

**Granite Springs  
Wildfire Fire Safe Plan**

**Prepared for:**

**Granade Family Trust  
Douglas G. Granade Trustee**

**EDC File # Z15-0003 / TM15-1527**

**Granite Creek Subdivision**

**Prepared by:**

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**May 4, 2020**

**Granite Springs**

**Approved by:**


  
\_\_\_\_\_  
**Maurice Johnson**  
**Fire Chief**  
**El Dorado Hills Fire Department**

5/4/20  
\_\_\_\_\_  
**Date**

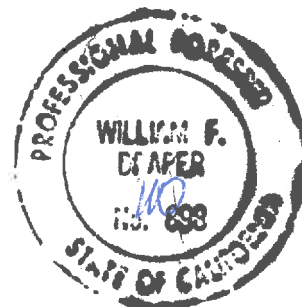
  
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**Darin McFarlan, FCS**  
**Fire Prevention**  
**California Department of Forestry**  
**and Fire Protection**

5/5/20  
\_\_\_\_\_  
**Date**

**Prepared by:**

  
\_\_\_\_\_  
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5/5/20  
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**Date**



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## **Granite Springs**

### **I. PURPOSE AND SCOPE**

Communities are increasingly concerned about wildfire safety. Drought years coupled with flammable vegetation and annual periods of severe fire weather insure the potential for periodic wildfires.

The purpose of this plan is to assess the wildfire hazards and risks of the Granite Springs subdivision, to identify measures to reduce these hazards and risks and protect the native vegetation. There are light fuel hazards and gentle topography associated with this proposed project both on and adjacent to the project.

The possibility of large fires occurring when the subdivision is complete will be greatly reduced. However, small wildfires in the open space areas, along roads and on the lots may occur due to the increase in homeowner uses.

Incorporation of the fire hazard reduction measures into the design and maintenance of the future parcels will reduce the size and intensity of wildfires and help prevent catastrophic fire losses. State and County regulations provide the basic guidelines and requirements for fire safe mitigation measures and defensible space around dwellings. This plan builds on these basic rules and provides additional fire hazard reduction measures customized to the topography and vegetation of the development with special emphases on the interface of homes and wildland fuels.

The scope of the Granite Springs Wildland Fire Safe Plan recognizes the extraordinary natural features of the area and designs wildfire safety measures which are meant to compliment and become part of the community design. The Plan contains measures for providing and maintaining defensible space around future homes and open space. Plan implementation measures must be maintained in order to assure adequate wildfire protection.

Homeowners who live in and adjacent to the wildfire environment must take primary responsibility along with the fire services for ensuring their homes have sufficient low ignitability and surrounding fuel reduction treatment. The fire services should become a community partner providing homeowners with technical assistance as well as fire response. For this to succeed it must be shared and implemented equally by homeowners and the fire services.

### **II. FIRE PLAN LIMITATIONS**

The Wildland Fire Safe Plan for Granite Springs development does not guarantee that wildfire will not threaten, damage or destroy natural resources, homes or endanger residents. However, the full

implementation of the mitigation measures will greatly reduce the exposure of homes to potential loss from wildfire and provide defensible space for firefighters and residents as well as protect the native vegetation. Specific items are listed for homeowner's attention to aid in home wildfire safety.

### **III. GRANITE SPRINGS WILDLAND FIRE SAFE PLAN**

#### **1. PROJECT DESCRIPTION**

Granite Springs subdivision is being proposed to split APN: 087-310-64 into 9 parcels. Lots 1-5 and 9 are to be 10 acres each. Lot 9 has a long driveway coming in from South Shingle Road. Lots 1-5 all have access directly from South Shingle Road. Lots 6-8 will have a minimum of 20 acres each. Lots 6-8 all have access from Brandon Road. Lot 7 and 8 currently have residential structures and driveways. Improvements to the shoulder of Brandon Road have been completed.

This area is historical grazing land. It is rolling hills with grass and scattered oak trees. There are Black oaks, blue oaks and liveoaks. There are large outcroppings of rocks over the project area. No new road construction is anticipated. Each individual parcel will need to comply with El Dorado County Oak Resources Conservation Ordinance.

Each new building must comply with current fire safe standards in the El Dorado Hills County Water District Fire Code, El Dorado County Ordinance 5101 (Vegetation Management and Defensible Space), California Code of Regulations Title 14 (SRA Fire Safe Regulations), California Code of Regulations Title 24, Parts 1-12 (California Buildings Standards Code), and Public Resources Code 4291 (PRC 4291) the state defensible space requirement for maintaining 100' clearances around all structures.

The El Dorado Hills Fire Department (EDHFD) provides all fire and emergency medical services to this project. The California Department of Forestry and Fire Protection (CALFIRE) has wildland fire responsibility in this state responsibility area (SRA). The project is in a "Moderate" Fire Hazard Severity Zone.

#### **2. GOALS**

- A. Modify the continuity of high hazard vegetation fuels.
- B. Reduce the size and intensity of wildfires.
- C. Ensure defensible space is provided around all structures.
- D. Design fuel treatments to minimize tree removal.
- E. Ensure fuel treatment measures are maintained.
- F. Identify fire safe structural features.
- G. Help homeowners protect their homes from wildfire.

#### **3. WILDFIRE MITIGATION MEASURES**

Wildfire mitigation measures are designed to accomplish the Goals by providing and maintaining defensible space and treating high hazard fuel areas. Fire hazard severity is reduced through these mitigation measures. The Wildland Fire Safe Plan places emphasis on defensible space around structures.

The residential construction materials, fire hydrant location and fuel treatment will be extremely important in the development of these new lots. Building setbacks from the property line are to be a minimum of 30' and may vary depending on lot size and house location.

Fuel hazard reduction zones (FHRZ) of at least 30' in width shall be installed along all road frontages. It is the responsibility of each parcel owner to comply with this annual requirement. A 10-foot fuel hazard reduction zone along both sides of all driveways is also required. The fuel treatment prescription and actual area to be treated is shown in Appendix A. These Fuel Hazard Reduction Zones are to be treated annually by June 1. A 30' fuel hazard reduction zone is to be maintained around all residences. Sidewalks and planted landscaping may be a part of this FHRZ (See Appendix A). This is part of the required 100' defensible space. Home hardening is an important part in creating and maintaining defensible space. Any tree canopy over the driveways will have 15' of vertical clearance over the roadways. Nonflammable fencing shall be used.

All dwellings shall be required to install and maintain an approved automatic fire sprinkler system that complies with the standards of California Code of Regulations Title 24, Part 2.5 and EDHFD standards. The project is located in a "Moderate" Fire Hazard Severity Zone. Implementation of Wildland-Urban Interface Fire Areas Building Standards (7A) will be required for the construction of new residences. These standards address roofing, venting, eave enclosure, windows, exterior doors, siding, and decking.

Clearance along the road and around structures is very important and necessary. Fire Safe specifications state that all trees in the fuel hazard reduction zones shall be thinned so the crowns are not touching. Branches on remaining trees shall be pruned up 8 feet as measured on the uphill side of the tree. Brush shall not be allowed to grow under the tree canopy. Grasses shall be kept mowed to a 2-inch stubble annually by June 1 within the zone (FHRZ). Any tree crown canopy over the driveways shall be pruned at least 15 feet up from the driveway surface. Vegetation must be kept back from the driveway edge at least 2'.

Driveways shall be a minimum of 12' wide with 2' of shoulder. Driveways over 150' long shall have a turn-around within 50' of the residence. Driveways over 400' shall have a turnout at the midpoint. Any driveway over 800' shall turnouts every 400'. All driveways shall be able to support 75,000 lbs vehicle load.

Any gate on the driveway shall not be placed any closer to the county road than 30'. Any gate opener must meet the standard established by El Dorado Hills Fire Department.

This area is served by individual wells. All homes must comply with the standard D-003 Fire Water Supply without a Purveyor as adopted by EDHFD. The fire hydrant supported by this system shall be no closer than 50' to the residence. It must be at or near a turn-around/turnout.

The State required Fire Safe clearances (PRC 4291) shall be implemented around all structures. The County ordinance also applies. Clearances may be required at the time of construction by the County. El Dorado Hills Fire Department also has a vacant lot clearance requirement which will apply.

El Dorado County Oak Tree Ordinance applies to the removal of any oak tree on any of the lots. Individual lot owners are responsible for being in compliance with this ordinance. The ordinance does not prevent the pruning of any oak tree that interferes with fire safe maintenance.

**More restrictive standards may be applied by approving El Dorado County Authorities. Approval of this plan does not by itself guarantee approval of this project. All mitigating measures in this plan while integrated must also stand alone. If one measure is determined to be invalid, all other measures shall remain in effect. The Wildland Fire Safe Plan shall be amended to correct any changes if necessary.**

#### **Mitigation Measures:**

- **Driveways shall be 12 feet wide. Driveways shall comply with the Fire Code weight standards (75,000 lbs).**
  - a. **Responsibility- builder/homeowner**
- **All homes shall have Class A listed roof covering.**
  - a. **Responsibility- builder/homeowner**
- **Decks that are cantilevered over the natural slope shall be enclosed.**
  - a. **Responsibility- homeowner (See Appendix B for guidelines)**
- **The houses shall be constructed with exterior wall sheathing that shall be rated noncombustible.**
  - a. **Responsibility-builder**
- **Windows and glass doors of the structure shall have tempered glass and fire-resistant frames.**
  - a. **Responsibility-builder**
- **Rafter tails shall be enclosed with noncombustible material on the sides of the structure.**
  - a. **Responsibility-builder**
- **Gutters and downspouts shall be noncombustible.**
  - a. **Responsibility-builder**
- **Attic and foundation vents shall be covered with 1/8 inch, or less, noncombustible mesh and horizontal to the ground.**
  - a. **Responsibility-builder**

## **2. OTHER FIRE SAFE REQUIREMENTS**

- A. **Each new property owner prior to construction shall be required to submit site and fire sprinkler system plans for review and approval to EDHFD.**

- B. 30' fuel hazard reduction zone along the county road frontage of each new lot shall be installed and annually maintained by June 1 to the Fire Safe specifications. Sidewalks and landscaping is acceptable in the zone along the driveways. Tree canopy over the road and driveways shall be cleared up 15'.
- C. Water tanks and fire hydrants shall be in compliance with the most recently adopted Standard D-003, Fire Water Supply without a Purveyor.
- D. A Notice of Restriction (NOR) shall be filed with the final parcel map which stipulates that a Wildland Fire Safe Plan has been prepared and wildfire mitigation measures must be implemented. EDHFD shall review and approve this NOR prior to the recordation of the final map with the County of El Dorado.
- E. The project shall meet all the Public Resource Codes 4290 as amended (the 2020 SRA Fire Safe Regulations- Article 2 Access, Article 3 Signing, Article 4 Water, Article 5 Fuels), County and Fire Department ordinances unless amended, revised or waived.
- F. The home/property owners are responsible for any future fire safe or building code changes adopted by the State or local authority.
- G. Only fire rated composite deck material, wood or non-combustibles shall be allowed for decks.
- H. All fencing shall be noncombustible.
- I. All vacant lots shall be treated to the standard established by the Weed Abatement Resolution of the Fire Department.
- J. Gates shall have an opticom activated automatic opener and a Knox key switch and be in compliance with Standard B-002 as adopted by the fire department. The gate shall lock open if there is a power failure.
- K. Gates shall be 2 feet wider than the driveway.
- L. The El Dorado Hills Fire Department shall review the Wildland Fire Safe Plan every 5 years to determine if additional Fire Safe measures need to be implemented.

## **Appendix**

### **APPENDIX A**

#### **FUEL HAZARD REDUCTION ZONE TREATMENTS**

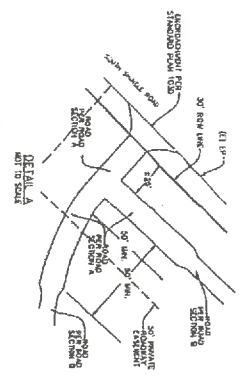


**Green-** landscaped, irrigated and regularly maintained or cut to a 2" stubble annually by June 1.

**Red-**annually by June 1 treat all grasses within 30' of the edge of the County road to a 2" stubble, remove all brush, limb trees to 8' and maintain tree canopy separation.

#### **FUEL HAZARD REDUCTION ZONES**

# **TENTATIVE SUBDIVISION MAP** A PORTION OF THE SOUTH 1/2 OF SECTION 36 T2N R2E AND A PORTION OF THE NORTH 1/2 OF SECTION 2 AND A PORTION OF THE NORTHEAST 1/4 OF SECTION 3 T8N R2E, NDM, COUNTY OF EL DORADO, CALIFORNIA JULY 2007 SCALE 1" = 200' SHEET 1 OF 1



**10' FHRZ along both sides of driveway**  
**Landscaped or cut to 2" stubble**  
**30' along County road frontage**  
**Cut to a 2" stubble. Limb trees up 8'**

DATE TALK	
DATE	TIME
11	1972-5-13
11	11:30

## **APPENDIX B**

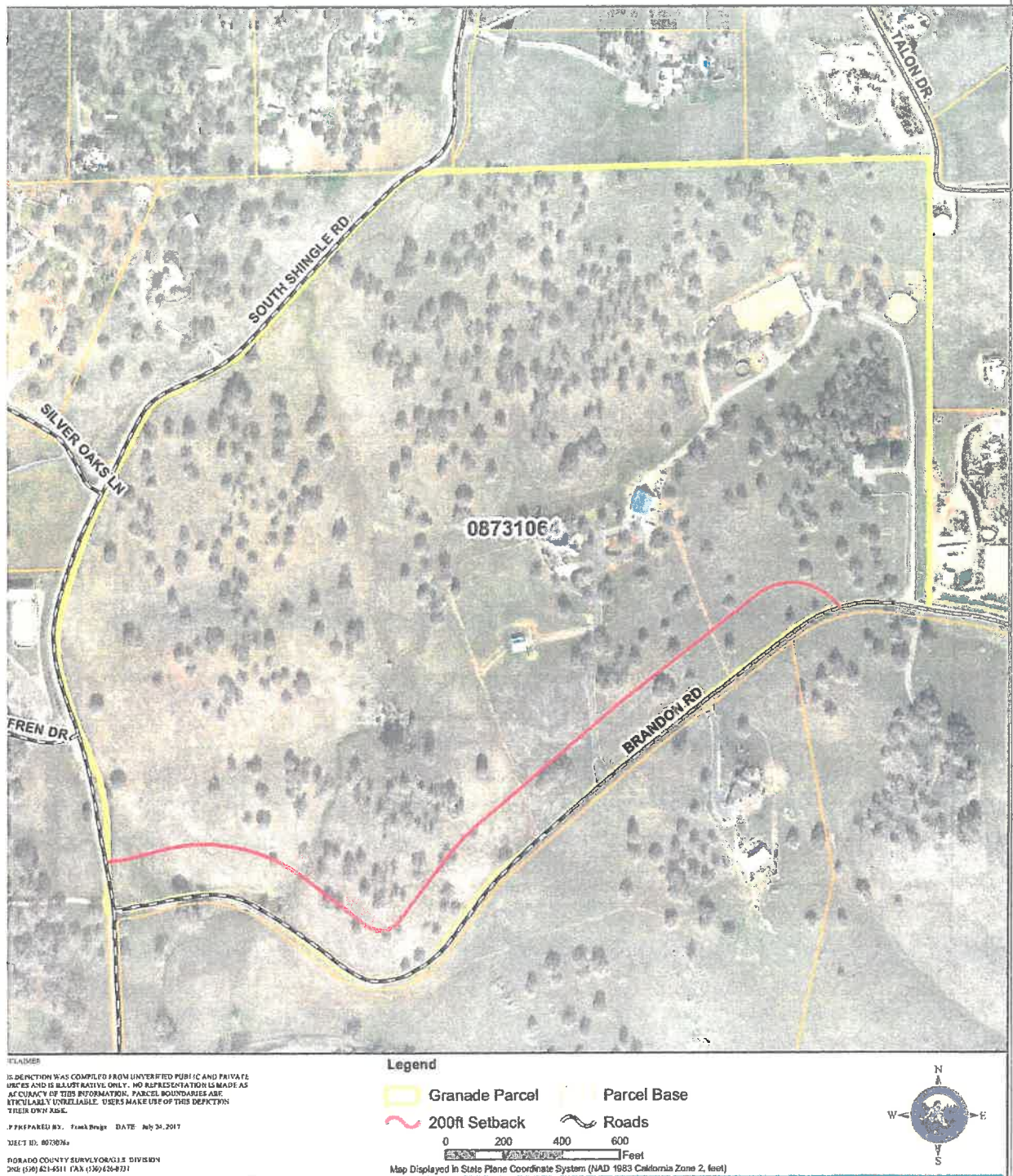
### **ENCLOSED DECK GUIDELINES**

The purpose of enclosing the underside of decks that are cantilevered out over the natural slope is to help prevent heat traps and fire brands from a wildfire igniting the deck or fuels under the deck.

1. Does not apply to decks that are constructed using fire resistant materials such as concrete, steel, stucco etc.
2. Any deck shall not include non fire rated composite deck material.
3. This applies to decks one story or less above natural slopes.
4. Combustible material must not be stored under the deck.

# GRANADE

## Aerials: 2011



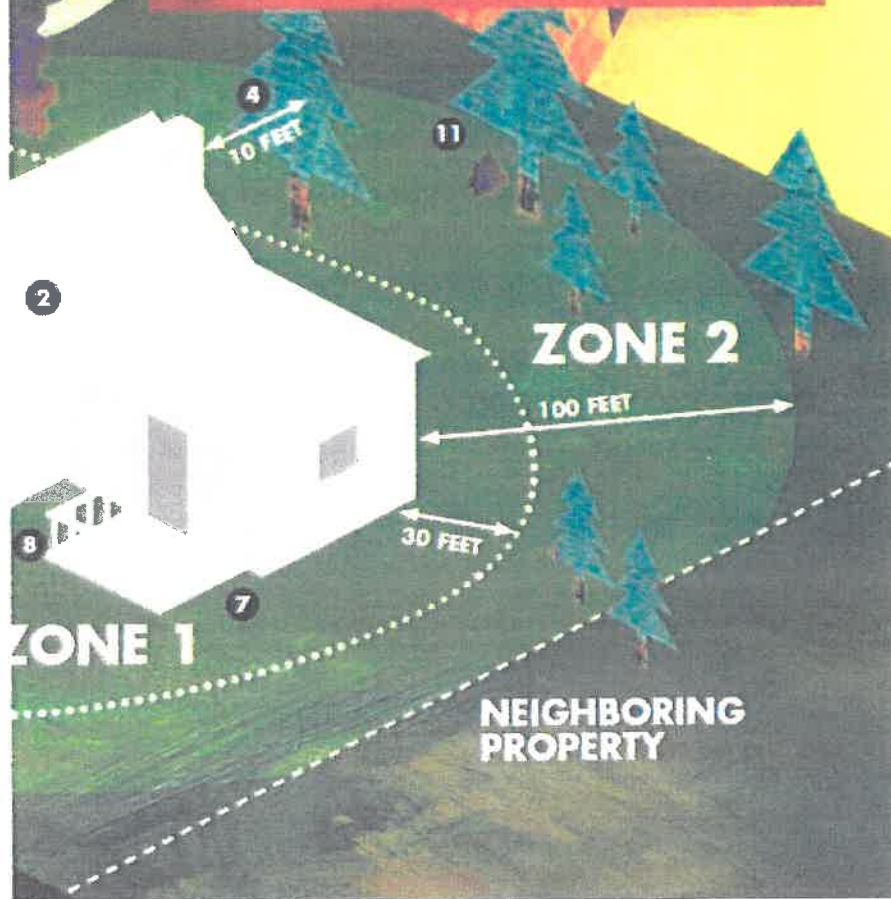




CAL FIRE GUIDELINE

## KNOW THE LAW BE FIRE SMART

100 FEET OF DEFENSIBLE SPACE IS REQUIRED UNDER THE PUBLIC RESOURCES CODE (PRC) 4291. CALIFORNIA BUILDING CODE CHAPTER 7A REQUIRES CERTAIN CONSTRUCTION MATERIALS AND METHODS FOR HOMES IN WILDLAND AREAS. BE SURE TO CONTACT YOUR LOCAL FIRE DEPARTMENT FOR ADDITIONAL REQUIREMENTS TO ENSURE YOUR HOME IS COMPLIANT WITH THE LAW. [READYFORWILDFIRE.ORG/THELAW](http://READYFORWILDFIRE.ORG/THELAW)





# EL DORADO COUNTY REGIONAL FIRE PROTECTION STANDARD

## Fire Water Supply without a Purveyor Residential & Commercial

STANDARD #D-003

EFFECTIVE 01-04-2016

### 1. PURPOSE

1.1. The California Fire Code (CFC) requires an approved water supply capable of providing the required fire flow for fire protection to premises upon which facilities, buildings or portions of buildings which are hereinafter constructed or moved into within the jurisdiction. The CFC further explains that the water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow. The CFC gives the minimum fire flow for residential one- and two-family dwellings as 1,000 gallons per minute for 60 minutes for dwellings 3,600 square feet or smaller. Many areas of El Dorado County do not have a water purveyor with piped underground supply lines to provide this fire flow. The tank size required to accomplish this minimum supply would be 60,000 gallons and the system would require a fire pump rated at 1000 gallons per minute for a single home. The CFC allows this supply to be reduced by 50% when the home is equipped with automatic fire sprinklers (AFS). This would still require 30,000 gallons of water storage plus the pumping system. The CFC gives the fire chief the authority to reduce the fire flow requirements for buildings in rural areas where the development of full fire flow requirements is impractical. The purpose of this standard is to communicate the *minimum* level of water storage and delivery system requirements for one- and two-family dwellings that can be approved under the reduced fire flow allowance within the fire jurisdictions that adopt this standard.

### 2. SCOPE

2.1. This standard identifies *minimum* fire water supply requirements for one- and two-family dwellings and associated buildings in rural and suburban El Dorado County where an adequate reliable water supply does not exist. The CFC allows the fire code official to use the NFPA 1142 standard or the California Wildland-Urban Interface Code to develop these modified local standards.

### 3. EXEMPTIONS

3.1. Where El Dorado County has determined that no permit is required for construction.

### 4. AUTHORITY

- 4.1. California Fire Code
- 4.2. NFPA 1142, NFPA 22, NFPA 24
- 4.3. California Wildland – Urban Interface Code



## EL DORADO COUNTY REGIONAL FIRE PROTECTION STANDARD

### AUTOMATIC & MANUAL GATES ON FIRE ACCESS ROADWAYS & DRIVEWAYS

STANDARD #B-002

EFFECTIVE 03-30-2009

REVISION 02-21-2019

#### PURPOSE

It is the intent of this standard to provide for quick, reliable and easy access of emergency response fire apparatus into gated communities.

#### SCOPE

This standard shall apply to all automatic gates in El Dorado County installing access control devices or systems.

#### AUTHORITY

Chapter 5, Section 503 of the California Fire Code, 2016 Edition, requires that the installation of security gates across a fire apparatus access road shall be approved by the Fire Chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

The Fire Chief is authorized to modify any of the provisions of this standard upon application in writing by the owner, a lessee, or a duly authorized representative where there are practical difficulties in the way of carrying out the provisions of this standard, provided that the spirit of the standard shall be complied with and public safety is secured. The particulars of such modification and the decision of the Fire Chief shall be entered upon the records of the Department and a signed copy shall be furnished to the applicant.

#### DEFINITIONS

**Roadway** - any surface designed, improved, or ordinarily used for vehicle travel

**Driveway** - a vehicular access that serves no more than two buildings, with no more than three dwelling units on a single parcel, and any number of accessory

**AHJ** - agency having jurisdiction



## Driveway Turnouts and Turn-arounds

April 12th, 2019

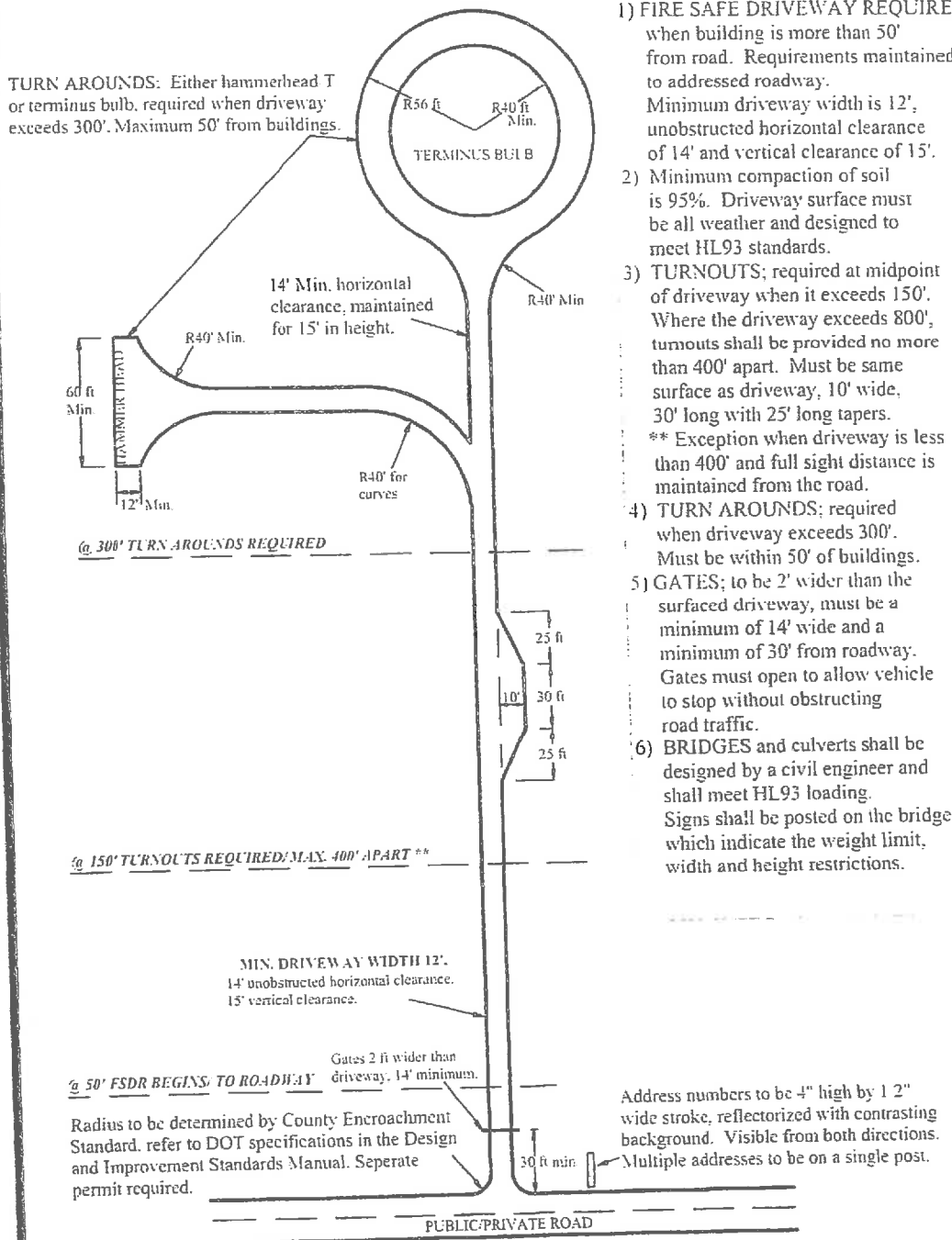
### FIRE SAFE DRIVEWAY REGULATIONS

References: California Code of Regulations Title 14, Div. 1.5, CH. 7, SUBCH. 2  
and County of El Dorado Design and Improvement Standards Manual.

SINGLE PARCEL

#### GENERAL NOTES

- 1) FIRE SAFE DRIVEWAY REQUIRED when building is more than 50' from road. Requirements maintained to addressed roadway. Minimum driveway width is 12', unobstructed horizontal clearance of 14' and vertical clearance of 15'.
- 2) Minimum compaction of soil is 95%. Driveway surface must be all weather and designed to meet HL93 standards.
- 3) TURNOUTS; required at midpoint of driveway when it exceeds 150'. Where the driveway exceeds 800', turnouts shall be provided no more than 400' apart. Must be same surface as driveway, 10' wide, 30' long with 25' long tapers. \*\* Exception when driveway is less than 400' and full sight distance is maintained from the road.
- 4) TURN AROUNDS; required when driveway exceeds 300'. Must be within 50' of buildings.
- 5) GATES; to be 2' wider than the surfaced driveway, must be a minimum of 14' wide and a minimum of 30' from roadway. Gates must open to allow vehicle to stop without obstructing road traffic.
- 6) BRIDGES and culverts shall be designed by a civil engineer and shall meet HL93 loading. Signs shall be posted on the bridge which indicate the weight limit, width and height restrictions.





# EL DORADO HILLS FIRE DEPARTMENT

*"Serving the Communities of El Dorado Hills, Rescue and Latrobe"*

May 4, 2020

CDS Fire Prevention Planning  
Attn: William F. Draper  
4645 Meadowlark Way  
Placerville, CA 95667

Project: **Granite Creek Subdivision, EDC File # Z15-0003 / TM15-152**

SUBJECT: **Granite Springs Wildfire Fire Safe Plan \_ Approval by EDHFD**

Dear Bill:

The Fire Protection Plan (Fire Safe Plan) for the Granite Creek subdivision project has been reviewed by this agency for conformance with El Dorado Hills County Water District Fire Code § 4903.1<sup>1</sup>. The Fire Safe Plan has been **Approved with One Condition**. The condition of this approval is described further for your awareness:

1. Prior to Final Map approval project applicant shall provide proof to the Fire Department that all required Notice of Restriction documents related to the Fire Safe Plan have been recorded with the County of El Dorado.

Sincerely,

Ronald A. Phillips  
Interim Fire Marshal/Division Chief

CC: County of El Dorado Planning & Building Department

Attachment: Granite Springs Wildfire Fire Safe Plan

<sup>1</sup> As adopted by Ordinance 2019-1