

**Silver Springs
Units 2 and 3**

Wildfire Fire Safe Plan

Prepared for:

Silver Springs LLC

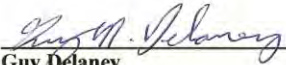
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April, 2006


**Silver Springs
Units 2 and 3**

Plan Approved by:



Guy Delaney
Fire Captain
Rescue Fire Protection District


5-22-06
Date



Ben Scott, Battalion Chief
Fire Prevention
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5/22/06
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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 two hundred and thirty-four lot 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 Pleasant Grove Middle School and its recreational use 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 emphasis on the interface of homes and wildland fuels.

The scope of the Silver Springs 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

Unit 2

This first unit is located within the unincorporated community of Rescue/Cameron Park on a generally flat to southwest facing slope to about 13%, south of Silver Springs Unit 1 off of Pioneer Place off of Bass Lake Road and south of Green Valley Road. Silver Springs Parkway will be the western boundary once built. This project has 134 lots varying in size from .256 to 3.558 acres. The main road through is Arapahoe Drive. It connects to Getchell Loop and Minton Drive on the north and Sutro Way and Bass Lake Road on the south. These roads are 36 feet wide with 4 foot sidewalks on each side. Primary access is from Silver Springs Parkway and Bass Lake Road. The developer has a letter with El Dorado County Department of Transportation specifying an agreement to the required changes to Bass Lake Road. This unit will eventually tie into the proposed Verde Vista development by way of Sorrento Drive. This is to be built as a cul-de-sac no longer than 1320 feet. There will be emergency vehicle access at the end of Sorrento Drive as specified in Appendix C.

This Unit borders Lot L to the north, an open space area adjacent to Unit 1. To the southwest of this unit are Lots O and P which are also open space areas that separate this Unit from Unit 3. At the intersection of Sorrento Drive and Arapahoe Drive will be a developed park identified as Lot Q.

Unit 3

This unit is located at the south end of the Silver Springs development. It borders Silver Springs Parkway on its west, open space on its north and east and private property on the south. There is another open space, Lot N, in the southwest corner. Access from Silver Springs Parkway will be on Willamette Road and connect into Unit 2 by Windom Lane that intersects Arapahoe Drive. The cul-de-sac off of Windom Lane is 450 feet long. This unit is primarily flat to north and west facing gentle slopes. This area will be split into 47 lots varying in size from .284 to 1.592 acres.

Emergency vehicle access shall be provided from Windom Lane to Lots O and P. Also access will be provided from the end of Tally Court and Arapahoe Court to Lot P. See Appendix C.

Structural fire protection is provided by the Rescue Fire Protection District and wildland fire protection by the California Department of Forestry and Fire Protection (CDF). A fire hydrant system will serve the new area with hydrant locations approved by the fire department.

2. PROJECT VEGETATION (FUELS)- Units 2 and 3

For wildfire planning purposes the vegetation is classified as follows:

- (a) ground fuels- annual grasses, chamise and scattered down trees and limbs
- (b) overstory- Gray Pines, White oaks and Liveoaks
- (c) riparian- grasses, blackberries and willows

The heaviest fuel loading throughout the units is grass. This will be significantly reduced through construction. There is a heavy concentration of chamise in Unit 2 where it borders Verde Vista on the east. There are a few down trees with the Gray pines and

oaks in the open space area identified as Lots N, O and P. Oaks and Gray pines are scattered throughout the units. Lots O and P are a drainage meandering through the open space. Vegetation along this channel would indicate that it does not carry water throughout the year. The problem of fuel laddering exists in the open space. Blackberries and willows should be eliminated. The buckeyes and ceanothus should be pruned up and isolated. Gray pines are extremely hazardous from a fire ignition and sudden deterioration. Trees in the open space must be pruned to separate the low limbs from the flashy grass fuels. Gray pines should be considered for removal/replacement. Any Gray pine in the areas of house construction shall be removed. Those oaks with more than 50% mistletoe should be considered for replacement. They will become a fire maintenance issue in the future. Those trees with less than 50% mistletoe in their canopy should be pruned to eliminate the mistletoe.

Lot N is classified as a wetland. Pruning of the overstory is essential as well as the removal of the brush understory. The low grasses associated with the wetland can remain.

3. PROBLEM STATEMENTS

A. The ground fuels on the 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 percentage of the project has slopes, which increases the rate of wildfire spread.

Wildfires rate of spread increases dramatically as slope increases. This project has grassy 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 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.

Silver Springs Units 2 and 3 have an established subdivision on their northeastern corner. Lot L is an open space area at the north end. Unit 2 and 3 are separated by open space. To the west of the Units are rolling grass-oak woodland. Silver Springs Parkway separates this subdivision from Pleasant Grove Middle School and undeveloped grass-oak woodland. There will be a landscaped strip along the length of the development bordering Silver Springs Parkway.

Mitigation Measures:

- **All homes shall have Class A listed roof assembly.
Responsibility- homeowner**
- **Unit 2-Lots 7-9,11-20, 37-39, 51, 113-118 shall have a 30 foot setback from the open space lot line for all structures.
Responsibility- builder**
- **Unit 3-Lots 1-11,17-19, 25-28 shall have a 30 foot setback from the open space lot line for all structures.
Responsibility- builder**
- **All lots one acre and larger shall have a 30 foot setback from all property lines.
Responsibility-builder**
- **Lots one acre and larger shall be landscaped to Firescaping Standards Zones I and II (100 feet). See Appendix A
Responsibility-homeowner within one year of occupancy**

6. BUILDING SETBACKS ON ONE ACRE AND 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 one 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 one acre or larger lots.

Approval of this Plan by the CDF and the Rescue Fire Protection District will constitute the approval of this Exception.

Mitigation practices providing the same overall practical effect as 1276.01 Regulations shall be required:

Class "A" rated roof covering and assembly shall be installed in accordance with its listing and the manufacturer's installation instruction.

When provided, valley flashing shall not be less than 28 gauge galvanized corrosion resistant metal installed over a minimum of a 36 inch wide underlayment consisting of one layer of No. 72 ASTM cap sheet running the full length of the valley.

The roof gutters and down spouts shall be constructed of metal or of a non-combustible material. The roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter.

The roof eaves shall be enclosed and constructed of non-combustible materials on the exposed underside.

Roof and attic vents shall be protected by corrosion resistant non-combustible wire mesh with openings no greater than 1/8 inch.

Vents shall not be installed in eaves and cornices unless the vents used provide the ability to resist intrusion of flame and burning embers into the attic area of the structure.

The exterior wall covering shall extend from the top of the concrete foundation and terminate at the enclosed section of the eaves. The exterior wall covering shall be constructed of an approved non-combustible material that is at least one hour rated. The use of foam board under stucco coats shall not be considered as a non-combustible covering.

Exterior windows, window walls, glazed doors and glazed door openings within exterior doors shall be insulated tempered glass pane units or have a fire resistant rating of not less than 20 minutes when tested according to ASTM E. 2010.

Exterior door assemblies shall be of non-combustible construction or solid core wood having stiles and rails not less than 1 3/8 inches thick. Doors shall be self closing.

Under floor ventilation shall be protected by corrosion resistant non-combustible frames and wire mesh with opening no larger than 1/8 inch.

Eave and floor vents shall be horizontal to the ground.

The underside of cantilevered and overhang decks and stair cases shall maintain the ignition resistant integrity of exterior walls to grade.

Fencing located within the reduced setback area shall be constructed of non-combustible materials.

7. BUILDING SETBACK ADJACENT TO OPEN SPACE

All structures not meeting the 30 foot setback from open space shall be required to meet the conditions in Item 6 above for those sides of the structure less than 30 feet from the open space.

8. OTHER FIRE SAFE REQUIREMENTS

- A. Every 5 years the Fire Department may review open space areas with the legal entity for the development 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 (Zone of Benefit, 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 and wildland 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. Vegetation in the open space shall be maintained annually by June 1.
- J. All developed access points to the open space shall be posted "No Smoking".
- K. All developed trails within the open space shall be brushed/mowed 5 feet on either side of the trail by June 1 annually.
- L. Emergency vehicle access shall be constructed at the end of cul-de-sacs and roads crossing or ending at open space. See Appendix C

F. Appendix

Appendix A

Silver Springs Units 2 and 3 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.

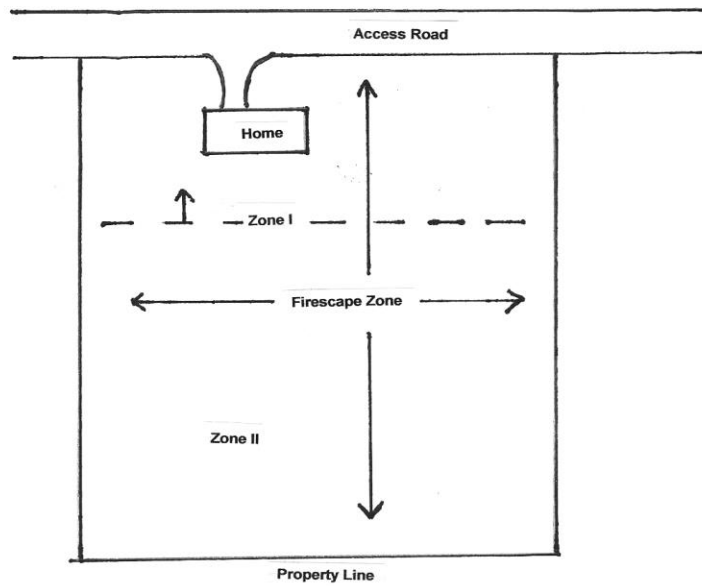
Zone I

The zone extends to not less than 50 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. Buckeye bushes can be left if isolated. 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 tree 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 100 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



Typical Lot in Oak Woodland
(schematic, no scale)

Appendix B

**SILVER SPRINGS
FUEL TREATMENT SPECIFICATIONS
For
OAK 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, burning 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.

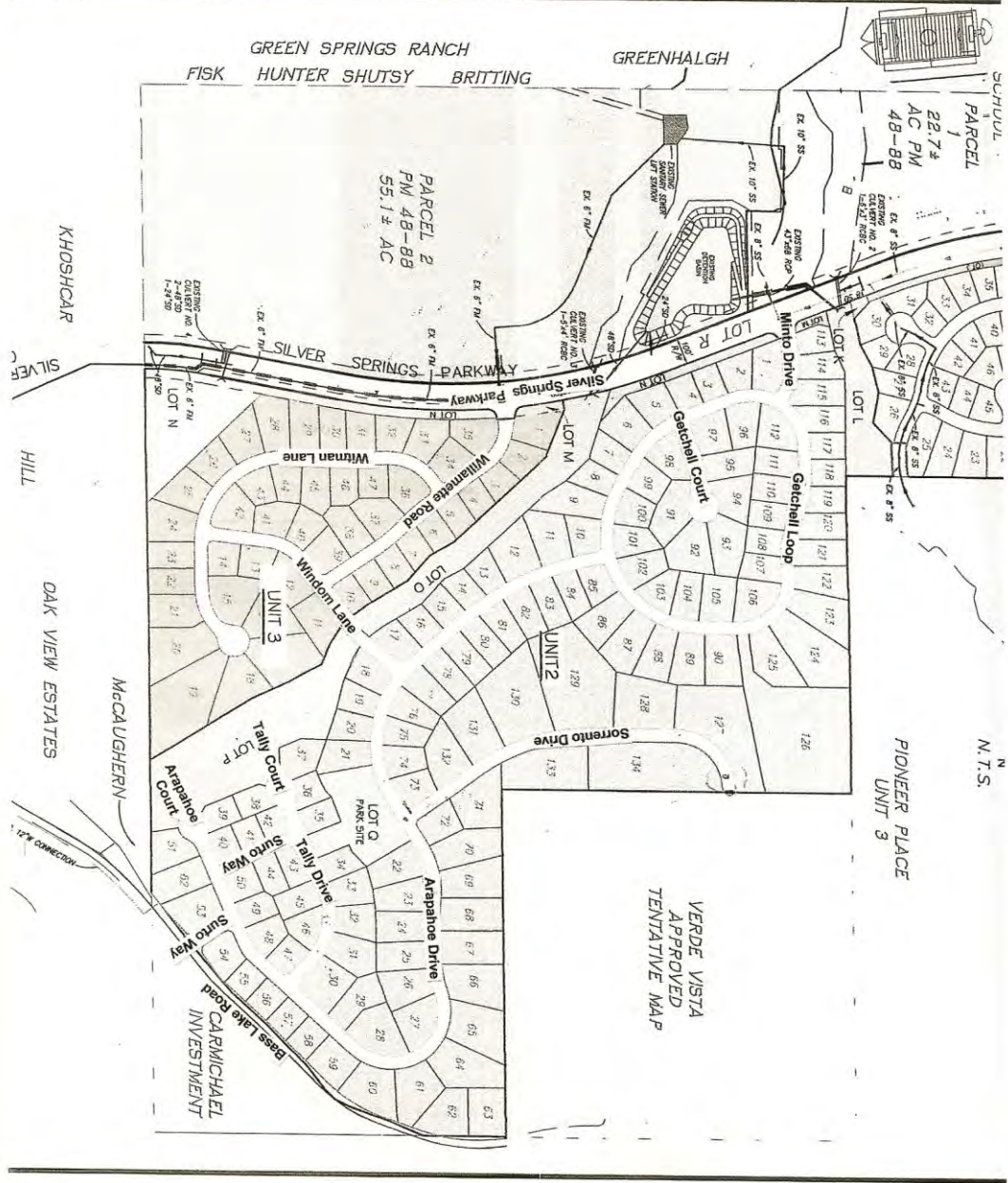
Appendix C

**SILVER SPRINGS
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 for wildfire suppression resources such as bulldozers, 4-wheeldrive fire engines, firefighters, hoselays etc.

Specifications are:

- a. "Break" in curb
- b. 15 feet in width
- c. Signed
- d. Gated and gate equipped with a Knox Lock



VERDE VISTA
APPROVED
TENTATIVE MAP

Sorrento Drive Cul-de-sac



