

**Watermark La Reserve  
APN 104-240-22**

**Wildfire Fire Safe Plan**

**Prepared for:**

**Richard Thompson**

**4645 Meadowlark Way  
Placerville, CA 95667**

**Prepared by:  
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William F. Draper  
Registered Professional Forester  
#898**

**January, 2006**

**Tentative Map  
APN 104-240-22**

Plan Approved by:



**Fred Russell  
Division Chief-Fire Marshall  
El Dorado Hills Fire Department**

3-13-06

Date

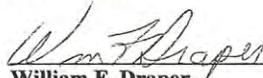


**Ben Scott, Battalion Chief  
Fire Prevention  
California Department of Forestry  
and Fire Protection**

3/9/06

Date

Prepared by:



**William F. Draper  
RPF 898**

3-13-06

Date



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## **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 this twenty-acre development and to identify measures to reduce these hazards and risks and protect the native vegetation. There are moderate fuel hazards and topography associated with this proposed development both on and adjacent to the project.

The possibility of large fires occurring when this project is complete will be greatly reduced. However, small wildfires in the open space areas and on the larger lots may occur due to the increase in public uses. The proximity to the recreation use on Folsom Lake is a constant threat to these parcels.

Incorporation of the fire hazard reduction measures into the design and maintenance 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 Thompson Tentative Map Wildfire 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 development design. The Plan contains measures for providing and maintaining defensible space around future homes. 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 Wildfire Fire Safe Plan for this 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. WILDFIRE FIRE SAFE PLAN**

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

This twenty-acre parcel is located within the unincorporated community of El Dorado Hills on a generally west facing slope and east of Folsom Lake. This project is a four way split creating two 5.08 parcels and two 4.92 parcels. The property lies north of Zee Estates and south of Watermark. Access is from Salmon Falls Road, through the Watermark subdivision on Chateau Montelana; left on Cain Five Drive to the property. These roads are 24 feet wide with 8 foot shoulders. Access can also come from Hidden Bridge Drive through Zee Estates. These roads are 21 feet wide with the shoulders overgrown and encroaching on the roadway. The key topographic features are moderate slopes and an intermittent drainage leading to Folsom Lake. Slopes range generally 20-30% with some steeper areas.

Structural fire protection is provided by the El Dorado Hills Fire Department and wildland fire protection by the California Department of Forestry and Fire Protection (CDF). A fire hydrant system will serve the new area.

#### **2. PROJECT VEGETATION (FUELS)**

For wildfire planning purposes the vegetation is classified as follows:

- (a) ground fuels - chemise, manzanita, annual grasses with scattered down trees and limbs
- (b) over story - Gray Pines, cottonwoods and Live Oak
- (c) riparian- grasses and forbes

The heaviest fuel loading is throughout the property. There are a few down trees and many young Gray pines. The problem of fuel laddering is very significant. Gray pines are extremely hazardous from a fire ignition and sudden deterioration. These trees and the large quantities of chemise and manzanita set a highly flammable situation.

#### **3. PROBLEM STATEMENTS**

##### **A. The ground fuels on the western facing slopes will ignite and have a rapid rate of spread.**

Fire in the ground fuels on the slopes is the most serious wildfire problem for this project.

##### **B. A high percentage of the project has moderate slopes, which increases the rate of wildfire spread.**

Wildfires rate of spread increases dramatically as slope increases. This project has moderate brushy slopes.

##### **C. Risk of fire starts will increase with development.**

The greatest risk from fire ignition will be along roads, in the open space areas around the lake and on large lots as human use on these areas increase.

**D. Provisions must be made to maintain all fuel treatments.**

The wildfire protection values of fuel reduction are rapidly lost if not maintained. Annual maintenance by June 1 of each year is necessary.

**E. Typical home design and siting often does not recognize adequate wildfire mitigation measures.**

A review of many wildfires has conclusively shown that most home losses occur when: (1) there is inadequate clearing of flammable vegetation around a house, (2) roofs are not fire resistant, (3) homes are sited in hazardous locations, (4) firebrand ignition points and heat traps are not adequately protected and (5) there is a lack of water for suppression.

**4. 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.

**5. 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 Wildfire Fire Safe Plan places emphasis on defensible space around structures.

The Thompson parcel is sandwiched between Folsom Lake, Zee Estates, an older established development, and Watermark a newer development. Four lots are planned that average about five acres in size and all are on slopes of approximately 20%. Fuels are dense stands of chemise and manzanita with Gray pines scattered throughout. It is recommended that all chemise, manzanita and Gray pines be eliminated due to their highly flammable properties. Primary access is through Watermark. The roads shall meet the 24-foot width with 8-foot fuel treatment zones on each side. No roadside parking will be allowed. Egress will also be provided from the south via Hidden Bridge Drive. From Hidden Bridge Drive is the existing Watermark secondary access, an 18-foot-wide graveled road.

**Mitigation Measures:**

- **Lots over 1 acre shall be landscaped to Firescaping Standards Zones I and II (150 feet).**
  - a. **Responsibility- homeowner within one year of occupancy**

- All fences that border on the open space areas adjacent to Folsom Lake shall be of noncombustible material. Pedestrian gates to the open space shall be provided and may be lockable.
  - a. Responsibility- homeowner
- Driveways over 150 feet shall provide for a turnout near the midpoint of the driveway. Vertical clearance for the entire length of the driveway will be 15 feet.
  - a. Responsibility- homeowner
- All residences shall have a residential fire sprinkler system built into the residence and approved by the AHJ.
  - a. Responsibility- homeowner
- All homes shall have Class A listed roof assembly and siding of fire resistant material. One/two coat stucco over foam insulation is not acceptable.
  - a. Responsibility- homeowner
- Decks that are cantilevered over the natural slope shall be enclosed.
  - a. Responsibility- homeowner (See Appendix C for guidelines)
- El Dorado Hills Fire Department Weed Abatement Resolution shall apply to vacant lots adjacent to lots with structures.
  - a. Responsibility- lot owner and Fire Department
- All lots shall have a 30-foot setback for buildings and accessory buildings or to all property lines which ever is less and a 30-foot setback from the center of the road. (See Item 6, page 7 with lots for setback exception)
  - a. Responsibility- builder

**6. BUILDING SETBACKS ON ONE ACRE OR LARGER LOTS**

State SRA Regulations (1276.01) requires a minimum of a 30-foot setback from all property lines or to the center of the road for lots 1 acre or larger.

All the lots can not meet the State setback on one or more sides. Criteria for identification of these lots are; (a) access road frontage less than 100 feet, (b) steep topography, (c) rock outcroppings, (d) lot shape.

**Request for SRA Exception**

**As authorized representative, the consultant requests an Exception to 1276.01, Setback Standards for the 1 acre or larger lots.**

**Mitigation practices providing the same overall practical effect as 1276.01 Regulations shall be required by the El Dorado Hills Fire Department. Contact the Fire Department for the specific same practical effects requirements.**

**Approval of this Plan by the CDF and the El Dorado Hills Fire Department will constitute the approval of this Exception.**

**7. OTHER FIRE SAFE REQUIREMENTS**

- A. Every 5 years the Fire Department shall review open space areas with the HOA to determine if additional fuel hazard reduction work is necessary.**
- B. A Notice of Restriction shall be filed with the final subdivision map which stipulates that a Wildfire Fire Safe Plan has been prepared and wildfire mitigation measures must be implemented.**
- C. The project shall meet all the Public Resource Codes 4290 as amended (the 1991 SRA Fire Safe Regulations- Article 2 Access, Article 3 Signing, Article 4 Water, Article 5 Fuels), County and Fire Department ordinances.**
- D. A legal entity (HOA, CSD etc.) shall be created with authority for maintaining and enforcing all fuel treatment mitigation measures if homeowners fail to implement or maintain. Covenants, Conditions and Restrictions must be developed to ensure the enforcement of the structural Fire Safe regulations.**
- E. The water hydrant system shall meet the California Fire Code specifications to water volume and pressure.**
- F. The homeowner/property owner is responsible for any future fire safe or building code changes adopted by the State or local authority when a new building permit is issued.**
- G. Driveways over 16% grade shall be paved.**
- H. All driveways must be a minimum of 12 feet wide.**
- I. All gates must be at least 2 feet wider than the driveway they gate, and 30-feet off of the roadway.**
- J. Roadway must be post “No Parking”.**
- K. Vegetation on road shoulders shall be maintained annually by June 1.**

**F. Appendix**

## Appendix A

### THOMPSON TENTATIVE MAP Firescaping Standards

Firescaping is an approach to landscaping to help protect homes from wildland fires. The goal is to create a landscape that will slow the advance of a wildfire and create a Defensible Space that provides the key point for fire fighting agencies to defend the home. This approach has a landscape zone surrounding the home containing a balance of native and exotic plants that are fire and drought resistant, help control erosion, and are visually pleasing. Firescaping is designed not only to protect the home but to reduce damage to oaks and other plants.

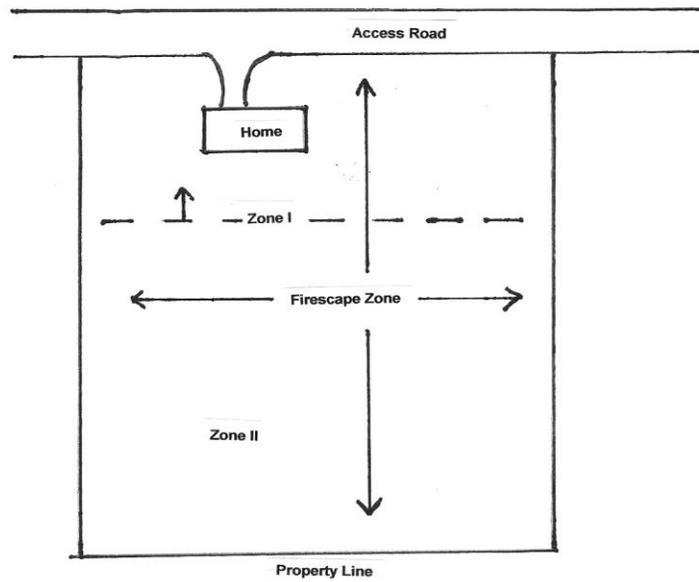
#### Zone I

The zone extends to not less than 100 feet from the house **or to the property line** in all directions and has a traditional look of irrigated shrubs, flowers gardens, trees and lawns. All dead trees, brush, concentrations of dead ground fuels (tree limbs, logs etc. exceeding 1 inch in diameter) are removed. All native oak trees and brush species are pruned up to 6-8 feet above the ground as measured on the uphill side but no more than 1/3 of the live crown. The plants in this zone are generally less than 18 inches in height, must be slow to ignite from wind blown sparks and flames. Such plants produce only small amounts of litter and retain high levels of moisture in their foliage year around. Native and exotic trees are permitted inside the Zone except for Gray pines, but foliage may not be within 10 feet of the roof or chimney. Grass and other herbaceous growth within this zone must be irrigated or if left to cure must be mowed to 2-inch stubble, chemically treated or removed. Such treatment must be accomplished by June 1, annually. This zone has built in firebreaks created by driveways, sidewalks etc.

#### Zone II

This Zone adds 50 feet to Zone I and extends a minimum of 150 feet from the house in all directions, **or to the property line** and is a transition area to the outlying vegetation. The zone is a band of low growing succulent and ground covers designed to reduce the intensity, flame length and rate of spread of an approaching wildfire. Irrigation may be necessary to maintain a quality appearance and retain the retardant ability of the plants. All dead trees, brush, concentration of dead ground fuels (tree limbs, logs etc.) exceeding 2 inches in diameter are removed. Annual grasses are mowed after they have cured to a 2-inch stubble by June 1, annually. Native trees and brush species are preserved and pruned of limbs up to 8 feet above the ground as measured on the uphill side. If Gray pines are to remain in this zone, they must be isolated from surrounding brush species by at least 10 feet on all sides of the pine.

**APPENDIX A-1  
FIRESCAPING ZONES  
EXHIBIT**



**Typical Lot in Chemise Woodland**  
(schematic, no scale)

## **APPENDIX B**

### **THOMPSON TENTATIVE MAP FUEL TREATMENT SPECIFICATIONS**

**For**

### **CHAMISE WOODLAND VEGETATION**

#### **Within The Designated Fuel Treatment Areas**

1. Leave all live trees **EXCEPT** Gray pines.
2. Remove all dead trees.
3. Remove all brush.
4. Prune all live trees of dead branches and green branches 8 feet from the ground as measured on the uphill side of the tree, except no more than 1/3 of the live crown is removed. All slash created by pruning must be disposed of by chipping or hauling off site.
5. Annually by June 1, reduce the grass or weeds to a 2-inch stubble by mowing, chemical treatment, disking or a combination of treatments.
6. Mature, multi stem Live Oak trees: remove all dead limbs and stems, cut off green stems at 8 feet above the ground as measured on the uphill side that arch over and are growing towards the ground.
7. Gray pines in Zone II or farther out from structures must be isolated from any chamise or manzanita by at least 10 feet.

## **APPENDIX C**

### **THOMPSON TENTATIVE MAP**

### **ENCLOSED DECK GUIDELINES**

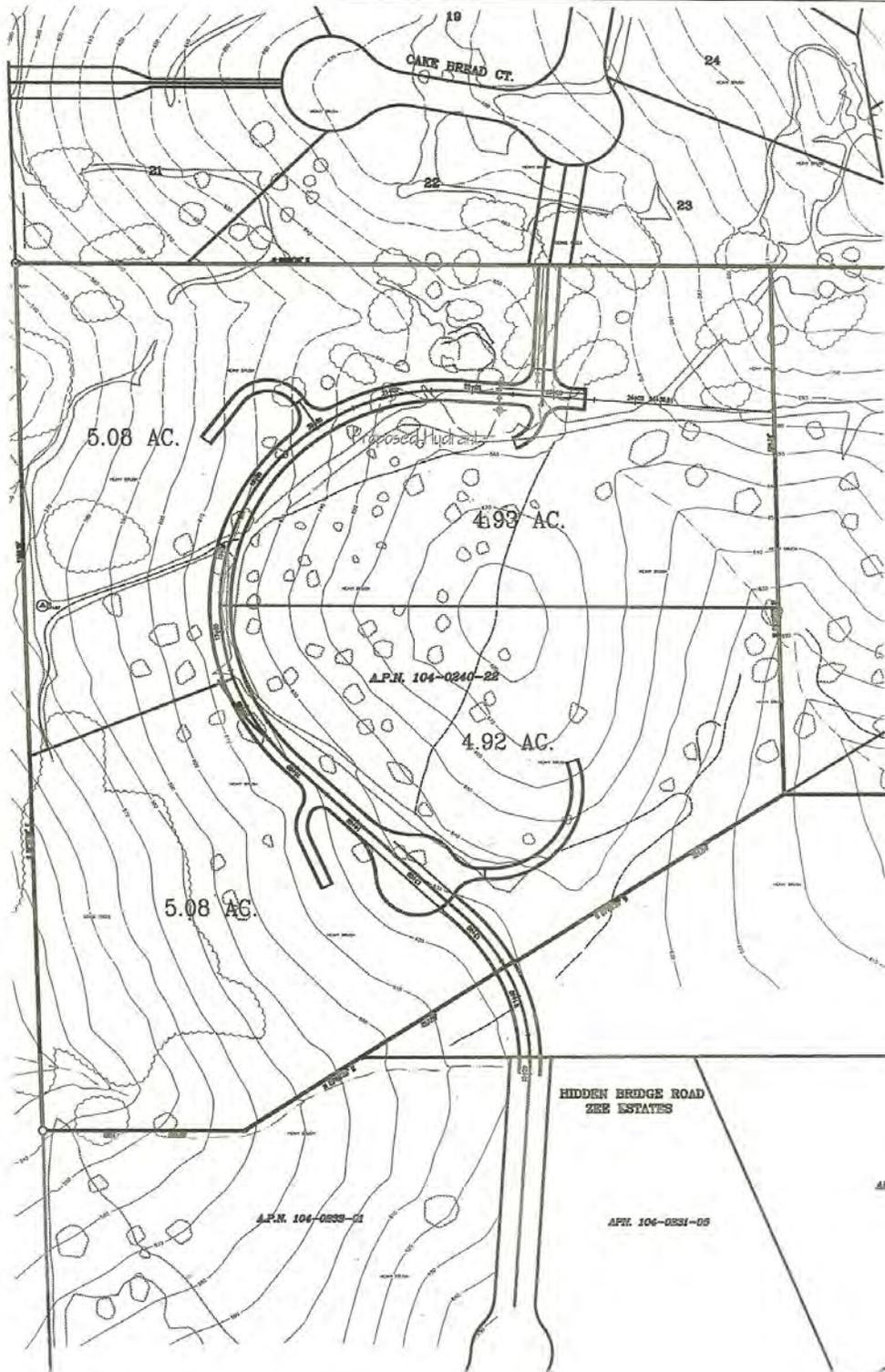
The purpose of enclosing decks that are cantilevered out over the natural slope is to help prevent heat traps and fire brands from a wildfire igniting the deck or fuels under the deck.

1. Does not apply to decks that are constructed using fire resistant materials such as concrete, steel, stucco etc.
2. Applies to decks one story or less above natural slopes.
3. Combustible material must not be stored under the deck.

**THOMPSON TENTATIVE MAP  
ROAD USE AGREEMENT**

**(See attachment)**

**THOMPSON TENTATIVE MAP  
APN 104-240-22**



## THOMPSON TENTATIVE MAP

### NON-GATED SUBDIVISION STATEMENT

Richard and Karen Thompson have agreed to process the Subdivision - *Richard and Karen Project APN# 104-240-22, El Dorado County*, as a Non-Gated Subdivision per request of the Eldorado Hills Fire Department. All private driveway gates are to meet Fire Safety and County Codes.

Richard L. Thompson                      2-14-2006  
Richard Thompson                      Date

Karen Thompson                      2-14-2006  
Karen Thompson                      Date