WILDFIRE MITIGATION PLAN

Docket SPR-# 03-117

Inspection date: 3/1/2004

Knowledge to Go Places

Boulder District

5625 Ute Highway Longmont, Colorado 80503-9130

(303) 823-5774

Prepared for:

Carl Wagner 13444 Glen Circle Broomfield, CO 80020 Phone: 303-410-8257

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 37 Jennie Lane, Golden CO 80403. Access to the property is from from Highway 72 turn North on Ramona Road and an immediate right on Jennie Lane. The legal description is Section 36, Township 1S, and Range 72W Cedar Ridge Estates, NW 1/4 of Section 36. The fire protection district is the Coal Creek fire protection district (303-642-3121). There will be 2 structures located on site, including a Residence with a detached garage to the South. The lot is 1 acre in size and has a ~25% percent slope with a Northern aspect. It is at 8,600 feet in elevation. The proposed building site is mid-slope and it is a relatively fairly moist site. Jennie lane to the South creates a small natural barrier that may help stop or slow the spread of a surface/crown fire on the site.

The site has a dominant overstory consisting of Ponderosa pine, Douglas fir, and Lodgepole pine with a Lodgepole pine and Douglas fir understory component. The area is predominantly fuel model 9 with an understory consisting of grasses and intermixed shrubs. 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. There is a small Dwarf Mistletoe infestation accompanied by a few IPS and MPB endemic hits due to 2003 harvest.

CONSTRUCTION DESIGN AND MATERIALS

The proposed house has a relatively simple design with a simple roofline and is oriented with a Northern aspect. The roofing material will consist of metal. The exterior wall material is to be tempered hardboard and rock. Soffits are to be 3/4" thick hardboard.

There are 8 on garage and 12 on residence with the primary viewing direction being toward the North side of the structure. Windows will be double glazed with low e-coated, but wants solar gain and frames made of wood on garage and aluminum clad on residence. Exterior doors are to be 1-3/4", fire-rated, and made of steel.

The one deck will be constructed of redwood and supported by a concrete base with fir posts for support. The deck will be open and isolated from the surrounding landscape with crushed rock over a polyester weed barrier.

The propane tank will be set on a pad of crushed rock overlaying a fiberglass weedbarrier approximately 50 feet East/SE of garage, and be at the same elevation as the house.

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 polyester 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 will be irrigated when possible and mowed to a maximum height of 6 to 8 inches.

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 Creating-Wildfire-Defensible-Space.

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 proposed driveway will create some additional site disturbance and soil compaction but will require the removal of only a few (~5) trees. The driveway is to be 12 feet wide with a vertical clearance of 13'6" and a grade that is less than 12%. The driveway is less than 150 feet therefore no turn around is needed (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 Well is located 100 feet to the South of residence and 30 feet from the garage. There will also be a 1,800 gallon cistern located about 40 feet to the East of the garage. The propane tank is located 50 feet East/SE of the garage. Vegetation within 10 feet of the cistern, well, and propane tank will be kept cleared. Utilities for the property will will be buried in a trench about 120 feet from an existing above ground line located on Jennie lane, which is South of residence. The septic field is located 100 feet to the North 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 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 (Coal Creek fire protection district (303-642-3121)).

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

- 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 3/1/2004.

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.



Knowledge to Go Places

March 4, 2004

Carl Wagner 13444 Glen Circle Broomfield, CO 80020 Boulder District 5625 Ute Highway Longmont, Colorado 80503-9130 (303) 823-5774

Dear Carl Wagner,

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 37 Jennie Lane, Golden CO 80403. 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,

Cory Secher Forester



Knowledge to Go Places

March 4, 2004

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

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

Hey Eric,

Enclosed is a copy of SPR # 03-117, for the Carl Wagner property. The property address is 37 Jennie Lane, Golden CO 80403. My initial inspection was on 3/1/2004.

Carl Wagner plans on building 2 structure(s) including a Residence with a detached garage to the South. The contact number is 303-410-8257. Carl Wagner has been informed to contact me for the final inspection once the work has been completed.

If you have any questions, please contact me at 303-823-5774.

Sincerely,

Cory Secher Forester

Colorado State FOREST SERVICE	Boulder District 5625 Ute Highway Longmont, CO 80503 (303) 823-5774 (303) 823-5768 fax
Name: Cav Wagner. Address: 37 Jennie Ln. Som Carl. wagner e Level 3, com. Phone: 720-898-1235 @ Appointment Date: 3-1-04; 11:00 a.m.	Defensible Space Fire Mitigation Insect and Disease Control Interested Neighbors Acreage/Size: 1.08
Directions: Conderve - Romana (Lon on left.
Fap #: 720 - 988 - 5	20-7
•	

SITE PLAN REVIEW FIELD DATA FORM

Inspection Date:	3/1/2004	
Landowner name:	Carl Wagner	
Mailing address:	13444 Glen Circle	
City, State. Zip:	Broomfield Co 80020	
Site address:	37 Jennie Lane	
Phone number:	303-410-8257	
Road access:		(Name of access road)
Docket Number:	03-117	(SPR, LU, Etc.)
Section:	36 N W	
Township:		
Range:	72W	
Legal Discription:	Co	
FPD:	CCC	
Dominant fuel type:	PP, DF, Lodgepole.	Grass/forbs(shrubs/slash/etc)
Dominant overstory:		
Co-dominant oversto	ry: LP DF	
Fuel model type: (9	
Slash disposal:	haul ed (Chipped/h	nauled/burned/lop-scatter)
Aspect:	North (Chipped/	(Direction of slope)
Slope:	25%	

Elevation:	8600	(feet)		
Building site:	Mid Slope	(Chimney/saddle/valley/ridge/mid-slope)		
Site moisture:	Moist			
Natural fire barrier:	Jennie Road to the Sou	uth (6)		
Insect & Disease Diagnosis: Small DM Infortation, Small IPS/MPD(2)				
Lot size (acres):	1,08 (Acres)			
Number of Structures	s:			
Type of Structures:	House & Garage	(House/barn/garage)		
Driveway length:	150	<> 150 ft. OR <> 400 ft)		
Driveway trees removed: few/many)				
Home buffer material: Grave				
House design:	Suple (simple/compl	ex)		
Roof Design: Simple/complex)				
Roof material:	Metal	(Asphalt shingles/concrete tiles/metal)		
Soffit type:	hordboard 34" Gerase only (3-4 42013)	(Plywood/hardboard/cement board)		
Siding material:	Temp hardboard / Rock	(Cement/hardboard/log/stucco/stone/wood)		
Windows (#):	8/12			
Windows Size:	Medau (small/medium/large)			
Windows Frames:	was /al clad	(Wood/aluminum/aluminum clad)		
Windows Aspect:	North	(Viewing direction)		
Window Construction	n: Want Solar gain	_ (Tempered glass/e-coating)		
Door Material:	Stel	(Wood/steel/fiberglass/composit)		

	21 11 1 2 6 61	(Wood/composite materials)
Deck material:	Kiedward top fir stu	(Wood/composite materials)
Deck Description:	Open	(Enclosed/open)
Deck support type:	Concrete /Fir	(Timber posts/logs/steel/concrete/stone)
Deck buffer material:	Rock	(Crushed rock/gravel)
Deck weed barrier:	Polyoster	(Fiberglass/polyester)
Structure SQR. FT.:	3100	
Utility Location:	20' south of home bu	(Pole Xft from house/buried in trench)
Structure aspect:	North	(Predominant facing direction - view)
Leech field:	North 100'	(Distance from house,propane,septic NSEW)
Cistern or Well:	South of Structure 100 1 for	(Distance from house, propane, septic NSEW)
Cistern size:	South East 100' from how	(Distance from house, propane, septic NSEW) vee 40'-50' Seet from Garase (gallons)
Propage Tank location	1. 50' Fast/SE of go	(Level w/house & >50ft from cistern)

