

WILDFIRE MITIGATION PLAN

Docket SPR- # 02-108

Inspection date: 5/27/2004

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

Prepared for:

Jay Wolkowsky
1505 Oak Avenue
Boulder, CO 80304
Phone: 303-449-6345

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 3923 Sugarloaf Road, Boulder CO 80302. Access to the property from Boulder Canyon go west to Sugarloaf Road and turn North, the property is located on the south side of Sugarloaf Road. The legal description is Section 25, Township 1N, and Range 72W. The fire protection district is the Sugarloaf fire protection district (303-440-4963). There will be a single new residence built on site. The lot is 35 acres in size and has a <10% percent slope with a southeast aspect. It is at 7,600 feet in elevation. The proposed building site is mid-slope and it is a relatively dry site. The area around the property has historically burned-over in the 1990's creating a large natural barrier that may help stop or slow the spread of a crown fire on the site. This location does not have any natural barriers that will stop the spread of a surface fire.

The site has a dominant overstory consisting of few Ponderosa pine (*Pinus ponderosa*) with a minimal Douglas-fir (*Pseudotsuga menziesii*), Ponderosa pine (*Pinus ponderosa*) understory component. The area is predominantly fuel model 1 with ground fuels consisting of grasses and forbs. Fuel model 1 consists of short grasses one foot tall or less. The area has very few shrubs or trees, any present are widely scattered. This type occurs on the plains, the first hogbacks of the foothills, mountain meadows, and fire rehabilitating areas. There is no sign of any current insect and disease problems on the property at the time of inspection.

CONSTRUCTION DESIGN AND MATERIALS

The proposed house has a relatively complex design with a simple roofline and is oriented with a southeast aspect. The roofing material will consist of EPDM class A material. The exterior wall material is to be CMU and cement based stucco. Soffits are to be ¾" thick cement board. The structure has ~41 large sized windows with the primary viewing direction being toward the southeast 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 aluminum clad. The one deck will be constructed of concrete pavers and will be constructed as a rooftop deck and located on the roof of the new residence. The propane tank will be set on a pad of crushed rock overlaying a fiberglass weedbarrier approximately 65 feet to the northwest of the residence.

EMERGENCY ACCESS

The existing driveway will not create additional site disturbance or soil compaction and will require the removal of no trees. The driveway will be 12 feet wide with a vertical clearance greater than 13'6" and a grade that is less than 12%. The driveway is 1200 feet long therefore a hammerhead turn-around will be present. The driveway is greater than 400 feet therefore pull-outs will also be required.

WATER SUPPLY / UTILITIES / SEPTIC FIELD

The water source will be from a domestic cistern located approximately 45 feet northeast of the residence. They will also be part of the community cistern. A well will be located 110 feet to the northeast of residence. The propane tank is set on a pad of crushed rock overlaying a fiberglass weedbarrier approximately 65 feet to the northwest of the residence. Vegetation within 10 feet of the cistern/well and propane tank will be kept cleared. Utilities for the property will be buried northwest of the residence. The septic field is located 170 feet west of the residence.

MAINTENANCE AND 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, zone 1 and 2, area into zone 3.

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
- Do not stack fresh cut wood against live trees – this could invite unwanted insects
- 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
- Have an emergency evacuation plan in place (included in wildfire mitigation plan)
- Be aware of fire danger; check the Boulder Fire Weather website at www.crh.hoaa.gov/den/fireindx.html
- Keep driveways and property address marked with reflective easy to see signs
- Maintain 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, ladders, and axes available and ready for use
- Clean debris from the roof and gutters at least two times annually
- Check screens and maintain spark arresters on chimneys annually
- Avoid storing combustibles under decks such as wood piles, scrap lumber, and fuels

DEFINITIONS

Wildfire mitigation plan – A plan to reduce wildfire hazards around a home or other structure through fuels reduction. A document to inform urban interface home owners of the dangers and responsibilities of living in the interface. A plan to help outline the initial and ongoing fuels reduction needed to maintain an effective and healthy wildfire defensible space.

Fuel Model – A number system that identifies the types of fuels found on the property that will directly influence fire behavior

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 other various mammals.

FUELS REDUCTION

There will be no trees marked for removal for fire mitigation purposes since the area is predominately fuel model 1, and only a few scattered trees exist on the property. Since no trees will be removed it is the recommendation of the State Forest Service to have the grasses mowed 30 feet around the structure to a height of 6 inches a minimum of twice a year.

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 stone over a 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 re-vegetation. Grasses will be irrigated when possible and mowed to a maximum height of 6 to 8 inches twice per growing season to a distance of 30 feet from the structure.

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 minimum crown spacing). No trees will overhang the house or decks, unless approved by Boulder County or CSFS as "part of the structure" with additional fuels reduction around those trees to insure the defensible space integrity. Trees should be at least 15 feet away from the house on all sides, and a minimum of 10 feet from chimneys.

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.

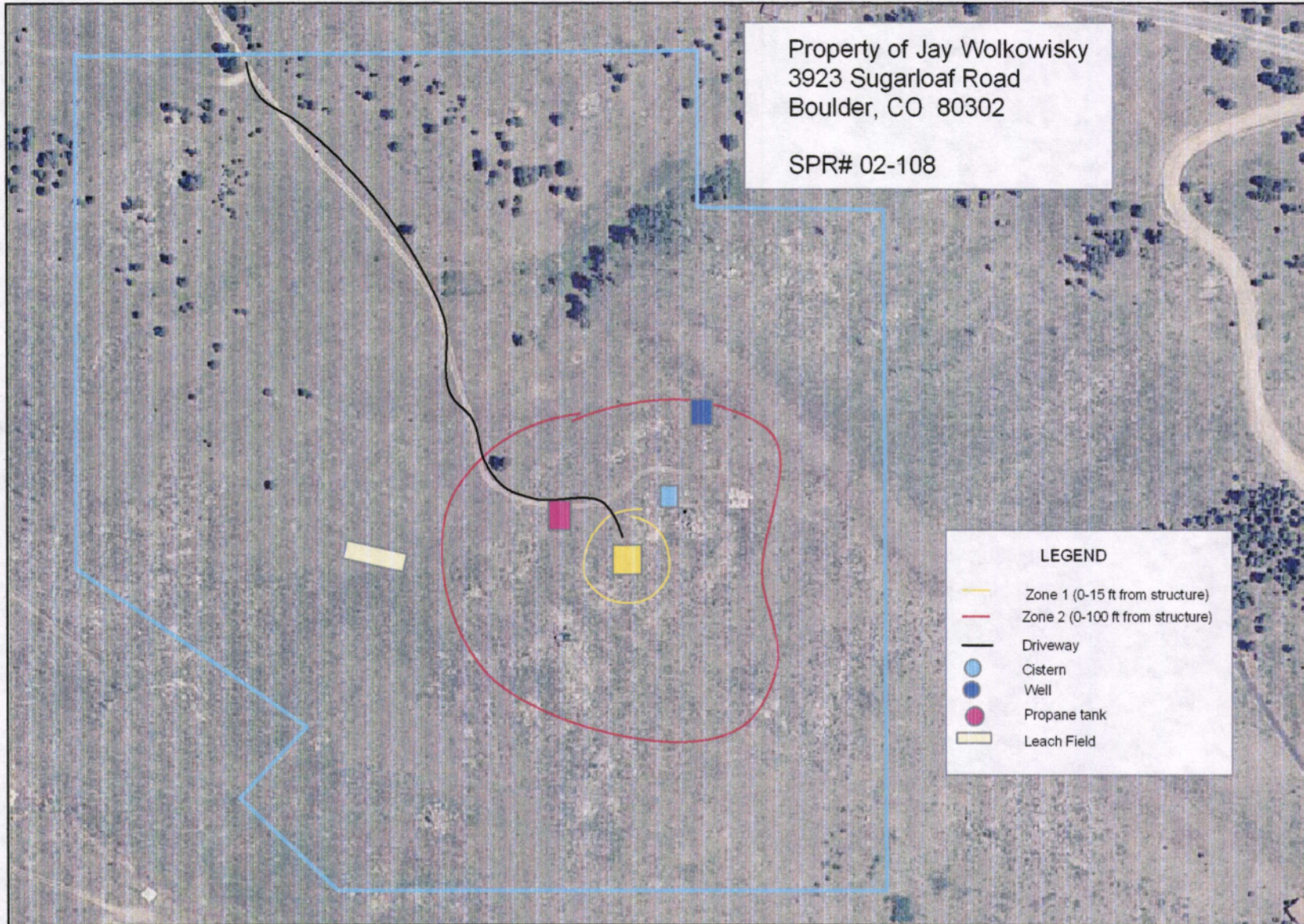
- Thin suppressed trees and trees with disease and insect infestations and retain the larger, healthier trees.
- Snags should be retained for wildlife.
- Some slash in this zone can be lopped and scattered and/or piled for wildlife enhancement and shelter.
- Large amounts of slash should be disposed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

Property of Jay Wolkowsky
3923 Sugarloaf Road
Boulder, CO 80302

SPR# 02-108

LEGEND

- Zone 1 (0-15 ft from structure)
- Zone 2 (0-100 ft from structure)
- Driveway
- Cistern
- Well
- Propane tank
- Leach Field



05/27/2004 10:57 3038235768

CSFS BODIST

PAGE 01

T.S. Archies
Tom Scrimgeour
810 Alpine Ave.
Boulder Co. 80304

DIRECTIONS FOR FILLING OUT FORM:

Please fill out as complete as possible and fax to Cory Secher at 303-823-5768 or mail to 5625 Ute Highway, Longmont CO 80503-9130.

Any **Bolded** categories will be filled in by the CSFS representative at the time of initial site visit and tree marking for the defensible space. If you have any questions about this form please contact Cory Secher at 303-823-5774 or by email at csecher@lamar.colostate.edu.

Wildfire Mitigation Plan
FIELD DATA FORM

Inspection Date: _____**Landowner name:** JAY WOLKOWISKY**Mailing address:** 1505 OAK AVE**City, State. Zip:** BOULDER CO 80304**Site address:** 3923 Sugarloaf Rd.**Phone number:** 303 449 6345**Road access:** South side of Sugarloaf Rd. (Directions from main access road)**Docket Number:** SPR 02-108 (SPR, LU, Etc.)**Section:** 25**Township:** 1N**Range:** 72W**Legal Description:** "embracing a portion of the south half of
Section 25 T1N R72W of the 6th P.M.
Boulder County, CO"

FPD: _____

Dominant fuel type: _____

(Grass/forbs/shrubs/slash/etc)

Dominant overstory: Pandanus

Co-dominant overstory: N/A

Fuel model type: 1

Slash disposal: NA (Chipped/hailed/burned/lop-scatter)

Aspect: South east (Direction of slope)

Slope: _____

Elevation: 7600 ± (feet)

Building site: _____ (Chimney/saddle/valley/ridge/mid-slope)

Site moisture: Low

Natural fire barrier: _____

Insect & Disease Diagnosis: N/A

Lot size (acres): 35 (Acres)

Number of Structures: 1 (All structures to be present)

Existing Structures: 0 (House/barn/garage/etc.)

New Structure: House (House/Barn/new addition/etc..)

Driveway length: 1200' (Actual length in feet from road to home)

Driveway trees removed: none (few/many/none)

Home buffer material: stone (Stone/crushed gravel/decorative stone)

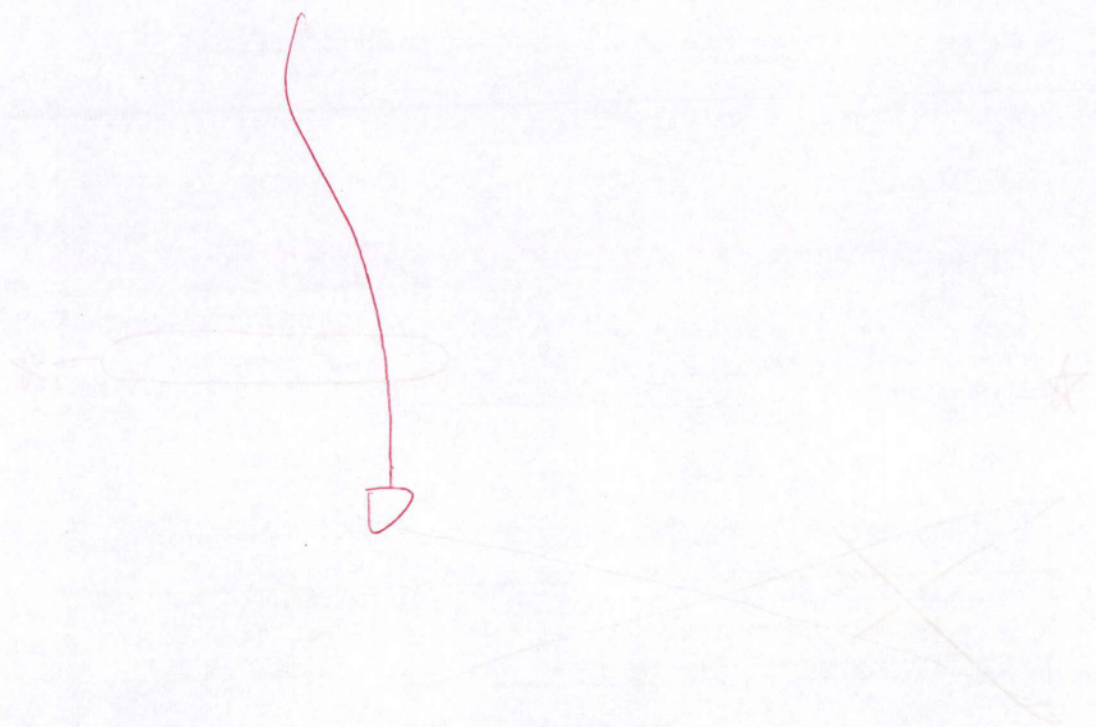
House design: 1 story mostly complex shape (simple/complex)

Roof Design: flat (simple/complex)

Roof material: EPDM CLASS A (Asphalt shingles/concrete tiles/metal)

Soffits type: cement bd. (Plywood/hardboard/cement board)
Siding material: CMU # ^{cement} portland based stucco (Cement/hardboard/log/stucco/stone/wood)
Windows (#): 41 (approximate number of windows)
Windows Size: large (On average: small/medium/large)
Windows Frames: aluminum (Wood/aluminum/aluminum clad)
Windows Aspect: E-S (Dominant viewing direction)
Window Construction: large windows (Tempered glass/e-coating/etc.)
tempered all heat mirror low e
Door Material: aluminum (Wood/steel/fiberglass/composite)
★ Deck material: (Roof Deck) conc. pavers (Wood/composite materials) ★
Deck Description: OPEN (Enclosed/open)
Deck support type: NA (Timber posts/logs/steel/concrete/stone)
★ Deck buffer material: NA (Crushed rock/gravel)
★ Deck weed barrier: NA (Fiberglass/polyester)
Structure SQR. FT.: 8500 (Total square feet of structure)
Utility Location: buried NW (Pole/buried: Direction from structure)
Structure aspect: E-S (Dominant facing direction/view)
★ Leach field: 170' → west (Distance from house, and direction)
Cistern: unknown well/home 50' NE (Distance from house, and direction)
★ Cistern Type: domestic (Domestic Cistern or Fire Cistern)
Cistern size: 1500 (gallons)
Well (if applicable): 110' NE (Distance form house, and direction)
Propane Tank location: 65' NW (Distance from house and direction)

★ Community Cistern for fire



Jan 102 Curry Jan 102



on 7 w/ such a fine view of