

## WILDFIRE HAZARD MITIGATION PLAN - SPR # LU-00-26

### Prepared for:

I.D. Russel  
1301 Iowa Street  
Longmont, CO 80501

### Prepared by:

Holly Asmus  
Forester  
Colorado State Forest Service  
[hasmus@lamar.colostate.edu](mailto:hasmus@lamar.colostate.edu)  
On March 5, 2002

### SITE LOCATION AND DESCRIPTION OF PROPERTY

The property is located at **5144 Longmont Dam Road**, approximately 5 miles west of Lyons and 1.5 miles north of County Road 80, Section 8, T3N, R71W. The dominant fuel types is litter and small shrubs. The dominant overstory is ponderosa pine, with mixed conifer (Douglas fir, aspen, and occasional juniper and limber pine). Dwarf mistletoe was not observed on the property, but has been observed the area. Although there were no indications of observed mountain pine beetle on the Russel property, the property should be periodically surveyed for new infestations. The property is on a on a 35-40 % slope with a south aspect. The property is located within the Lyons Fire Protection District.

The property is characterized by **Fuel Model 9**. Fuel Model 9 is represented by closed canopy stands of ponderosa pine, and mixed conifer. Under story consists of small trees and shrubs, grasses, and moderate concentrations of down, dead woody litter.

The initial property inspection for a wildfire hazard mitigation consultation occurred on February 22, 2002. The property was marked with blue tree marking paint for thinning and clearing recommendations. A final inspection was completed on \_\_\_\_\_. Payment was received on \_\_\_\_\_.

### RECOMMENDATIONS

As detailed in fact sheet 6.302, *Creating Wildfire Defensible Zones*, an important factor that determines a structure's ability to survive wildfire is defensible space. Defensible space is a maintained area around a structure where fuels (flammable materials) are modified to slow the possible spread of wildfire to the structure, as well as from the structure to the surrounding areas. Defensible space provides a place where structure protection and fire suppression operations may occur. Wildfire hazard mitigation work breaks up fuel continuity, potentially decreasing a wildfire's intensity, and for more effectiveness should be completed beyond a home's defensible space area.

There are three zones of protection to be created around the homesite for defensible space. Zone 1 is the most critical and affords the most protection to the site. Zones 2 and 3 are extensions of this protection.

#### ZONE 1

Zone 1 starts at the foundation and extends out 30-80 feet depending on the slope and aspect of the site. On your property we have considered Zone 1 to be approximately 45 feet above and from each side of the



stakes for the home site. Zone 1 extends 60 feet below the home site; this estimated includes slope and aspect calculations.

As per Boulder County Land Use Department, create a 3-foot wide strip of nonflammable groundcover immediately adjacent to the structure. This can be accomplished by using decorative rock or gravel. This strip should surround the house and extend under any decks to 2 feet out past the drip line of the decks.

Thinning and pruning are necessary to create defensible space at the site. **All trees marked in blue should be removed.** Trees for removal were selected because of their poor form and/or lack of vigor in addition to their close spacing. Tree removal will improve the health of the remaining trees in addition to mitigating wildfire hazards.

Remove ladder fuels from beneath trees. Ladder fuels are small shrubs, trees, tree limbs, etc. that allow a fire to climb into a tree's crown. **Limb trees to a height of 6 to 8 feet** on the remaining trees in this zone. For young, small trees in this zone, limb the lower third of the tree's height. **All slash generated during thinning operation should be removed completely** (either chipped or hauled away) from Zone 1.

## ZONE 2

Typically zone 2 is a transition zone between the heavily thinned areas near the house to a more traditional forest setting. In this zone, some clusters of trees are acceptable if there is adequate spacing between clusters. All trees marked in blue should be removed. Prune off branches up to six feet for the remaining trees from 15 feet from the house to the property line. Branches of young, small trees in this zone should also be pruned off to 1/3 of the tree's height.

## ZONE 3

Typically zone 3 extends from zone 2 and is of no set shape or size. Zone 3 adds some protection, but mitigation focuses on forest health as well as fire protection purposes. Because dwarf mistletoe and mountain pine beetle have been observed in the area, it is highly recommended that you periodically **survey your property for signs of both dwarf mistletoe and mountain pine beetle.** It is recommended that all of zone 3 (the remainder of your property) be thinned for forest health. Please contact CSFS if you have questions concerning any of these issues.

Forested land in this zone could be thinned for increased overall forest health and wildfire hazard reduction. The following guidelines apply if you (and your neighbors) decide to work in these areas.

While not required through Site Plan Review, those who live in the wildland-urban interface are encouraged to implement good forest management practices on a regular basis. Such practices will increase both the health, vigor, and value of your mountain property for years to come. These practices include:

- Thin suppressed trees and trees with disease and insect infestations and retain the larger, healthier trees. Thin trees with aesthetic and wildlife considerations in mind.
- Some snags can be retained for wildlife.
- Some slash in this zone could be lopped and scattered and/or piled for wildlife.
- Large amounts of slash should be disposed of by chipping, hauling to an approved site, or burning.
- For burning permits, check with your local fire protection district.



**All cutting, limbing and slash treatments must be completed prior to scheduling a wildfire hazard re-inspection. Contact this office to set up an inspection date at least two weeks before you need the approval.**

Implementing this wildfire mitigation plan and maintaining your defensible space will help reduce the threat of wildfire to your home, but does not guarantee its safety.

In addition to the above recommendations, several other measures can be taken to make your home and family more prepared for and adapted to life in a fire prone ecosystem. These include:

1. Be aware of fire danger. Signs are posted at the entrances of most major canyons.
2. Clean roof and gutters at least twice a year.
3. Stack firewood uphill at least 15 feet from buildings.
4. Do not store combustibles under decks.
5. Screen off foundations, roof and attic openings.
6. Screen and maintain spark arresters on chimneys.
7. When possible, maintain an irrigated greenbelt around the home.
8. Connect and have available at least 50 feet of garden hose during fire season.
9. Post lot and house numbers so that they are clearly visible.
10. Maintain the site's defensible space annually. Contact the Colorado State Forest Service for a 5-year maintenance inspection.

## DEFINITIONS

Aspect – Exposure. The direction a slope faces.

Canopy – The cover of branches and foliage formed collectively by crowns of adjacent trees.

Crown – Branches and foliage of a tree.

Dominant fuel type – Matter that would carry a fire, found on the ground.

Fuel continuity – The proximity of fuels to each other. Helps determine if a fire can sustain itself.

Limb (verb) – To remove the branches from a tree.

Overstory – The tree species that forms the uppermost forest layer.

Snag – Standing dead tree, often used by wildlife such as woodpeckers, owls, and sometimes squirrels.

Wildfire mitigation plan – A plan to reduce wildfire hazards around a home or other structure through fuels reduction and landowner awareness.

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*Knowledge to Go Places*

Boulder District  
5625 Ute Highway  
Longmont, Colorado 80503-9130  
(303) 823-5774

March 5, 2002

Eric Philips  
Boulder County Land Use Department  
P.O. Box 471  
Boulder, CO 80306

Hi Eric,

Enclosed is a copy of SPR # LU-00-26. I have not received payment and I have not inspected the property. We marked the property together on February 22, 2002. Enclosed is a copy of the letter I sent to Russel as well.

If you have any questions, please feel free to contact me.

Sincerely,

Holly Asmus  
Forester





*Knowledge to Go Places*

Boulder District  
5625 Ute Highway  
Longmont, Colorado 80503-9130  
(303) 823-5774

March 5, 2002

I.D. Russel  
1301 Iowa St.  
Longmont, CO 80501

Dear Mr. Russel,

Enclosed is a copy of your Wildfire Mitigation Site Plan Review.

When you have completed the work, please call me so we can set up an inspection. If you have any questions about the SPR process or any concerns about forest management issues, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Holly Asmus".

Holly Asmus  
Forester





# Land Use Department

Courthouse Annex  
2045 13th Street • 13th & Spruce Streets • Boulder, Colorado 80302 • (303) 441-3930

June 18, 2001

RECEIVED JUN 19 2001

-3PR-

I.D. Russell  
1301 Iowa Street  
Longmont CO 80501

Dear Applicant(s):

This letter certifies that a hearing of the Board of County Commissioners, County of Boulder, State of Colorado, was duly called and held on Tuesday April 17, 2001, in consideration of the following request:

**Docket LU-00-26: RUSSELL Limited Impact Special Review**

**Request:** Limited Impact Special Review for grading of more than 500 cu. yds. of material for a proposed road; and including a Site Plan Review of the construction of a 3,578 sq. ft. residence.

**Location:** At 5144 Longmont Dam Road, approximately five miles west of Lyons, and 1½ miles north of County Road 80 (Longmont Dam Road) in Section 8, T3N, R71W

**Zoning:** Forestry (F)

The Board of County Commissioners has determined that the request is Approved with Conditions, subject to the following:

**1) DRIVEWAY REQUIREMENTS**

The applicant shall submit final plans for the Revised Grading Plan addressing grading, erosion control, and drainage plans for the review and approval of the County Transportation Department and County Parks & Open Space Department. The revised plans shall be reviewed and approved by County staff prior to the issuance of any permits by the County. In addition, prior to any such activity commencing or permits being issued, the applicant shall submit and have approved by County staff final plans for improvements to the limited portions of the Longmont Dam access road as identified and agreed to by the applicant and Transportation Department at the April 17, 2001 Public Hearing, which plans shall meet all usual County requirements. The applicant shall obtain all other necessary government approvals for all such road/driveway work. If the improvements to the Longmont Dam access road involve more than 500 cubic yards of earth movement, they shall be considered authorized by the limited impact special use approval, subject to compliance with the terms and conditions of approval.

**2) BUILDING SITE**

The proposed Building Site is approved as submitted. However, the existing coniferous trees to the north, east, and south of the proposed house should be preserved to the greatest extent possible to maintain visual screening.



### 3) HOUSE DESIGN

Because of the property's proximity to such valued resources as the North St. Vrain ECA, and visibility from surrounding private and public lands, the size of the proposed residence shall not exceed 3,578 square feet above grade (finished and unfinished), and 24 feet in height, as proposed in the application materials. The applicant is subject to all applicable County Health Department requirements

### 4) TREE PRESERVATION PLAN / REVEGETATION PLAN

The existing coniferous trees to the north, east, and south of the proposed house should be preserved to the greatest extent possible to maintain visual screening. If significant tree removal occurs (i.e., to meet wildfire mitigation requirements, to open an area for the leachfield, or to satisfy the view preferences of future owners) the proposed house will be prominently visible from surrounding private and public lands. Therefore, given the house's saddle location, this approval requires maximum tree preservation. The applicant shall submit a tree preservation plan that addresses this issue, to be reviewed and approved by County staff prior to the issuance of a building permit. The wildfire mitigation plan (e.g., defensible space plan) shall be developed and implemented in conjunction with the tree preservation plan.

The applicant shall submit a revegetation plan, as revised to accommodate the Revised Grading Plan, to be reviewed and approved by County staff prior to the issuance of any permits. Prior to final inspection or certificate of occupancy, the full installation of the approved revegetation plan must be inspected and approved by the Land Use Department. If weather is not conducive to seeding and/or planting or if adequate revegetation efforts have not occurred, an irrevocable letter of credit must be provided to assure completion of revegetation and erosion control. In addition, the applicant should consider the following well in advance of the revegetation inspection:

- \*\* Whether applying for a Certificate of Occupancy, Final Inspection, or the return of funds held for completion of revegetation, some level of germination and growth of grass seed is required before sign-off.
- \*\* The steeper the slopes and dryer the soil, the greater the attention needed to establish a level of germination adequate to obtain final approval.
- \*\* Areas of disturbance found at inspection not included on the revegetation plan are still subject to reseeding and matting.
- \*\* Incomplete revegetation is the leading cause for delays in the issuance of Certificates of Occupancy.

### 5) COLOR REQUIREMENTS

Prior to the issuance of a building permit, the applicant shall submit to the Land Use Department for review and approval, one set of samples (color chips, brochure/catalog page, or photographs) of all exterior colors to be used including roof, siding and trim. Given the building site's location with some visibility off-site, these colors should be carefully selected from the dark to medium



dark brown, gray, or green color range or some other color scheme which blends with the natural environment. All color samples need to be small enough to fit into a file and will be kept for the record.

Prior to final inspection or issuance of Certificate of Occupancy, the Land Use Department must inspect and verify that these color samples are used on the new structure.

#### **6) LIGHTING REQUIREMENTS**

Prior to the issuance of a building permit, one copy of the proposed lighting plan with details for all exterior lighting must be submitted to and approved by the Land Use Department. Exterior lighting shall be minimized and must be down lighting to minimize glare as much as possible. Details submitted must indicate location of all exterior fixtures on site and on structures, and must include cut sheets (manufacturer's specifications with picture or diagram) of all fixtures. Lighting is restricted to outdoor entrances or exits, and over the garage doors. Absolutely, no landscape lighting is permitted.

Prior to final inspection or issuance of Certificate of Occupancy, the full installation of the approved lighting plan must be inspected and approved by the Land Use Department.

#### **7) FIRE PROTECTION**

The property is in a potentially fire sensitive environment. To reduce the potential for the spread of fire, to and from the structure, all roofing material must be UL listed and labeled Class A (fire resistive). Prior to the issuance of a building permit, the applicant shall consult with the Lyons Fire Protection District and provide evidence of all requirements including adequate turnouts and cistern provisions.

Prior to the issuance of any permit and the removal of any trees, a Wildfire Mitigation Plan shall be submitted for review and approval by the Land Use Department. At minimum, the Plan shall include: Defensible Space, Tree Preservation, Emergency Water Supply and Ignition Resistant materials for the home.

A. To prevent the spread of fire to and from the structure a defensible space plan must be created. Ground surfaces within three feet of the structure and below all roofline projections (bay windows, decks, etc.) must be covered with crushed rock or other nonflammable ground cover, and kept free of vegetation by utilizing a weed barrier. [Please see the enclosed publication from Colorado State University for further information on creating fire-safe zones]

B. Due to the lack of an adequate, accessible water source and to assist in firefighting efforts, a cistern must be provided. A cistern with a minimum capacity of 1,800 gallons must be located no closer than 50 feet to the proposed home and should be no more than 150 feet from any side of the house. Prior to installation of the cistern, details such as location, access, and connection standards should be resolved with the local Fire Protection District or the Wildfire Mitigation Coordinator in the Land Use Department. The applicant shall incorporate the plans for installation of the cistern (demonstrating location, access, and required site disturbance / earthwork) into the Wildfire Mitigation and Tree Preservation Plan. The County Building Division also notes building permit, soils report, fire-retardant shakes, and automatic fire sprinkler system requirements (sprinkler requirements include basement, covered porches and garages).



The defensible space component of the wildfire mitigation plan, including all vegetation removal, and the removal of limbs and slash, must be completed and inspected prior to the foundation wall inspection.

**8) WILDLIFE SAFE FENCE**

Since this area serves as a mountain wildlife movement corridor and if fencing is absolutely necessary, the following shall apply. Fencing is to be kept as close to the developed site as possible, and is to be wildlife-safe fencing as recommended by the Colorado Division of Wildlife (Contact CDOW at 303-291-7227). Specifications for wildlife-safe fence are as follows:

Smooth top & bottom wires, with wire spacing at 16-22-28-40 inches from ground (please note that fences over 42 inches create serious negotiation problems for deer, and that fences between 42 inches and 8 feet can function as a death trap).

**\*\* Bottom wire at least 16 inches off ground for passing of fawns.**

**\*\* 12-inch gap between top two wires to reduce entanglement and wire twisting.**

**\*\* Materials like woven wire or single strand wire (tightly strung) are to be used.**

**\*\* No chain-link fences except for small isolated pens or kennels (wildlife are easily entangled in mesh fences and impaled on wrought iron pickets).**

If you have any additional questions, please feel free to contact me at (303) 441-3930.

Sincerely,



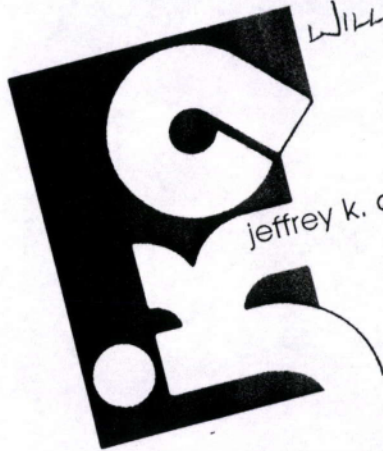
Greg Oxenfeld, Planner II  
Land Use Department

cc: Rosi Koopmann, AICP / Strategic Planning, Inc.

*Have Greg ask what final steps  
maps?  
red. plan?  
meeting Greg?  
Eric*

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WILLIAM RIVERA



jeffrey k. abrams architect p.c.  
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boulder, co. 80302  
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[www.jkadesign.net](http://www.jkadesign.net)  
[jeff@jkadesign.net](mailto:jeff@jkadesign.net)



To: 1D Russel  
1301 Iowa St.  
Longmont, CO 80501

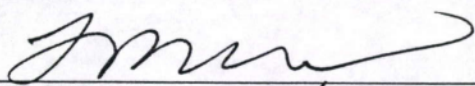
Invoice No. 58359

**Colorado  
State**  
FOREST  
SERVICE

Date: 3/5/02

Item	Unit Cost	Total
1 SPR/markings		150.00
2 inspection		45.00
3		
4		
5		
6		
7		
8		
9		
Tax Exempt No. _____	Sales Tax	

Total		195.00
CK-CA-MO Amount Paid:		
Amount Due		195.00
Ck#	Dated	
Rcv'd By	F.Y. 01-02	
Funding		Amount
223530	0615	195.00

  
CSFS Originator  
Payment Due By 4/5/02

Remit to:

COLORADO STATE FOREST SERVICE  
BOULDER DISTRICT  
5625 UTE HIGHWAY  
LONGMONT CO 80502-9130

Deposit No.

Date