# SIGNATURE PAGE FOR HIGHLAND VIEW

# UNIT NO. 7

# WILDFIRE SAFETY PLAN

Prepared and Submitted by:

**Registered Professional Foresters** Douglas R. Leisz, License 249 Eugene E. Murphy, License 1164

Signature

Douglas R. Leisz

**Registered Professional Forester** 

License Number 249 Placerville, California

/Signature

Eugene E. Murphy

**Registered Professional Forester** 

License Number 1164

Cameron Park, California

Plan Approved by:

California Department of Forestry and Fire Protection

El Dorado-Hills Fire Department

Signature

Date

Fred Russell

**Battalion Chief** 

El Dorado Hills Fire Department

Signature

William Smith

**Battalion Chief, Fire Prevention** 

California Department of

Forestry and Fire Protection

#### 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 Highland View Unit 7 development and its environs, and to identify measures to reduce these hazards and risks and protect the native vegetation. There are moderate fuel loads and topography associated with the proposed development both on and adjacent the project.

Incorporation of the fire hazard reduction measures into the design and maintenance of the future villages will reduce the size and intensity of wildfires and help prevent catastrophic fire losses. State, County and Fire Department regulations provide the basic guidelines and requirements for safe, 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 with wildland fuels.

The scope of Unit 7 Wildfire Safety 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. Plan implementation measures for reduction of fire hazard severity must be maintained in order to assure adequate wildfire protection for the future villages.

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 Safety Plan for the Highland View Unit 7 development does not guarantee that wildfire will not threaten, damage or destroy natural resources, future 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 attention to aid in home wildfire safety.

#### III. THE HIGHLAND VIEW UNIT 7 WILDFIRE SAFETY PLAN

#### 1. PROJECT DESCRIPTION

Highland View Unit 7 is the final phase of the Highland View Planned Community. The project is 14.1 acres located in the unincorporated community of El Dorado Hills. The project lies immediately adjacent to the Highland View Units 5 and 6 which are under construction. The eastern and southern boundaries are adjacent to vacant lands.

The Unit is planned for 14 lots that will average 2/3 of an acre in size. Lot A is dedicated for a water tank which exists. Access to all lots will be from Aberdeen Lane now under construction. All project roads will be public. No gates are planned. Unit 7, Aberdeen Lane provides ingress and egress to the north and south.

The key topographic feature is an intermittent drainage that is adjacent and parallels the eastern boundary of the majority of the lots. Elevations range from 960 to 1060 feet. Slopes are gentle.

All of the residential lots will be graded. Graded lots will have homes constructed by a "Builder". Structural fire protection will be 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 development. All roads will have Type 1 curbs and gutters, but no sidewalks. A Home Owners Association (HOA) will be established.

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

The vegetation is oak woodland. For wildfire planning purposes the vegetation is classified as follows:

- (a) ground fuels annual grasses with scattered down trees, limbs, slash and a few "jackpots" of fuel.
- (b) understory scattered pockets of brush (Poison Oak, Coffee Berry).
- (c) overstory mostly Live Oak with a few Gray Pine, and California Buckeye.

A fuel ladder from the ground fuels to the overstory oaks exists over the read portion of all lots. A large number of the oaks have a high ratio of dead limbs to green limbs. The California Department of Forestry and Fire Protection classifies the area as a Medium Fire Hazard Severity Zone.

#### 3. PROBLEM STATEMENTS

#### A. The grass fuels will ignite easily and have a rapid rate of spread.

Fire starts in the in flashy grass fuels, is the most serious wildfire threat for the project.

#### B. The north/south drainage near the eastern boundary will spread fire rapidly.

Wildfire rate of spread increase dramatically in drainages

C. Risk of fire starts will increase with development.

The greatest risk from fire ignitions will be along roads and on vacant adjacent Lands due to people and their activities.

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

The wildfire protection values of fuel modification are rapidly lost if not Maintained annually.

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 lack of water for suppression.

#### 4. FIRE BEHAVIOR ANALYSIS

Proper planning requires an estimate of how wildfire would behave within the project area. This was accomplished through study of a standard Fire Behavior Fuel Model 2, Timber. Fire spread in this Model is governed by the fine, very porous and continuous herbaceous fuels that have cured. Concentrations of dead-down woody material will contribute to possible torching out of trees, spotting and crowning. This model with winds of 5 mi./hr, fuel moisture content of 8 percent indicates a rate of spread of 2000 feet per hour and flame lengths of 6 feet The consultants incorporated the model outputs in the design of the fuel treatments.

#### 5. 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.

### 6. 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 Safety Plan places emphasis on defensible space around structures.

#### A. Fuel Management

#### 1. All Residential Lots

a. Must implement Firescaping Zones I (80 feet) to the rear of all structures or to the property lines. Firescaping Standards are displayed in Appendix B.

Responsibility - homeowner within one year of occupancy.

b. Fuels from the edge of Firescaping Zone I, outward to the rear lot line must be treated to the Oak Woodland Fuel Treatment Specifications. Specifications displayed in Appendix A.

Responsibility - homeowner within one year of occupancy.

#### 2. Water Tank Lot A

a. Must have annual grasses reduced to a 2 inch stubble by June 1, annually for 30 feet outward from the tank or to property lines.

Responsibility - EID

3. El Dorado Hills Fire Department Weed Abatement Resolutions will be enforced on all vacant lots adjacent to occupied lots.

Responsibility - lot owner

#### B. Homes

1. All homes must have Class A listed roofing and stucco siding.

Responsibility - homeowner

2. Wooden decks, one story and under, that are cantilevered out over the natural slope must have the open space enclosed with fire resistant material. See guidelines in Appendix C

Responsibility - homeowner

3. SRA Fire Safe Regulation 1276.01, requires that all structures on lots over 1 acre in size must have a building setback of 30 feet from all property lines and or center of the road.

Lot 244 is 1.238 acres and due to its triangular shape, 14% slope can

not reasonably obtain a 30 foot building setback on its southwestern side lot line without extensive cutting into the hillside and endangering oak trees on the lot. The 30 foot setback will be achieved on the other three property lines. The County has zoned Unit 7 as R-20,000 - "Minimum yard setbacks: front, thirty feet; sides ten feet, except the side yard shall increase one foot for each additional foot of building height in excess of twenty-five feet (25') rear (30'); (ord.4236,1992 "

The applicant under Article 1207.07 of the SRA Regulations requests an Exception to the 30 foot setback for the future home on the southwestern side lot of line of Lot 244 to a 10 foot setback.

Mitigation Measures Providing The Sane Practical Effect (1270.07) are:

- 1. R20,000 will require a minimum of 10 feet on the one side yard all other setbacks will be 30 feet.
- 2. Irrigated landscaping will be required from the homes west side outward to the lot line.
- 3. House siding will be stucco.
- 4. Fence adjacent the home on the southwestern lot line will be of noncombustible material.
- 5. The pad fill slope that encroaches on adjacent Lot 242 will be irrigated landscaping.

The above mitigation measures offer the Same Practical Effect and support an Exception to the SRA 1276.01 standards. Approval of this Wildfire Safety Plan by the California Department of Forestry and Fire Protection, the inspection authority, constitute the approval of the exception.

4. If rear lot lines have fences, the fences must be of noncombustible material.

Responsibility - homeowner

5. Lot 244 driveway appears to exceed 150 in length. A turnout near the midpoint of the driveway is required.

Responsibility - homeowner

#### C. Other Fire Safe Requirements

1. Every 5 years the Fire Department shall review lots with the HOA to determine if additional fuel hazard reduction work is necessary in the area to the rear of lots bordering the drainage.

- 2. A Notice of Restriction must be filed with the final subdivision map which stipulates that a Wildfire Safety Plan has been prepared and wildfire mitigation measure must be implemented.
- 3. The project must meet all the Public Resource Codes 4290 (the 1991 SRA Fire Safe Regulations Article 2. Access, Article 3. Signing, Article 4. Water, Article 5, Fuels, and County and Fire Department ordinances.
- 4. The HOA must have authority for maintaining and enforcing the 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 requirements.

IV. Appendix

#### APPENDIX A

#### Highland View Unit 7

#### OAK WOODLAND FUEL TREATMENT SPECIFICATIONS

For

#### RESIDENTIAL LOTS & OPEN SPACE LOTS

- 1. Leave all live trees.
- 2. Remove all dead trees, down trees, and tree limbs on the ground over 2 inches in diameter
- 3. Remove all brush, slash, and "jackpots" of fuel.
- 4. Prune all live trees of dead branches and green branches for 8 feet from ground level, except that no more than 1/3 of the 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 or chemically treating, disking or a combination of treatments.
- 6. Multi stem Live Oak trees: remove all dead limbs and stems, cut off green stems at 8 feet above the ground that arch over and are growing downwards to the ground.

#### Appendix B

#### HIGHLAND VIEW UNIT 7.

#### 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 calls for a system of landscape zones surrounding the home. Each zone may contain a balance of native and exotic plants that are fire and drought resistant, help control erosion, and are visually pleasing.

#### Zone I

This zone extends to not less than 80 feet from the house, or to the property lines, in all directions and has a traditional look of irrigated shrubs, flower 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 trees are pruned up to 6 - 8 feet above the ground, but no more than 1/3 of the 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 trees are permitted inside the Zone, but 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 a 2 inch stubble, disked, chemically treated or removed. Such treatment must be accomplished by June 1, annually. This zone has built in fire breaks created by driveways, sidewalks etc.

## APPENDIX C

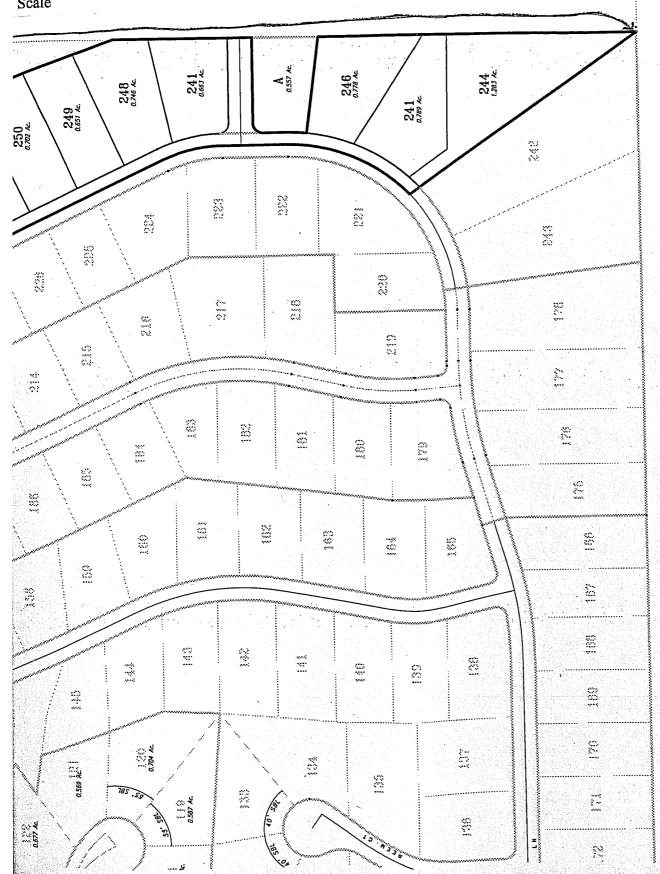
## HIGHLAND VIEW UNIT 7

# 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.

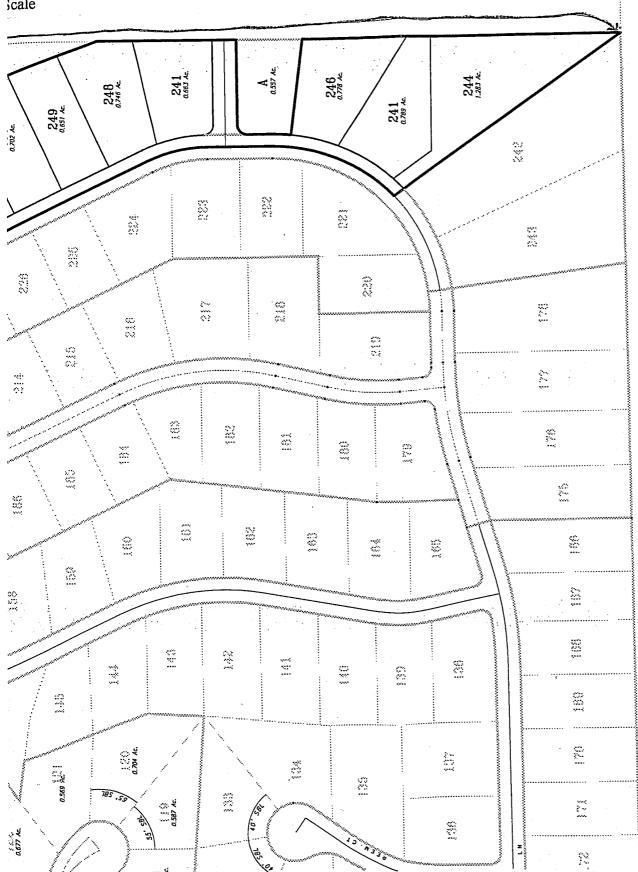
- 1. Does not apply to decks that are constructed using fire resistant materials such as concrete, steel, stucco etc.
- 2. Applies to decks one story or less above the natural slope.
- 3. Combustible material must not be stored under the deck.

p h



UNIT 4

c : 1 = 1/4



UNIT 4 31.969 Ac.