Bell Woods

Wildfire Fire Safe Plan

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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 the Bell Woods development. To identify measures to reduce these hazards and risks and protect the native vegetation. There are moderate fuel hazards and gentle topography associated with this proposed development.

The possibility of large fires occurring when the Bell Woods 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.

Incorporation of the fire hazard reduction measures into the design and maintenance of the development 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 Bell Woods 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 community design. The Plan contains measures for providing and maintaining defensible space along utility easements, open space areas and 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.

I. FIRE PLAN LIMITATIONS

The Wildfire Fire Safe Plan for the Bell Woods 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 attention to aid in home wildfire safety.

II. BELL WOODS WILDFIRE FIRE SAFE PLAN

1. PROJECT DESCRIPTION

Bell Woods is located between the unincorporated communities of El Dorado Hills and Cameron Park on a generally southwest facing slope. This project is planned for 54 lots ranging in size from 11,004 sq. ft to 26,080 sq.ft. covering 34.28 acres. There is 10.372 acres of open space incorporated in this development. Access is from Nicole Drive in the northwest corner of the project to Courts "A" and "B". From the south, Covello Circle accesses Courts "C" and "D". The site is linked with the Bass Lake Road and Country Club Drive. The key topographic features are nearly flat slopes with grades up to 12% and intermittent drainages in the southwest corner and eastern edge of the project. Elevations generally range from 1,160 to 1,230 feet. Open space areas will be gated. Emergency access gates to Open Space "A" must have public access during emergencies where evacuation of residents is necessary.

Structural fire protection is provided by both the El Dorado Hills Fire Department and Cameron Park Fire Department. LAFCO will make a final determination as to which fire department will be the primary provider through annexation. Wildland fire protection is provided 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- annual grasses with scattered down trees and limbs
(b) overstroy- scattered stands of Black, Blue and Live Oak with individual oak trees and California Buckeyes
(c) understory- chamise, manzanita, toyon, and poison oak
(d) riparian- grasses, forbes, blackberries, and willows

The heaviest fuel loading is in Lot "A", the open space in the center of the development. The area in general is an oak stand with a brush understory. The brush component is made up of chamise, manzanita, toyon, coffeeberry, and poison oak. There are grey pines in the overstory. These are a very hazardous tree and should be eliminated. There is a heavy grass layer in the areas that are open. Both drainage areas have cattails and some blackberries.

3. PROBLEM STATEMENTS

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

Fire in the grass fuels on the side slopes or on the flats are the most serious wildfire problem for this project.

B. A high percentage of the project has dense ladder fuels which increases the rate of wildfire spread.

Wildfires rate of spread increases dramatically as fuel loading increases. This project has significant fuel loading and ladder fuels.

C. Risk of fire starts will increase with development.

The greatest risk from fire ignition will be along roads and in the open space areas as human uses 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.

Bell Woods

Bell Woods has two housing components that are separated by a large wooded open space. Fuels are dense stands of oak and scattered open grasslands with a heavy understory of brush species most of which are highly flammable. There is a smaller open space in the southwest corner of this project identified as Lot “B”. This area is made up of oaks and open grass. There is a drainage along the western border of the development and Lot “B”. Open space fuel hazard reduction standards shall be enforced by a Homeowners Association (See Appendix B). Lots 10-21, 32-36 and 50-54 border Open Space “A”. Lots 23-28 border Open

Space “B”. Emergency vehicle access shall be provided to Open Space “B” from Court “C”. (See Appendix C)

Mitigation Measures:

- **All lots shall be landscaped to Firescaping Standards for Zone I.**
  - **a. Responsibility- homeowner within one year of occupancy**

- **All fences that border on the open space areas shall be of noncombustible material. Pedestrian gates to the open space shall be provided and may be lockable. (Lots 10-21, 23-28, 32-36, 50-54)**
  - **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 D for guidelines)**

- **El Dorado Hills Fire Department/Cameron Park Community Services District Weed Abatement Resolutions shall apply to vacant lots adjacent to lots with structures.**
  - **a. Responsibility- lot owner and Fire Departments**

- **All gates to Open Space “A” shall have a remote control and Knox Box lock per Fire Department standards.**
  - **a. Responsibility- developer**

- **Lots 10-21, 23-28, 32-36, and 50-54 shall have a 30 foot setback from the rear property line along the open space.**
  - **a. Responsibility- builder, homeowner**

- **All lots shall have setbacks not less than those required by El Dorado County Zoning Ordinance 17.28.040(D).**
  - **a. Responsibility- builder**

- **All utility and drainage easements shall have the fuels treated, within the easement, annually to the specifications in Appendix B.**
  - **a. Responsibility- utility provider, developer and/or HOA**

- **Firescaping standards will be implemented to the building front and side yards to the lot lines, regardless of distances to these lines.**
  - **a. This will ensure a continuous belt of Firescaping to neighboring lots.**
  - **b. If adjacent lot is vacant, El Dorado Hills Fire Department/Cameron Park Community Services District Weed Abatement Resolutions shall apply and the vacant lot fuels will be treated for 30 feet from any structure.**

c. Rock outcroppings are part of the Firescaping.
d. Windows and doors on the side(s) of the structure, that is less than 30 feet from a property line, shall have tempered glass.
e. Rafter tails will be enclosed with noncombustible material on the side(s) of the structure that is less than 30 feet from the property line.
f. Exterior wall sheathing shall be one hour rated noncombustible sheathing on the side(s) of the structure that is less than 30 feet from the property line.
g. Gutters and downspouts shall be noncombustible.
h. Attic and floor vents shall be covered with ¼ inch or less noncombustible mesh and horizontal to the ground.

6. **OTHER FIRE SAFE REQUIREMENTS**

A. Every 5 years the Fire Department shall review open space areas at the request of 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 building is modified with a building permit.

G. Emergency vehicle access per Appendix C shall be the end of Court "C" accessing Lot "B".

H. Post "No Smoking" signs at all public access points to open space.

I. All walking/hiking trails will be annually maintained by June 1.

F. Appendix

Appendix A

BELL WOODS

Firescaping Standard

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 1inch 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, 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 a 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.

For All Areas With Live Oaks

Mature, multi stemmed Live Oaks can present a serious wildfire problem if untreated. Treat the Live Oaks as to the following specifications: (a) remove all dead limbs and stems and (b) cut off green stems at 8 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground. Remove clumps of mistletoe.

APPENDIX A-1
FIRESCAPING ZONES
EXHIBIT

Typical Lot in

Oak Woodland Thicket
(schematic, no scale)

APPENDIX B

BELL WODDS
FUEL TREATMENT SPECIFICATIONS

For

OAK WOODLAND VEGETATION
And
OPEN SPACE

Within The Designated Fuel Treatment Areas

1. Leave all live trees.

2. Remove all dead trees.

3. Remove all brush under tree canopy. Prune isolated brush specimens at least 4 feet off the ground.

4. Prune all live trees of dead branches and green branchs for 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 down towards the ground. Remove mistletoe wherever possible.

7. Trails shall be brushed 10 feet on both sides.

8. Post “No Smoking” signs at public access points to open space areas.

APPENDIX C

BELL WOODS

EMERGENCY VEHICLE OPEN SPACE ACCESS SPECIFICATIONS

The purpose of the Emergency Vehicle Access to Open Space areas is to provide rapid access to wildland fuels in open space areas for wildfire suppression resources such as bulldozers, 4-wheeldrive fire engines, firefighters, hoselays etc.

Specifications are:

a. 15 feet in width
b. “Break” in the curb
c. Signed
d. Gated and gate equipped with a Knox Lock and remote control opening device

APPENDIX D

BELL WOODS

ENCLOSED DECK GUIDELINES

The purpose of enclosing decks that are cantilevered out over the natural slopes 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 over natural slopes.

3. Combustible materials must not be stored under the deck.