in an excessive fire loss.

A quantitative vulnerability assessment prepared by the Regional Water Authority included in the American River Basin Integrated Regional Water Management Plan (IRWMP) evaluated the effects on both surface water and groundwater. The assessment indicates that surface water supplies would be reduced and would be mostly associated with reduced diversions from the American River. Climate change is also anticipated to have an impact on

groundwater. Also noted is that increased groundwater pumping would occur to meet urban and agricultural demands, i.e., the long-term average groundwater pumping in the Central Basin would increase by 6 percent. Groundwater elevations would decrease from 6 to 15 feet from the baseline condition in the Sacramento County Water Authority's service area. Planned actions to address these vulnerabilities include decreasing urban per capita water demand. The degradation of water supplies reduces the efficiency of fixed fire protection systems as well as hampering fire suppression activities. As an example, in 1998, the City of Sacramento lowered its static water pressure from 50 psi to 30 psi.

The doubling of average rainfall called an "El Nino" event has occurred from time to time and does cause the grass to mature and grow in excess of six feet high before it dries out. Ten sq. feet of this type of fuel is equivalent to the explosive force of one gallon of gasoline.

Low-level fog (Tule Fog) is present throughout the winter months, which brings visibility to almost zero feet. The fog delays emergency responders and has caused numerous vehicle accidents including the December 11, 1997, Interstate 5 incident in Elk Grove which involved 36 vehicles and caused 31 casualties including 5 fatalities. The fog can also cause freezing and slick roadways.

2. Temperature

a. Condition

Temperatures have been recorded as high as 115° F throughout the Sacramento region with average summer highs in the seventy-eight (78) to ninety-four (94) degree ° range. (National Weather Service Sacramento Branch average of historical data (<https://wrcc.dri.edu/cgi-bin/clilcd.pl?ca23232>.)

b. Impact

The Sacramento region has extreme variations in weather patterns too. Summers are arid and warm, winters are cool to freezing, fall and spring can bring any combination of weather pattern together. It is this cyclical uncertainty that allows weather events such as the rapid melting of the snowpack which causes flooding in the low-lying valley areas of Sacramento County.

High temperatures cause rapid fatigue and heat exhaustion of firefighters, thereby reducing their effectiveness and ability to control large building and wildland fires.

Another impact from high temperatures is that combustible building material and non-irrigated weeds, grass, and brush are preheated, thus causing these materials to ignite more readily and burn more rapidly and intensely. Additionally, the resultant higher temperature of the atmosphere surrounding the materials reduces the effectiveness of the water being applied to the burning materials. This requires that more water be applied, which in turn requires more Fire District resources in order to control a fire on a hot day. High temperatures directly contribute to the rapid growth of fires to an intensity and magnitude beyond the control capabilities of the Fire District.

3. Sea Level Rise

a. Condition

Climate change induced sea level rise is likely to create hydrologic changes in the San Francisco Bay and Delta that could affect the CSD Service Area. While uncertainty exists regarding the extent of sea level rise, there is consensus that it will increase the frequency, duration, and magnitude of flood events in the San Francisco Bay and Sacramento-San Joaquin Delta (Bay-Delta) area that borders the western edge of the CSD Service Area.

b. Impact

Given a 1-foot rise in sea level, as predicted in low-end sea level rise projections, the occurrence of a 100-year storm surge–induced flood event would shift to once every 10 years. In other words, the frequency of a 100-year event could increase tenfold. Sea level rise and the associated increases in flood events would place greater strain on existing levee systems and could expand floodplains affecting the City. In addition to the pressure resulting from sea level rise, climate change is anticipated to result in increased severity of winter storms, particularly in El Niño years. Such weather events will result in higher levels of seasonal flooding than those currently experienced. Such changes in weather events will further strain levees and increase floodplain areas.

4. Winds

a. Condition

Prevailing winds in the area are from the south or southeast. However, winds are experienced from virtually every direction at one time or another. Wind velocities are generally in the six (6) mph to nine and one half (9.5) mph ranges, gusting to twenty-five (25) to thirty-five (35) mph. Forty (40) mph winds are experienced

occasionally and winds up to seventy-four (74) mph have been registered locally. During the winter half of the year strong, dry, gusty winds from the north move through the area for several days creating extremely dry conditions.

(National Weather Service Sacramento Branch average of historical data (<https://wrcc.dri.edu/cgi-bin/clilcd.pl?ca23232>.)

b. Impact

Winds such as those experienced locally can and do cause fires, both interior and exterior, to burn and spread rapidly. Fires involving non-irrigated weeds, grass, and brush can grow to a magnitude and be fanned to intensity beyond the control capabilities of the Fire District very quickly even by relatively moderate winds. During wood shake and shingle roof fires, or exposure fires, winds can carry sparks and burning brands to other structures, thus spreading the fire and causing conflagrations. When such fires are not controlled, they can extend to nearby buildings, particularly those with untreated wood shakes or shingles. In building fires, winds can literally force fires back into the building and can create a blow torch effect, in addition to preventing “natural” ventilation and cross-ventilation efforts.

Winds of the type experienced locally also reduce the effectiveness of exterior water streams used by the Fire District on fires involving large interior areas of buildings, fires which have vented through windows and roofs due to inadequate built-in fire protection and fires involving wood shake and shingle building exteriors. Local winds will continue to be a factor toward causing major fire losses to buildings not provided with fire resistive roof and siding materials. Buildings with inadequately separated interior areas or lacking automatic fire protection systems are also at risk.

Throughout the District, homes are being built within grass and brush covered rural areas creating an urban interface environment. Combustible weeds on vacant lots, coupled with windy conditions can be a recipe for disaster. Throughout the State of California, large catastrophic fires in these urban interface environments have resulted in loss of life and property at an increasing rate.

- B. This amendment is justified on the basis of a local geologic condition. The City of Elk Grove has no known active faults, and no active or potentially active faults underlie, nor is it located in an Alquist-Priolo Earthquake Fault Zone. In major earthquakes, fault displacement can cause rupture along the surface trace of the fault, leading to severe damage to structures, roads, and utilities located on the fault trace. Surface rupture generally occurs along an active fault trace but can occasionally occur along presumably inactive faults. Because no known faults traverse the City of Elk Grove, the risk of surface rupture is considered low.

Ground shaking is motion that occurs as a result of energy released during earthquakes. The damage or collapse of buildings and other structures caused by ground shaking is among the most serious seismic hazards. The intensity of shaking and its potential impact on buildings is determined by the physical characteristics of the underlying soil and rock, building materials and design, earthquake magnitude, location of the epicenter, and the character and duration of ground motion. Ground motion lasts longer, and waves are amplified on loose, water-saturated materials as compared to solid rock; as a result, structures located on alluvium typically suffer greater damage. Much of Sacramento County is on alluvium, which increases the amplitude of an earthquake wave.

Sacramento County is bisected by major transportation corridors including Interstate 80 which traverses in an east/west direction and is bisected by both Highway 99 and Interstate 5. The Sacramento Metropolitan Fire District and The Cosumnes Fire Department serve a combined population in excess of 923,000 residents and over 500 square miles. There are 2 major rail lines which run through the Districts. An overpass or underpass crossing collapse would significantly increase response time for fire and emergency vehicles and hinder mutual aid efforts. This is due to the limited crossings of the major highways and rail lines.

Earthquakes of the magnitude experienced locally mixed with the alluvium soils found in Sacramento County can cause damage to areas within the electrical transmission facilities, which, in turn, cause power failures while at the same time starting fires throughout the Fire Districts. The occurrence of multiple fires will quickly deplete existing fire districts resources; thereby reducing and/or delaying their response to any given fire. Additionally, without electrical power, elevators, smoke management systems, lighting systems, alarm systems, and other electrical equipment urgently needed for building evacuation and fire control in large buildings without emergency generator systems would be inoperative, thereby resulting in loss of life and/or major fire losses in such buildings.

The above local topographical conditions impede emergency response activities and increase response times. Public Safety resources would have to be prioritized to mitigate the greatest threat and may likely be unavailable for smaller single dwelling or structure fires

- C. This amendment is justified on the basis of a local topographic condition. Sacramento County is subject to increased vegetation, varied surface features, hazardous building operations, increased landscaping and terrain risk factors.

- 1. Vegetation

- Highly combustible dry grass, weeds, and brush are common in the open space areas adjacent to built-up locations six (6) to eight (8) months of each year. The Sacramento County Local Hazard Mitigation Plan Update (LHMP) indicates the probability of a wildfire is highly likely and could be extensive geographically, and that climate change may be a factor in the probability

of future occurrences (Sacramento County 2016) The unincorporated area contains large sections of undeveloped agricultural lands with scattered residential and some limited commercial uses. There is a wildland-urban interface at some locations where the boundaries in some instances adjoin City limit boundary. The CCSD provides fire protection 157-square-mile service area covering Elk Grove, Galt, and a portion of unincorporated southern Sacramento County. During a wildfire event that crosses into the Urban City areas there would be significant area to cover. Thus, nearby buildings, particularly those with wood roofs, or sidings are in danger. This condition can be found throughout the Fire Districts, especially in those fully developed areas and those areas marked for future development.

Development continues to extend from the urban core into grass-covered areas and brush/tree covered canyons, where every 20-percent increase in slope doubles the rate of fire spread.

2. Surface features

The Districts are bisected by the Union Pacific mainline running north/south with an average of eighteen to twenty-four trips daily and with the ability to increase the trips significantly without prior notice to the District. Underground pipelines run parallel to the mainline in a north/south direction in the western portion of the district and carry liquid petroleum, and natural gases under high pressure. It is reasonably foreseeable that this bisection of the Districts by the railroad track could result in the reduction of response time for fire and emergency vehicles in the event a train is traveling on the railroad track at the time of a fire or other emergency.

3. Buildings, landscaping, and terrain

The Districts include several topographical features, including major rivers and creeks, aqueducts, lakes, sloughs, natural parkways, open space, bridges/overpasses, freeways, railroad tracks, drainage canals, and sprawling industrial facilities, such as Suburban Propane, Apple Computer, Ampaq, and McClellan Park. Traffic has to be channeled around several of these topographical features and limitations, which creates traffic congestion and delays in emergency response. In the event of an accident or other emergency at one of the key points of intersection between a road and river or freeway, sections of the Districts could be isolated, or response times could be significantly increased so as to increase the risk of injury or damage. These features are located between many of the District's fire stations.

Preservation of wetland areas, natural parkways, riparian corridors along rivers/streams, vernal pools, open space and endangered species habitats have all contributed to access problems as well as exemption from vegetation abatement programs. These situations, though very environmentally important, do increase the demands on the fire service due to the extreme fire hazard created by fuel loading and limited access.

Reduced available infrastructure features, such as roads, water supplies, and fire protection, hamper the effectiveness of fire response resources. These rural areas are subject to a higher degree of risk without mitigation measures.

The 100-year floodplain zone estimates inundation areas based on a flood that has a 1 percent chance of occurring in any given year. The 100-year flood zones include areas along Laguna Creek in the northwest and north-central portion of the City of Elk Grove, and along the Cosumnes River to the southeast, primarily just outside of City limits, but still within the CSD's service area. Flood risk is intensified in the lower stream reaches by high tides occurring in the Delta at the same time as strong offshore winds during heavy rainfall.

The area potentially affected by a 200-year flood event in the City is located along Deer Creek and the Cosumnes River. Much of this land is preserved for agricultural use and would be at limited risk of damage from flood hazard zones. However, a 200-year flood event caused by levee breaks along the Sacramento River could result in flooding in small portions of Laguna West, an existing residential neighborhood on the western side of the City.

A 500-year flood event, which has a 0.2 percent chance of occurring in any given year, is possible in the northern portion of the City of Elk Grove along the Sacramento River and Laguna Creek.

The existing levee system in areas surrounding the CSD's service area was initially constructed by hand labor, and later by dredging to hold back river floods and tidal influences, in order to obtain additional lands for grazing and crop growing. Continued maintenance is necessary to hold these levees against the river floods that threaten surrounding areas. Because levees are vulnerable to peat oxidation as well as sand, silt, and peat erosion, new material is continually added to maintain them. Subsiding farmlands adjacent to levees may increase water pressure against the levees, adding to the potential for levee failure. In addition, many levees, known as non-project levees, are not maintained to any specified standard, which can increase the likelihood of failure and inundation. Levee failures can be difficult to predict, since even inspected project levees are prone to failure under certain conditions.

The foregoing local topographical conditions impede emergency response activities and increase response times. Public Safety resources would have to be prioritized to mitigate the greatest threat and may likely be unavailable for smaller single dwelling or structure fires.

Additional variables that may negatively impact emergency response:

1. The extent of damage to the water system.

2. The extents of isolation due to bridge and/or freeway overpass collapse.
3. The extent of roadway damage and/or amount of debris blocking the roadways.
4. Climatic conditions (hot, dry weather with high winds).
5. Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours.
6. The availability of timely mutual aid or military assistance.

2019 California Fire Code

Section	Title	Adopted from CFC	Amended from CFC	Added to CFC	Deleted from CFC	Justification
105.6.4	Carnivals and fairs		X			Administrative
105.7.26	Electrified Security Fences			X		A3, A4, C1
110.4	Violation Penalties		X			Administrative
112.4	Failure to comply		X			Administrative
202	Definitions		X	X		Administrative
503.1.2.1	One or two-family dwelling residential developments			X		B, C2
505.1	Address identification		X			A1
505.1.1	Illumination			X		A1
507.1.1	Connection			X		A2, A3, C1
507.5.1	Where required		X			A2, A3, C1
507.5.1.1	Hydrant for standpipe systems		X			A2, A3, C1
901.4.6	Pump and riser room size		X			A1, A2
901.4.6.2	Marking on access doors		X			A1
901.4.6.4	Lighting		X			A3, B
903.2	Where required		X			A2, A3, B, C1, C2, C3

903.2.1.1	Group A-1		X			A2, A3, B, C1, C2, C3
903.2.1.2	Group A-2		X			A2, A3, B, C1, C2, C3
903.2.1.3	Group A-3		X			A2, A3, B, C1, C2, C3
903.2.1.4	Group A-4		X			A2, A3, B, C1, C2, C3
903.2.2.1	Group B			X		A2, A3, B, C1, C2, C3
903.2.3	Group E		X			A2, A3, B, C1, C2, C3
903.2.4	Group F-1		X			A2, A3, B, C1, C2, C3
903.2.7	Group M		X			A2, A3, B, C1, C2, C3
903.2.8.1.1	Group R-3 manufactured housing			X		A2, A3, B, C1, C2, C3
903.2.8.3	Group R-4		X			A2, A3, B, C1, C2, C3
903.2.9	Group S-1		X			A2, A3, B, C1, C2, C3
903.2.9.1	Repair garages		X			A2, A3, B, C1, C2, C3
903.2.10	Group S-2 enclosed parking garages		X			A2, A3, B, C1, C2, C3
903.2.10.1	Commercial parking garages		X			A2, A3, B, C1, C2, C3
903.2.18.1	Group U private garages and carports accessory to Group R-3 occupancies		X			A2, A3, B, C1, C2, C3
903.3.1.2	NFPA 13R sprinkler systems				X	A2, A3, B, C1, C2, C3
903.3.8.4	Supervision		X			B, C2, C3
903.3.9	Floor control valves		X			B, C2, C3
903.4.2	Alarms		X			A1, B, C2, C3
903.4.3	Floor control valves		X			B, C2, C3
903.6	Where required		X			A1, A3, C1, C2, C3
903.6.1	Monitoring			X		B, C2, C3

1008.3.3	Rooms and spaces		X			A3, B
1028.5.1	Exit discharge surface			X		A1
1203.1.3.1	Emergency and standby power systems			X		A1, A3, B, C1, C2, C3
1206.2	Stationary storage battery systems		X			A, B, C
1206.3	Capacitor energy storage systems		X			A, B, C
3310.3	Premise identification			X		A, B, C
5003.9.1.2	Emergency response support information			X		A, B, C
Chapter 80	Reference standards		X	X		A, B, C
Appendix B, Table B105.1(1)	Required fire flow for one and two-family dwellings, Group R-3 and R-4 buildings and townhouses		X			A2, A3, B, C1, C2, C3
Appendix B, B105.2	Buildings other than one and two-family dwellings, Group R-3 and R-4 buildings and townhouses		X			A2, A3, B, C1, C2, C3
Appendix B, Table B105.2	Required fire flow for buildings other than one and two-family dwellings, Group R-3 and R-4 buildings and townhouses		X			A2, A3, B, C1, C2, C3
Appendix C, Table C102.1	Required number and spacing of fire hydrants		X			A2, A3, B, C1, C2, C3

(f) Based on these local climatic, topographical and geological conditions, the amendments to the 2019 California Fire Code as specified in this ordinance are considered reasonable and necessary modifications to the requirements established pursuant to Section 18941.5. While it is clearly understood that the adoption of such amendments may not prevent the incidence of fire, the implementation of these various amendments to the code attempt to reduce the severity and potential loss of life, property and protection of the environment.

(g) California Health and Safety Code Section 17958.7 requires that the modifications or change be expressly marked and identified as to which each finding refers. Therefore, the Council finds that the attached table provides code sections that have been modified which are building standards as defined in Health and Safety Code Section 18909, and the associated conditions for modification due to local climatic, geological and topographical reasons.

Section 4: Repeal of Conflicting Ordinances

As of the Effective Date of this Ordinance, all prior fire prevention ordinances, resolutions or parts thereof, conflicting or inconsistent with the provisions of this ordinance, or of the code hereby adopted are hereby repealed.

Section 5: Conflict With City Municipal Code, General Plan, or Other Policy Documents

Should any of the Fire Code revisions now or in the future conflict with the City Municipal Code, General Plan, or other City Council adopted policy documents, the City's Code, Plan, or Policy shall prevail.

Section 6: California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires analysis of agency approvals of discretionary "projects." A "project," under CEQA, is defined as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." (CEQA Guidelines, § 15378.) The proposed project includes discretionary amendments to the Elk Grove Municipal Code and is a project under CEQA; but it is exempt from CEQA review as set forth below.

CEQA Guidelines Section 15060(c)(2) states that a project is not subject to CEQA review where the activity will not result in a direct or reasonably foreseeable indirect physical change to the environment. CEQA Guidelines Section 15061(b)(3) states that a project is exempt from CEQA "where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment." The approval of the code amendments set forth in this Ordinance does not approve any physical development project, and it would not result in a direct or indirect physical change in the environment. Therefore, the approval of the Ordinance is exempt from CEQA review.

Section 7: No Mandatory Duty of Care

This ordinance is not intended to and shall not be construed or given effect in a manner that imposes upon the City or any officer or employee thereof a mandatory duty of care towards persons and property within or without the City, so as to provide a basis of civil liability for damages, except as otherwise imposed by law.

Section 8: Severability

If any provision of this ordinance or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are severable. This City Council hereby declares that it would have adopted this ordinance irrespective of the invalidity of any portion thereof and intends that the invalid portions should be severed, and the balance of the ordinance be enforced.

Section 9: Effective Date and Publication

This Ordinance shall take effect thirty (30) days after its adoption. In lieu of publication of the full text of the ordinance within fifteen (15) days after its passage, a summary of the ordinance may be published at least five days prior to and fifteen (15) days after adoption by the City Council and a certified copy shall be posted in the office of the City Clerk, pursuant to GC 36933(c)(1).

ORDINANCE: **26-2019**
INTRODUCED: November 13, 2019
ADOPTED: December 11, 2019
EFFECTIVE: January 10, 2020




STEVE LY, MAYOR of the
CITY OF ELK GROVE

ATTEST:

APPROVED AS TO FORM:



JASON LINDGREN, CITY CLERK



JONATHAN P. HOBBS,
CITY ATTORNEY

Date signed: December 16, 2019

**CERTIFICATION
ELK GROVE CITY COUNCIL ORDINANCE NO. 26-2019**

STATE OF CALIFORNIA)
COUNTY OF SACRAMENTO)
CITY OF ELK GROVE) **ss**

I, Jason Lindgren, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing ordinance, published and posted in compliance with State law, was duly introduced on November 13, 2019 and approved, and adopted by the City Council of the City of Elk Grove at a regular meeting of said Council held on December 11, 2019 by the following vote:

AYES:	COUNCILMEMBERS:	Ly, Hume, Detrick, Nguyen, Suen
NOES:	COUNCILMEMBERS:	None
ABSTAIN:	COUNCILMEMBERS:	None
ABSENT:	COUNCILMEMBERS:	None

A summary of the ordinance was published pursuant to GC 36933(c) (1).



**Jason Lindgren, City Clerk
City of Elk Grove, California**