

Knowledge to Go Places

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

April 29, 2004

**Rob** Pudim 67 South Peak Road Boulder, CO 80302

Dear Rob Pudim,

Upon your request the Colorado State Forest Service has completed your Wildfire Mitigation Plan per Boulder County Land Use regulations for your property located at 414 Forsythe Road, Boulder CO 80302. We have submitted a copy of this plan to the Land Use Department, Mr. Eric Philips.

The next step in this process is to have all trees marked by the State Forest Service with blue spray paint removed from your building site. Trees that do not have blue marking on them should be pruned 6-10 feet from base of tree. Once trees have been removed and pruned please call for an appointment of inspection. Either Boulder County Land Use or the Colorado State Forest Service must inspect all Site Plan Review properties before final plan approval is granted.

We have enclosed an invoice for our services and would like payment within one month of the date it was written.

We thank you for your compliance and look forward to assisting you in the future. If you have any questions regarding the Site Plan Review process please contact Eric Philips at 303-441-3930 or if you have question regarding the Wildfire Mitigation plan or forest health please call Cory Secher at 303-823-5774.

Sincerely,

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Cory Secher Forester

# WILDFIRE MITIGATION PLAN

Docket SPR- # 04-025

Inspection date: 4/27/2004

Prepared for: Rob Pudim 67 South Peak Road Boulder, CO 80302 Phone: 303-444-2471 Prepared by: Cory Secher - Forester Boulder District Phone: (303) 823-5774 E-mail: csecher&lamar.colostate.edu

# SITE LOCATION AND PROPERTY DESCRIPTION

The property is located at 414 Forsythe Road, Boulder CO 80302. Access to the property from Boulder Canyon go west to Magnolia Road and turn left and continue on Magnolia until Forsythe road and turn left. The legal description is Section 12, Township 1N, and Range 72W NE 1/4 of the SE 1/4 of Section 11 and W 1/2 of the SW 1/4 of section 12. The fire protection district is the High Country fire protection district (303-642-3588). There will be 3 structure located on site, including an old house barn, oversized garage barn, and residence. The lot is 51 acres in size and has a 0-8% percent slope with a Southwest aspect. It is at 8,000 feet in elevation. The proposed building site is mid-slope and it is a fairly dry site. There are no natural barriers that may help stop or slow the spread of a surface/crown fire on the site except a fairly large open area of grass to the north.

The site has a dominant overstory consisting of Ponderosa pine (Pinus ponderosa) with a Douglas-fir (Pseudotsuga menziesii) understory component. The area is predominantly fuel model 9 with an understory consisting of grasses and forbs. Fuel model 9 is represented by a closed canopy of Ponderosa pine and mixed conifer. Understory may consist of small trees and shrubs, grasses, and moderate concentrations of down, dead woody litter. High amounts of needle litter can exist. The area in the defensible space zones 1 and 2 is predominately fuel model 2 which is represented by open grown pine stands. Trees are widely spaced with few understory shrubs or regeneration. Ground cover consists of mountain grasses, and or needle and small woody litter. This model occurs in open grown and mature ponderosa pine stands.

There is no sign of any problematic insect of disease noticed at the time of inspection; 2 Ponderosa pines had mountain pine beetle endemic hits and will be removed and treated.

#### CONSTRUCTION DESIGN AND MATERIALS

The proposed house has a relatively simple design with simple rooflines and is oriented with a norhtwest aspect.

The roofing material will consist of metal. The exterior wall material is to be stucco and log. Soffits are to be 3/4" thick 1x6 tounge and groove metal and wood.

There are ~30 medium windows with the primary viewing direction being toward the mostly northwest side of the structure. Windows will be double glazed with low e-coated tempered glass and frames made of aluminum clad. Exterior doors are to be 1-3/4", fire-rated, and made of wood and steel.

The one deck is constructed of composite and wood and supported by timber posts and logs. The deck is open with and roof and isolated from the surrounding landscape with gravel over a fiberglass weed barrier.

The propane tank is set on a pad of crushed rock overlaying a fiberglass weedbarrier approximately 50 feet to the south of the residence.

#### DEFENSIBLE SPACE ZONES

There are three defensible space zones to be created around the structure(s) on the site.

**Zone 1** - Starts at the foundation and extends out 15 feet in all directions from the outside edge of the structure(s). Zone 1 is broken down into three segments:

**Zone 1A** - Consists of the structure(s) themselves and the area immediately adjacent to and surrounding the structure(s) on all sides. A three-foot wide, non-flammable strip will be created using gravel over a fiberglass weed barrier material. This strip will also extend back under, and out to, two feet past the drip line of any decks.

**Zone 1B** - Extends out from Zone 1A. In this zone, all highly flammable vegetation is to be removed. Any large dead woody material on the ground will also be removed. Firewise plants will be used for landscaping and revegetation. Grasses around the structure will be irrigated when possible and mowed to a maximum height of 6 to 8 inches twice a year to a distance of 30 feet from the structure.



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Boulder District 5625 Ute Highway Longmont. Colorado 80503-9130 (303) 823-5774 **Zone 1C** - This zone extends out from Zone 1B to 15 feet from the house. All understory trees (ladder fuels) will be removed as marked. These are small seedling and sapling size trees that can be ladders for fire to get in the crowns of the larger trees. A few of the larger, healthy trees are to be retained for screening. All remaining trees in this zone will be pruned to a height of 10 feet. They must be well spaced so that the crowns are not touching (10 foot crown spacing). No trees will overhang the house or decks. Trees should be at least 15 feet away from the house on all sides.

**Zone 2** - This zone extends out from Zone 1C, and acts as a transition zone between the heavily thinned areas near the house to the existing forest setting. It extends down slope between 100-170 feet depending upon slope steepness. Zone 2 also extends on either side of the structure a minimum of 100 feet and behind the house between 70-100 feet assuming no boundary restrictions. Tree spacing begins as in Zone 1C and gradually decreases as you approach the outer edge of the zone. Thinning and crown spacing becomes greater in areas of steep slopes. Ladder fuels and poor quality, suppressed and/or diseased trees, 6 to 8 inches in diameter, make up the majority of the removals. The remaining mature trees will be pruned to a height of 10 feet at the intersection of Zones 1 and 2 with limbing reduced in height to 6 feet as you approach Zone 3. If there are any questions pertaining to slope and the changes in thinning spacing and distance regulations please refer to www.colostate.edu/Depts/CSFS/ and find the *Quick Facts 6.302* <u>Creating Wildfire Defensible Space</u>.

**Zone 3** - This zone extends out from Zone 2 to the edge of the property. It may extend out to areas that are not part of the immediate mitigation efforts. In this zone, a few thicker clumps of trees are acceptable, as well as some unpruned trees near the outer edge. Thinning in this zone adds some protection, but is aimed more at forest health. Trees that are of poor quality or form, or have insect or disease infestations, should be removed. Slash in this zone can be lopped and scattered and/or piled for wildlife use.

- Thin suppressed trees and trees with disease and insect infestations and retain the larger, healthier trees.
- Snags should be retained for wildlife.
- Some slash in this zone can be lopped and scattered and/or piled for wildlife enhancement and shelter.
- 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.

#### EMERGENCY ACCESS

The driveway will not create any additional site disturbance or soil compaction and will require the removal of few trees. The driveway is 12 feet wide with a vertical clearance of 13'6" and a grade that is less than 12%. The driveway is greater than 150 feet therefore hammerhead turn-arounds will be present (see plan for details). The driveway is less than 400 feet therefore no pull-outs will be required

#### WATER SUPPLY / UTILITIES / SEPTIC FIELD

The water source will be from a fire cistern that is located about 250 feet to the north and from a well that is located 30 feet southwest of residence. The propane tank will be set on a pad of crushed rock overlaying a fiberglass weedbarrier approximately 50 feet to the south of the residence. Vegetation within 10 feet of the well and propane tank will be kept cleared. Utilities for the property will be buried in a trench about 125 feet west of the residence. The septic field is located 50 feet to the southwest of residence.

# MAINTENANCE AND RECCOMMENDATIONS

As detailed in fact sheet 6.302, <u>Creating Wildfire Defensible Zones</u>, 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.

All trees to be removed are marked with blue spray paint. All trees that are to remain within zones 1 and 2 will be unmarked. The boundaries for zones 1 and 2 will be marked with red flagging. If the property is less than 1 acre it may not have zones marked due to boundary interference. Harvested wood that remains on site will be stacked at least 30 feet from the house and at the same elevation. Slash from the harvest will be chipped and hauled. Note that before burning piles, you must obtain a valid Open Burning Permit from the Boulder County Environmental Health Department and notify your local fire protection district (High Country fire protection district (303-642-3588)).

In addition to the above recommendations, several other measures can be taken to make your home more fire safe and add an additional measure of safety for your family. While not required through site plan review, the following measures should be undertaken to maintain the home and defensible space in the future.

- Maintain your defensible space yearly; contact your local forester for a 5-year maintenance inspection
- Keep firewood at least 30 feet away from buildings; clear weeds and grass from around pile
- When possible, maintain an irrigated green space; mow grasses 6" to 8" high
- · Connect, and have available, a minimum of 50 feet of garden hose with an adjustable nozzle
- Be aware of fire danger; fire danger signs are posted at the entrance of most major canyons
- Keep driveways and property address marked with visible signage
- Check the screens on foundations, soffit vents, roof vents, and attic openings
- Get rid of unnecessary accumulations of debris and trash from yards
- Keep tools such as shovels, rakes and axes, available and ready for use
- Clean debris from the roof and gutters at least two times a year
- Check screens and maintain spark arresters on chimneys
- Check to make sure address markers are clearly visible
- Avoid storing combustibles under decks

## INSPECTION

Inspection was conducted on 4/27/2004.

## 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 (dominant and co-dominant).

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.



Date: 4-29-04	Invoice	No. 64	te
Item 1 Marking defensible space + Writte 2	en five Mitigation P	Unit C Ian \$25	Cost Total
3			
4		14 11 11	
5		2	
6			
7			
9			
Tax Exempt No	Sale	s Tax	te ta base ta b
-12	Total \$250,~		
	CK-CA-MO Amount Paid: Amount Due 250,		
CSFS Originator			Due 250, 2
Payment Due By 5-29-04	Ck# Dated		
	Rcv'd By F.Y.		
Remit to:	n		Amount
COLORADO STATE FOREST SERVICE	194030	0615	\$250,2
BOULDER DISTRICT		2	
5625 UTE HIGHWAY			
5625 UTE HIGHWAY LONGMONT, CO 80503-9130	A	and a second	

White-Customer copy; Yellow-State Office copy; Pink-Project copy



FAX TRANSMITTAL FROM TIMBERLINE BUILDERS INC.

To: Cory Sechen Fax #: 823-5768 From: MARK VANEVEREN Date: 4/21/04 Re: 414 Forsythe vol, \* of Pages: E Rob Pudim Job Urgent D For Review D Please Comment D Please Reply Please Recycle

Notes:

I Think I'VE got All of your Information completed. It more is anything assing please CALL And I CAN Fill IN. A. for of the question Are UASUE. Ant thoughy 22ml Tunte Plen.

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Wildfire Mitigation Plan FIELD DATA FORM MARK VAN EUEREN, TBI CSFS BODIST

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Knowledge to Go Places

Boulder District 5625 Uto Highway Longmunt, Colorado 80503-9130 (303) 823-5774

*	Inspection Date:	
	Landowner name:	Rob Pudin / Part Knuourns
	Mailing address:	67 South Peak Rd
	City, State. Zip:	Boulden, CO 20302
	Site address:	414 Forsythe Rd. Boolden, CO
	Phone number.	303 444-2471
	Road access:	Magnolia (Name of access road)
	Docket Number:	SPR 04-025 (SPR) LU, Etc.)
	Section:	12 Located IN The North cast Yy of
	Township:	1 The Southeast Yy of Section 11 AND
	Range:	72 W The West Yz of The Southwest Yy o
	Legal Discription	Section 12
¥	FPD:	
*	Dominant fuel type:	Crasses/Ferby (Grass/forbs/shrubs/slash/etc)
*	Dominant overstory:	Ponderosa
*	Co-dominant overstor	y: Douglas Fir.
*	Fuel model type:	9
	Slash disposal:	<u>Chipping</u> / hauling (Chipped/hauled/burned/lop-scatter)
*	Aspect	SW (Direction of slope)
*	Slope	

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	Elevation	8,000	(feet)	
	Building site:	Valley Mid-slop	E (Chimney/saddle/valley/ridge/mid-slope)	
*	Site moisture:	moist		
*	Natural fire barrier:	Nono		
*	Insect & Disease Diag	nosis: NOND		
	Lot size (acres):	50.8 (Acres)		,
	Number of Structures	3	MUERSIZED GAMASE/ IS	BATN
	Type of Structures	old horse barn, He	OVERSIZED 6AMASE/IS	
	Driveway length:	67 400 ft	(<>150 ft. OR <>400 ft)	
	Driveway trees remov	ved: few/many)		
VI	Home buffer material	bravel		
A-	House design:	Comptex (simple/compl	lex)	
	Roof Design.	Simple (simple/compl	lex)	
	Roof material:	_metal	(Asphalt shingles/concrete tiles/metal)	
De	Soffit type:	IXG Ttb meta	Pewood (Plywood/hardboard/cement board)	inge & Grove
)	Siding material:	stucio/ Log	_ (Cement/hardboard/log/stucco/stone/woo	d)
	Windows (#).	30		
	Windows Size:	halium (small/medium	n/large)	
	Windows Frames.	Aluminum clad	(Wood/aluminum/aluminum clad)	11 STAUT
	Windows Aspect:	Mostly North I w	(Viewing direction)	
	Window Construction	303	(Tempered glass/c-coating)	
	Door Material	wood and stee	(Wood/steel/fiberglass/composit)	

Divertune N.S.E.V. MARK VAN EUEREN, TBI CSFS BODIST

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Deck material:	Both	(Wood/composite materials)
Deck Description:	OPEN W/ ROOT	(Enclosed/open)
Deck support type:	Logs/Timbers	(Timber posts logs steel/concrete/stone)
Deck buffer material	Rack/GVAUE1	(Crushed rock/gravel)
Deck weed barrier:	TBD	(Fiberglass/polyester)
Structure SQR. FT .:	4179 ft2	
Utility Location (	125' underground	(Pole Xft from house buried in trench)
Structure aspect:	North / WEST	(Predominant facing direction - view)
Leech field: $(5E)$	50' To field: Prop.	(Predominant facing direction - view) n 50; Sept. 2 + n - 25 (Distance from house, propane, septic NSEW) 2.50' To LISTERN (4000 6n1)
Cistern or Well: (N	30' to well	(Distance from house, propane, septic NSEW)
Cistern size:	4000	(gallons)
Propane Tank location	m: Level; 7.50'	(Level w/house & >50ft from cistern)