



# ALPINE FIRE PROTECTION DISTRICT

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PASS

FAIL

RESUBMIT

## FIRE PLAN CHECK CORRECTION

### List for Single Family Residences, Duplexes, ADU and Garages

Date: \_\_\_\_\_ CPC Number: \_\_\_\_\_ AFD Plan Check # \_\_\_\_\_

Project Name: \_\_\_\_\_ Address: \_\_\_\_\_

APN: \_\_\_\_\_ R-3: \_\_\_\_\_ ADU: \_\_\_\_\_ U: \_\_\_\_\_ Porch: \_\_\_\_\_ TOTAL: \_\_\_\_\_

Corrections circled are to be made on the plans before Fire Approval will be issued. The approval of plans and specifications does not permit the violation of any section of the Alpine Fire Protection District Fire Ordinance, County Ordinances, or State law. The following list does not necessarily include all errors and omissions.

PLAN REQUIREMENTS	FMF FEE:	PLAN CHECK FEE:
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1. **Two sets of County Red stamped original building plans** and a County Fire Mitigation form.
2. Due to the number and/or complexity of corrections, before Fire sign-off will be given, corrections should be made on the originals and run new prints.
3. Corrections can **NOT** be made on stamped plans. **NO RED INK** or clouding is allowed.
4. Identify all rooms **on each section** of plans and specify use.
5. Define all symbols and shaded areas etc. used on the plans with reference to NFPA 170 symbols.
6. See notes/remarks made on one set of plans. Return marked set with new/revised sets after you have complied with the requirements on the marked set of plans. Red marks on plans are part of this comments list.
7. The Fire District will require the following conditions be placed on the project: Detailed information regarding Fire District Ordinances can be found on the district's web site at: <http://www.alpinefire.org>, under fire prevention.

#### PLOT PLAN & SITE REQUIREMENTS

1. **SITE INSPECTION** may reveal conditions which have changed since plan review. When such discrepancies arise, field inspection shall take precedence.
2. **SHOW FIRE HYDRANT AND WATER STORAGE TANK LOCATIONS ON PLOT PLAN (AFPD 2023-01 Ord. Sec. 507.5.7 & 507.2.2)**  
All fire hydrants shall be installed as per 2022 California Fire Code Appendix B capable of flowing 2500 - 3000 GPM. Show on plot plan the location of existing water storage tanks with size of gallons and location of riser with FDC. Mitigation may be required on existing FDC risers.

## A. FIRE APPARATUS ACCESS ROADWAYS

### 1. FIRE APPARATUS ACCESS ROADS (AFPD 2023-01 Ord. Sec. 503.1)

Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3. Fire apparatus access roads shall be provided and maintained in compliance with this section and the most recent edition and any amendments thereto, of public and private road standards as adopted by the County of San Diego (San Diego County Standards for Private Roads and Public Roads, San Diego County Department of Public Works). The fire code official may modify the requirements of this section if the modification provides equivalent access.

### 2. INDIVIDUAL DRIVEWAY DIMENSIONS (AFPD 2023-01 Ord. Sec 503.2.1)

Fire apparatus access roads shall have an unobstructed improved width of no less than 24 feet, except for single-family residential driveways, serving no more than two single-family dwellings, shall have a minimum of 16 feet of unobstructed improved width. All fire apparatus access roads shall have an unobstructed vertical clearance of no less than 13 feet 6 inches.

### 3. SURFACE (AFPD 2023-01 Ord. Sec. 503.2.3) (NOTE THE FOLLOWING ON THE PLOT PLAN)

Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus (not less than 75,000 lbs.) unless authorized by the FAHJ and shall be provided with an approved paved surface to provide all-weather driving capabilities. The paving and subbase shall be installed to the standards specified in the County of San Diego Parking Design Manual. A residential driveway constructed of 3 ½" Portland cement concrete may be installed on any slope up to 20% if slopes over 15% have a deep broom finish perpendicular to the direction of travel or other approved surface to enhance traction.

### 4. ROADWAY RADIUS (AFPD 2023-01 Ord. Sec. 503.2.4)

The horizontal inside radius of a fire apparatus access road shall comply with the County of San Diego Public and Private Road Standards approved by the Board of Supervisors. The horizontal inside radius of any public or private driveway shall be a minimum of 28 feet, as measured on the inside edge of the improvement width or as approved by the fire code official. The length of vertical curves of fire apparatus access roads shall not be less than 100 feet, or as approved by the fire code official.

### 5. DEAD ENDS (AFPD 2023-01 Ord. Sec. 503.2.5) (NOTE THE FOLLOWING ON THE PLOT PLAN)

Dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved area for turning around emergency apparatus.

### 6. DEAD END ROADS TURN-AROUND REQUIRED (AFPD 2023-01 Ord. Sec. 503.2.5.1). A cul-de-sac or other approved turn-around shall be provided in residential areas where the fire apparatus access roads serve 3 or more parcels. The minimum unobstructed radius width for a cul-de-sac in a residential area shall be 36 feet paved, 40 feet graded, or as approved by the fire code official. The fire code official shall establish a policy identifying acceptable turnarounds for various project types. See Annex A & B for illustrations.

### 7. DEAD END ROADS – (AFPD 2023-01 Ord. Sec. 503.2.5.2). The maximum length of a dead-end road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths, regardless of the number of parcels served. A turnaround shall be provided to all building sites on driveways over 150 feet in length and shall be within fifty (50) feet of the building.

### 8. BRIDGES & ELEVATED SURFACES (AFPD 2023-01 Ord. Sec. 503.2.6) (NOTE THE FOLLOWING ON THE PLOT PLAN)

When a bridge or an elevated surface is required to be used as part of a fire apparatus access road the bridge shall be constructed and maintained in accordance with nationally recognized standards. (AASHTO HB 17)

### 9. GRADE (AFPD 2023-01 Ord. Sec. 503.2.7) (SHOW ON PLOT PLAN)

The gradient for a fire apparatus access roadway shall not exceed 20%. Grades exceeding 15% (incline or decline) shall not be allowed without mitigation measures. The fire code official may require additional measures where he deems appropriate. The angle of departure and angle of approach of a fire access roadway shall not exceed 7 degrees 12% or as approved by the fire code official.

### 10. CROSS SLOPE (AFPD 2023-01 Ord. 503.2.7.1) The standard cross-slope shall be 2%; minimum cross-slope shall be 1%; maximum cross-slope shall be 5%.

- 11. ANGLES OF APPROACH AND DEPARTURE. (AFPD 2023-01 Ord. Sec. 503.2.8)** The angles of approach and departure for fire apparatus access roads shall not exceed 7 degrees 12% for the first 30' or as approved by the fire code official and shall not allow for transitions between grades that exceed 6% elevation change along any 10-foot section.
- 12. ROADWAY TURNOUTS. (AFPD 2023-01 Ord. Sec. 503.2.9)** When required by the fire code official, turnouts shall be a minimum of 12 feet wide and 30 feet long with a minimum 25-foot taper on each end. (Title 14 SRA 1273.06)
- 13. MARKINGS (AFPD 2023-01 Ord. Sec. 503.3)**

When required by the fire code official, approved signs or other approved notices shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs or notices shall be always maintained in a clean and legible condition and replaced or repaired when necessary to provide adequate visibility. All new public roads, all private roads within major subdivisions and all private road easements serving four or more parcels shall be named. Road name signs shall comply with County of San Diego Department of Public Works Design Standard # DS-13.
- 14. OBSTRUCTION OF FIRE APPARATUS ACCESS ROADS. (AFPD 2023-01 Ord. Sec. 503.4)** Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum road widths and clearances established in sections 503.2.1 and 503.2.2 shall be always maintained.
- 15. TRAFFIC CALMING DEVICES (AFPD 2023-01 Ord. Sec. 503.4.1)**

Roadway design features (speed bumps, speed humps, speed control dips, etc.), which may interfere with emergency apparatus responses shall not be installed on fire access roadways, unless they meet design criteria approved by the fire code official.
- 16. SECURED GATES (AFPD 2023-01 Ord. Sec. 503.5.1) (NOTE THE FOLLOWING ON THE PLOT PLAN)**

All gates or other structures or devices which could obstruct fire access roadways or otherwise hinder emergency operations are prohibited unless they meet standards approved by the Fire code official and receive Specific Plan approval. Gates shall have a 30-foot setback from main road.
- 17. ADDRESS NUMBERS (AFPD 2023-01 Ord. Sec. 505.1) (NOTE THE FOLLOWING ON THE PLOT PLAN)**

Approved numbers and/or addresses shall be placed on all new and existing buildings and at appropriate additional locations as to be plainly visible and legible from the street or roadway fronting the property from either direction of approach. Said numbers shall contrast with their background and shall meet the following minimum standards as to size: 4" high with a 1/2" stroke for residential buildings, and a post at roadway. Address identification shall be maintained. Where access is by means of a private road and the structure may not be seen a pole shall be installed with address at street. Applicant shall install the appropriate green/blue address marker. Application provided.
- 18. EASEMENT ADDRESS SIGNS (AFPD 2023-01 Ord. Sec. 505.3)**

All easements which are not named differently from the roadway from which they originate, shall have an address sign installed and maintained, listing all street numbers occurring on that easement, located where the easement intersects the named roadway. Minimum size of numbers on that sign shall be four inches in height with a minimum stroke of 1/2" and shall contrast with the background.
- 19. RESPONSE MAP UPDATES (AFPD 2023-01 Ord. Sec. 505.5)**

Any new development, which necessitates updating of emergency response maps by virtue of new structures, hydrants, roadways, or similar features, shall be required to provide map updates in a format compatible with current department mapping services, and shall be charged a reasonable fee for updating all response maps.
- 20. KEYBOXES & SWITCHES (CFC Sec. 506.1) (NOTE THE FOLLOWING ON THE PLOT PLAN)**

When access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or firefighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. (Knox key switch/box application is available online [www.knoxbox.com](http://www.knoxbox.com) ).

## B. TYPE OF WATER SUPPLY

1. **TYPE OF WATER SUPPLY (AFPD 2023-01 Ord. Sec. 507.2)** A water supply may consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems, as approved by the fire code official, capable of providing the required fire flow. In setting the requirements for fire flow, the fire code official shall follow section 507.3 or Appendix B of the CFC, or the standard published by the Insurance Service Office, "Guide for Determination of Required Fire Flow".
2. **PRIVATE WATER STORAGE TANKS – (AFPD 2023-01 Ord. Sec. 507.2.2).** Water tanks for private residential fire protection, when authorized by the fire code official, shall comply with Table 507.2.2 and be installed in accordance with the NFPA 22 edition referenced in Chapter 80 of CFC. Water tanks are only allowed if a letter from the applicable water district is provided stating that extending the water line and adding a hydrant is unserviceable.
3. **PLAN SUBMITTAL FOR PRIVATE WATER STORAGE TANKS (NFPA 22 latest Edition, AFPD 2023-1 Ord. Sec. 507.2.2 & ANNEX F)**  
 Separate plan submittal shall be submitted to the Alpine Fire Protection District for approval prior to the setting of tank. All materials shall be listed and approved for their intended use and installation. See ANNEX F.

Water storage tank Capacity: \_\_\_\_\_ Gallons, Fire Department Connection: 4" x 2 ½"  
 See AFPD list of approved materials with image for approved riser.

<b>TABLE 507.2.2</b>			
<b>RESIDENTIAL WATER TANK REQUIREMENTS</b>			
Building Square Feet	Gallons Per Minute Water Flow	Capacity Gallons	Duration Minutes
Up to 1,500	250	5,000	20
Over 1,500	250	10,000	40
When the exposure distance is one hundred feet (100') or less from an adjacent property, or where additional hazards or higher fire flow exists, the required water storage may be modified by the fire code official.			

4. **FIRE FLOW (AFPD 2023-01 Ord. Sec. 507.3)** Fire flow requirements shall be based on Appendix B of the California Fire Code, or the standard published by the Insurance Services Office, "Guide for Determination of Required Fire Flow." Consideration should be given to increasing the gallons per minute to protect buildings and structures of extremely large square footage and for such reasons as: poor access roads, grade and canyon rims, hazardous brush, and response times greater than five minutes by a recognized fire department or fire suppression company. In hazardous fire areas the main capacity for new subdivisions shall not be less than 2,500 – 3,000 gallons per minute, unless otherwise approved by the fire code official. If fire flow increases are not feasible, the fire code official may require alternative design standards such as: alternative types of construction that provides a higher level of fire resistance, fuel break requirements, which may include required irrigation, modified access road requirements, specified setback distances for building sites addressing canyon rim developments and hazardous brush areas, and other requirements as authorized by this chapter and as required by the fire code official.
5. **FIRE HYDRANT AND FIRE VALVE LOCATION (AFPD 2023-01 Ord. Sec. 507.5.7).** The fire hydrant or fire valve shall be between 14 to 24 inches above grade, no closer than 4 feet nor further than 10 feet from the roadway, and 10 feet from combustible vegetation.
6. **WATERLINE EXTENSION (AFPD 2023-01 Sec. 507.5.8)** The fire code official may require a waterline extension for the purpose of installing a fire hydrant if a water main is 1,500 feet or less from the property line. Water tanks are only allowed if a letter from the applicable water district is provided stating that extending the water line and adding a hydrant is unserviceable.

# C. AUTOMATIC FIRE SPRINKLER SYSTEM

**1. FIRE SPRINKLERS (AFPD 2023-01 Ord. Sec. 903.2) (NOTE THE FOLLOWING ON THE PLOT PLAN)**

**903.2 Where required.** Approved automatic sprinkler systems shall be installed in all new buildings. For the purpose of automatic sprinkler systems, buildings separated by less than 10 feet from adjacent buildings shall be considered one building. Fire barriers and partitions, regardless of rating, shall not be considered as creating separate buildings for purposes of determining automatic sprinkler system requirements. Mezzanines shall be included in the total square footage calculation. All new buildings constructed shall have an approved NFPA 13, NFPA 13R or NFPA 13D automatic sprinkler system installed as per 903.3.1.1, 903.3.1.2 or 903.3.1.3. The Fire Code Official has the final decision of which NFPA 13 standard to apply, NFPA 13R or NFPA 13D as required due to access, water supply and travel time.

**Section 903.2 All occupancies built or moved into the District**

Commercial & Industrial	Residential (R3)	Additions (903.(a))	Remodels or reconstruction
All	All	50% increase or exceeding fire flow as defined in 2022 California Fire Code Section Appendix "B" or ISO grading schedule	AHJ may require installation of automatic sprinkler system for re-roof, significant remodel (load bearing walls).

**EXCEPTION:**

- (1) **Group U occupancies not greater than 500 square feet**, and when the building is more than 10 feet from an adjacent building or property line measured from the farthest projection from the building.
- (2) Agricultural buildings constructed of wood or metal frames over which fabric or similar material is stretched, which are specifically used as green houses are exempt from the automatic sprinkler requirements unless physically connected to other building.

**2. GROUP U OCCUPANCIES (AFPD 2023-01 Ord. Sec. 903.2 (C). For Group U Occupancies greater than 500 square feet**, an approved automatic sprinkler system shall be installed as per NFPA 13D edition referenced in Chapter 80 CFC or as approved by the FAHJ.

**3. AUTOMATIC SPRINKLER SYSTEM SUPERVISION AND ALARMS. (AFPD 2023-01 Ord. Sec. Sec. 903.4)** 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 automatic sprinkler systems shall be electronically supervised by a listed fire alarm control unit.

**Exceptions:**

- 1. Automatic sprinkler systems *with less than 100 fire sprinklers* protecting one-family and two-family dwellings and group U occupancies.
- 2. Limited area sprinkler systems in accordance with Section 903.3.8.
- 3. Automatic sprinkler systems installed in accordance with NFPA 13R edition referenced in Chapter 80 CFC where a common supply main is used to supply both domestic water and the automatic sprinkler system and a separate control valve for the automatic sprinkler system is not provided.
- 4. Jockey pump control valves that are sealed or locked in the open position.
- 5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
- 6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
- 7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

## D. RESIDENTIAL GROUND MOUNTED SOLAR

1. **GROUND-MOUNTED PHOTOVOLTAIC ARRAYS (AFPD 2023-01 Ord. Sec. 1205.5)** Ground-mounted photovoltaic array installations shall meet the requirements of sections 1204.4.1 through 1204.4.4.
2. **FIRE APPARATUS ACCESS ROADS (AFPD 2023-01 Ord. Sec. 1205.5.1)** Fire apparatus access roads to ground-mounted photovoltaic arrays, associated equipment structures and operations/maintenance buildings shall comply with section 503.

**Exception:** Private residential and agricultural systems less than 10 acres in size and where the energy generated is primarily for on-site use are exempt from this requirement subject to the approval of the fire code official.

3. **PERIMETER FIRE APPARATUS ACCESS ROADWAY (AFPD 2023-01 Sec. 1205.5.2)** Ground-mounted photovoltaic arrays 10 acres or larger in size shall provide a fire apparatus access roadway around the perimeter of the project. The perimeter fire apparatus access roadway shall comply with section 503.
4. **FUEL MODIFICATION (AFPD 2023-01 Sec. 1205.5.3)** Combustible vegetation within the array and to a distance of 30 feet from the array and associated equipment shall be reduced to a height of no more than 6 inches. The fuel modification zone may be increased when required by the fire code official or as recommend by a fire protection plan.

**Exception:** For private residential and agricultural systems less than 10 acres in size and where the energy generated is used primarily on-site, the required fuel modification zone may be reduced to 10 feet from the array and associated equipment.

Operation/maintenance buildings shall be provided with fuel modification zones that comply with section 4907.2.

5. **WATER SUPPLY (AFPD 2023-01 Sec. 1205.5.4)** Water supply for fire protection and suppression shall be provided for equipment structures and operations/maintenance buildings as required by section 507.
6. **IDENTIFICATION (AFPD 2023-01 Sec. 1205.6)** Ground-mounted photovoltaic arrays with multiple equipment structures shall include a means of readily identifying each equipment structure. The fire code official may require a lighted directory map of the project to be installed on-site near the entrance to the facility for projects of 10 or more acres in size.

# E. BUILDING CONSTRUCTION

**ALPINE IS LOCATED IN SRA LAND. ALL PARCELS ARE DESIGNATED  
"VERY HIGH FIRE HAZARD SEVERITY ZONE" AS PER 4904.3.1**

## **BUILDING CONSTRUCTION AND FEATURES (SAN DIEGO COUNTY BUILDING CODE 7A STANDARDS) (AFPD 2023-01 Ord. 4905.2) (2022 CBC 7A)**

### **1. ROOF COVERING (NOTE ON PLAN) (2022 CBC 705A.2)**

Shall have a minimum Class "A" Fire Rating and eave protection (bird stops) as per standard 705A.2  
(Note: All roof references on plans must indicate class "A" roof requirement)

### **2. VENT REQUIREMENTS (2022 CBC 706A.2)**

Show vents sizes and locations of vents per California Building Code. No attic ventilation openings or ventilation louvers shall be permitted in soffits, in eave overhangs, between rafters at eaves, or in other overhanging areas in structures within the Wildland Urban Interface Area. Provide the name of the manufacture of all vents on plans.

### **3. SPARK ARRESTERS (AFPD 2023-01 Ord. 605.3.1)**

All structures having any chimney, flue, or stovepipe attached to any fireplace, stove, barbecue, or other solid or liquid fuel burning equipment and devices, shall have such chimney, flue or stovepipe equipped with an approved ½" spark arrester. The fireplace chimney design shall provide access for maintenance or repair of spark arresters.

### **4. TURBINE VENTS (SDCBCS 92.1.706 A.2)**

Shall be equipped to allow one-way direction rotation only; they shall not free spin in both directions.

### **5. EXTERIOR GLAZING AND WINDOW WALLS (2022 CBC 708A.2)**

Exterior windows, window walls, glazed doors, and glazed openings within exterior doors shall be insulating-glass units with a minimum of one tempered pane, or glass block units or have a fire-resistance rating of not less than 20 minutes.

### **6. VINYL WINDOWS (2022 CBC 708A.2.1)**

Must meet the following characteristics:

- a. Frame and sash are comprised of vinyl material with welded corners
- b. Metal reinforcement in the interlock area
- c. Glazed with insulating glass, annealed or tempered and certified to ANSI/AAMA/NWDA 101/I.S.2-97.

### **7. SKYLIGHTS (2022 CBC 708A.2.1)**

Shall be dual-glazed or tempered glass and solar-tubes shall be rated for class A roof assembly.

### **8. EXTERIOR WALL SURFACING MATERIALS (2022 CBC 707 A.3)**

The exterior wall surface materials, other than noncombustible materials, must have an under-layment of 5/8" inch fire-rated gypsum sheathing, that is tightly butted or taped and mudded, under 3/8"-inch plywood or ¾" inch drop siding or an approved alternate.

### **9. WOOD SHINGLE AND SHAKE WALL (2022 CBC 707 A.3)**

Covering shall be prohibited except for repair or replacement.

### **10. FENCES AND OTHER ATTACHMENTS TO STRUCTURES (92.1.707A.1) (2019 CBC 707 A.3.2)**

Shall have the first 5 feet of fences and other items attached to a structure shall be constructed of non-combustible material or meet the same ignition-resistant standards as the exterior walls of the structure.

### **11. SOLID CORE DOOR SEPERATION FROM GARAGE TO RESIDENCE (NOTE ON PLANS) (2022 CRC R302.5.1)**

Separation between the garage and the residence shall contain a solid wood door not less than 1 3/8" thick solid or honeycomb core steel not less than 1 3/8" thickness or 20-minute fire-rated doors. Doors shall be self-closing and self-latching.

# F. VEGETATION MANAGEMENT

**ALPINE IS LOCATED IN SRA LAND. ALL PARCELS ARE DESIGNATED  
"VERY HIGH FIRE HAZARD SEVERITY ZONE" AS PER 4904.3.1**

1. **LANDSCAPE PLANS – (AFPD 2023-01 Ord. Sec. 4906.3)** Landscape plans shall be provided to the FAHJ or a designated third party for any new construction and or addition for residential and commercial buildings or accessory thereof. Plans shall be submitted and approved prior to any framing inspection. In addition, plans shall be provided when modifications occur to any previously approved landscape plan or to the Home Ignition Zones.

1. **Sec. 4906.3.1 Contents.** Landscape plans shall contain the following:

- i. Plans shall be prepared by a California Licensed Landscape Architect, Architect, or Civil Engineer. A landscape designer could prepare planting plans only (not irrigation) for a single-family residence but would need one of the above professionals to stamp the plans verifying compliance with the regulations.
- ii. Provide plans with a readable (Engineer or Architect) scale.
- iii. Delineation of fuel modification zones and Home Ignition Zones with a general description of the zone's dimensions and character.
- iv. Describe and show existing vegetation on plan.
- v. Designate irrigated areas on the plan.
- vi. Include a Plant Legend with both botanical and common names for existing and proposed plant material.
- vii. Define all symbols, site amenities, features, and shaded areas, etc. used on the plans.
- viii. Draw all plant symbols of what the full mature canopy size will be.
- ix. Include quantities of trees and large shrubs being proposed.

2. **Sec. 4906.3.2 Landscaping Installation.** All landscaping shall be installed per the approved plan prior to final inspection for issuance of certificate of occupancy.

2. **VEGETATION – (AFPD 2023-01 Ord. Sec. 4906.4)** All new vegetation shall be drought tolerant and fire-resistant vegetation in accordance with this section.

Exception: Trees classified as non-fire-resistant vegetation complying with Section 4906.4.2.1

To be considered fire resistant vegetation, it must meet at least one of the following:

- i. Be identified as fire-resistant vegetation in an approved book, journal or listing from an approved organization.
- ii. Be identified as fire-resistant vegetation by a licensed landscape architect with supporting justification.
- iii. Plants considered fire resistant vegetation and approved by the local enforcing agency.

1. **Sec. 4906.4.1 Shrubs.** All new plantings of shrubs planted in Zone 1 and Zone 2 shall comply with the following:

- i. Shrubs shall not exceed 6 feet in height.
- ii. Groupings of shrubs are limited to a maximum aggregate diameter of 10 feet.
- iii. Shrub groupings shall be separated from other groupings a minimum of 15 feet
- iv. Shrub groupings shall be separated from structures a minimum of 30 feet.
- v. Where shrubs are located below or within a tree's drip line, the lowest tree branch shall be a minimum of three times the height of the understory shrubs or 10 feet whichever is greater.
- vi. Ornamental grasses shall be planted a minimum 5 feet from any structure.

2. **Sec. 4906.4.2 Trees.** Trees shall be managed as follow within the 50' foot zone of a structure:

- i. New trees shall be planted and maintained so that the tree's drip line at maturity is a minimum of 10 feet from any combustible structure.
- ii. The horizontal distance between crowns of new trees and crowns of adjacent trees shall not be less than 10 feet.
- iii. Existing trees shall be trimmed to provide a minimum separation of 10 feet (3048 mm) away from roof lines, barbecue, fire pit, other heat or flame producing devices, chimney and stovepipe outlets per Title 14, Section 1299.03.
- iv. For streetscape plantings, all non-fire resistive trees shall be planted so that the center of the tree trunk is 20 feet from edge of curb. Fire resistive trees may be planted 10 feet from edge of curb to center of tree trunk.

3. **Sec. 4906.4.2.1 Non-fire-resistant vegetation.** New trees not classified as fire resistant vegetation, such as conifers (including Junipers and Cypress), palms with fibrous tissues, pepper trees, acacia species, bamboo species and eucalyptus species, and other species deemed highly flammable by the FAHJ shall be permitted provided the tree is planted and maintained so that the tree's drip line at maturity is a minimum 30 feet from any combustible structure.



# G. DEFENSIBLE SPACE & HOME IGNITION ZONES

**ALPINE IS LOCATED IN SRA LAND. ALL PARCELS ARE DESIGNATED  
“VERY HIGH FIRE HAZARD SEVERITY ZONE” AS PER 4904.3.1**

- 1. BUILDING AND STRUCTURE SETBACKS FROM PROPERTY LINES. (AFPD 2023-01- Ord. Sec. 4907.4)** The building official shall establish the minimum setbacks for locating a building and structure on a lot in a wildland-urban interface fire area. The setbacks may be greater than the minimum setbacks provided in the County Zoning Ordinance, when necessary to protect a building and structure from an unreasonable hazard from a wildfire.
- 2. GENERAL FIRE SETBACKS. (AFPD 2023-01 Ord. Sec. 4907.4.1)** Buildings and structures shall be setback a minimum of 30 feet from property lines and biological open space easements unless existing permitted buildings and structures are located within 30 feet of the property line or the County Zoning Ordinance requires a greater minimum. When the property line abuts a roadway, the setback shall be measured from the centerline of the roadway.

**Exception:** When both the building official and the FAHJ determine that the hazard from a wildland fire is not significant or when the terrain, parcel size or other constraints on the parcel make the required setback infeasible, the building official may allow the setback to be less than 30 feet when allowed by the Zoning Ordinance.
- 3. FIRE SETBACKS ADJACENT PROTECTED AREAS. (AFPD 2023-01 Ord. Sec. 4907.4.2)** Buildings and structures shall be setback a minimum of 100 feet from any property line adjacent to a national forest, state park or open space preserve. This setback may be reduced when existing permitted buildings and structures are located within 100 feet of the property line or additional mitigation measures are employed that are satisfactory to both the FAHJ and the building official.
- 4. BUILDING AND STRUCTURE SETBACK FROM SLOPE. (AFPD 2023-01 Ord. Sec. 4907.4.3)** Single-story buildings and structures shall be setback a minimum 15 feet horizontally from top of slope to the farthest projection from a roof. A single-story building and structure shall be less than 12 feet above grade. A two-story building and structure shall be setback a minimum of 30 feet horizontally from top of slope to the farthest projection from a roof. Buildings and structures greater than two stories may require a greater setback when the slope is greater than 2 to 1.
- 5. FUEL MODIFICATION (AFPD 2023-01 Ord. Sec. 4907.5) (AFPD 2016-01 Ord.)**

Maintain an effective fuel modification zone by removing, clearing away or modifying combustible vegetation and other combustible materials from areas within 100 feet from such buildings or structures. Fuel modification zones shall not extend beyond the property line. The fuel modification zone is divided into two zones: While these standards will provide a high level of protection to structures built in the wildland / urban interface zone. **There is no guarantee or assurance that compliance with these standards will prevent damage or destruction of structures by fire in all cases.**
- 6. ADDITIONAL CLEARANCE REQUIRED. (AFPD 2023-01 Ord. Sec. 4907.2 (a))** Where the distance from the structure to the property line of the parcel on which the building is located is less than the distance required to be cleared, (100'), the adjacent parcel owner may be required to establish the required fuel break to achieve the required distance of defensible space if such requirement is approved by the Fire Code Official.
- 7. FUEL MODIFICATION OF COMBUSTIBLE VEGETATION FROM SIDES OF ROADWAYS. (AFPD 2023-01 Ord. Sec. 4907.6)** The FAHJ may require a property owner to modify combustible vegetation in the area within 20 feet from each side of the driveway or a public or private road adjacent to the property to establish a fuel modification zone. The FAHJ has the right to enter private property to ensure the fuel modification zone requirements are met.
- 8. ZONE 0 IMMEDIATE ZONE 0-5' (AFPD 2023-01 Ord. 4907.9.1)** Meaning from exterior wall surface of the building extending 5 feet on a horizontal plane. This zone shall be constructed of continuous hardscape or limited fire-resistant plantings acceptable to the FAHJ. Vegetation in this zone shall not exceed 6" to 18" in height and irrigation is required. Removal of combustible materials surrounding the exterior wall area and maintaining area free and clear of combustible materials. The use of mulch and other combustible materials shall be prohibited.
- 9. ZONE 1 INTERMEDIATE ZONE FROM ZONE 1 to 50' (AFPD 2023-01 Ord. Sec. 4907.9.2)** means from the immediate edge of Zone 0 extending out in a horizontal plane. This zone shall consist of planting of low growth, drought tolerant and fire resistive plant species. The height of the plants in this zone starts at 6" adjacent to Zone 0 and extending in a linear fashion up to a maximum of 18" at intersection with Zone 2. Vegetation in this zone shall be irrigated and not exceed 10' in height and shall be moderate in nature. Trees shall not exceed 30' in height and be limited or as approved by the FAHJ. Firewood inside this zone shall be piled minimum of 30' away from all buildings and structures. Cords of firewood shall also be maintained at least 10' from property lines and not stacked under tree canopies drip lines.

10. **ZONE 2 EXTENDED ZONE 50'-100' (AFPD 2023-01 Ord. Sec. 4907.9.3)** means from the immediate edge of Zone 1 extending out in a horizontal plane for 50'. This zone consists of planting of drought tolerant and fire resistive plant species of moderate height. Brush and plants shall be limbed up off the ground, so the lowest branches are 1/3 height of bush/tree/plant or up to 6' off the ground on mature trees. This area would be considered selective clearing of natural vegetation and dense chaparral by removing a minimum 50% of the square footage of this area.

## F. SMOKE ALARMS & CARBON MONOXIDE

1. **SMOKE ALARMS (NOTE THE FOLLOWING ON THE PLAN) (2022 CFC 907.2.11.2)**

Smoke alarms shall be required in each existing sleeping room and in the hallway/area serving each sleeping room. *Battery operated alarms are acceptable for existing construction.*

**For new construction in:**

- a. Each sleeping room
- b. At a point centrally located in the corridor or area giving access to each separated sleeping area
- c. Rooms open to a hallway serving bedrooms where the ceiling height exceeds that of the hallway by 24" or more
- d. Other locations as specified in (N.F.P.A. 72 2022 Edition Ch. 29 Section 29.8.3.4.)  
Proximity to bathroom, laundry rooms or other steam producing rooms may be problematic.  
Carbon Monoxide alarms shall be installed outside sleeping rooms one at each end of hallway.
- e. Smoke alarms or smoke detectors shall be installed a minimum of 20' feet horizontal distance from a permanently installed cooking appliance.

2. **ADDITIONS, ALTERATIONS OR REPAIRS TO GROUP R OCCUPANCIES (2022 CFC 907.2.11.9) (2022 CFC 1103.8.5.2)**

When the valuation of an addition, alteration or repair to a Group R Occupancy exceeds \$1,000 and a permit is required, or when one or more sleeping rooms are added or created in existing Group R Occupancies, smoke alarms may be solely battery with 10-year lithium battery operated when installed in existing buildings; or in buildings without commercial power; or in buildings which undergo alterations, repairs or additions.

3. **LOCATION OF LPG TANK, ABOVE GROUND STORAGE (NOTE THE FOLLOWING ON THE PLOT PLAN) (2022 CALIFORNIA FIRE CODE Table 6104.3)**

Minimum separation between containers and buildings, public ways, or lines of adjoining property that can be built upon is: 10 feet for containers 125 gallons to 500 gallons; 25 feet for containers 501 to 2,000 gallons.

4. **STORAGE OF FIREWOOD (AFPD 2023-1 Ord. Sec. 326.1) General.** Firewood shall not be stored in unenclosed space beneath a building or structure, on a deck or under eaves, a canopy or other projection or overhang. When required by the fire code official, firewood or other combustible material stored in the defensible space surrounding a structure shall be located at least 30 feet from any structure and separated by a minimum of 15 feet from the drip line of any trees, measured horizontally. Firewood and combustible materials not for use on the premises shall be stored so as to not pose a fire hazard. Wood storage shall be located on bare soil or a non-combustible material. Minimum clearance around wood storage pile shall be 10' bare soil, free of vegetation or other combustible material measured on a horizontal plane. The maximum size of wood storage shall be 2 cords of woods with the pile dimensions no greater than 4 feet in height, 4 feet in width, and 16 feet in length.

Exception: Permit may be issued by the FAHJ for wood storage amounts in excess of this section.

**ADDITIONAL REQUIREMENTS (Sheets Attached)**

- Submit corrected plans with new sheets for recheck to Fire Marshal
- Call Fire Marshal to arrange for a recheck appointment
- Corrected sheets and plans are to be logged-in for a recheck

Fire Marshal Jason M. McBroom Phone: 619 445-2635 X 308

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

Notes:



Supported By

# Reflective Fire Code-Compliant Address Marker Order Form

Please Complete the Following Information:

<b>Name:</b>
<b>Address:</b>
<b>City, State Zip:</b>
<b>Phone Number:</b>

## ADDRESS NUMBER REQUESTED

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Note: If your address has fewer than five digits, please X boxes not used.

## TYPE OF MARKER

Numbers on **One** side of sign: \_\_\_\_\_

Numbers on **Both** sides of sign: \_\_\_\_\_

## TYPE OF MARKER

**Blue** \_\_\_\_\_ **Green** \_\_\_\_\_

A Blue sign informs the fire department that you have a 4" stand pipe and a 5,000 gallon or larger functioning water tank on your property.

**VERTICAL** \_\_\_\_\_ **HORIZONTAL** \_\_\_\_\_

Questions: call 1-469-993-4141

(pick up or delivery to be arranged)

### Mail Form and Payment

Graceful Foundation  
P O BOX 1438  
Alpine, CA 91903

Ver: January 2022

FSC use only:		
	Date	initial
received		
complete		
paid		
delivered		

**Only**  
**\$35<sup>00</sup>**  
**Each**



Signs are 24" x 6" aluminum green or blue reflective background with 4" high 1/2" wide white numbers. Pole NOT included

County of San Diego Consolidated Fire Code 505.1 Residential property must have a visible address placed at appropriate locations to be plainly visible and legible from the street or roadway fronting the property from either direction of approach.