

WILDFIRE MITIGATION PLAN

For Dale J. and Dwilette B. Paulsen
211 Riverside Dr
Docket: SPR - 08 - 003
Inspection date: 1/8/2008

**Colorado
State**
FOREST
SERVICE
Boulder District
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Prepared for:

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Prepared by:

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PURPOSE OF A WILDFIRE MITIGATION PLAN

The purpose of a Wildfire Mitigation Plan is to give guidelines for reducing wildfire hazards around a home or other structures through fuels reduction. It is a document to inform urban interface home owners of the dangers and responsibilities of living in the interface. This plan will help outline the initial and ongoing fuels reduction needed to create and maintain an effective wildfire defensible space. However, having a wildfire mitigation plan, implementation of a defensible space thinning, and following all the recommendations as outlined in this plan **does not guarantee that your home will survive a wildland fire; however, in combination they will give your home the best potential probability to survive a wildland fire.**

SITE LOCATION AND PROPERTY DESCRIPTION

The property is located in Section 34, Township 3N, and Range 72W, W.L. Thomas Tract of Block 1 of the Hmended 1935 Plat of Riverside, Boulder Co. The property is located within the Allenspark Fire Protection District (303-747-2586). A 1,880 sq.ft residence is proposed for the site. The lot is .965 acres in size and has a modest ~2-50 percent slope with a north aspect. The site is at ~7,500 feet in elevation and located on a valley which is relatively moist and dry. Riverside Dr and Hwy 7 to the north create a small natural barrier that may help slow the spread of a surface fire on the site.

CONSTRUCTION DESIGN AND MATERIALS

The proposed structure will have a moderatley complex design with a moderately complex roofline and will be oriented with a northeast aspect. **The overall design of the structure greatly influences how it will withstand a wildfire. Complex building forms create heat traps, areas where the walls and roof members intersect on another where eddies form and hot air and embers from a fire can collect. It is important to keep these areas clear of combustibles such as needles and brush.**

The roofing material will consist of class-A laminated asphalt shingles. **Falling embers and fire brands from a wildfire can land on a roof and ignite the roof, either by directly heating the roofing material, or by igniting light fuels (pine needles) that have collected on the roof. It is recommended to place screening over gutters and/or make a yearly check to keep them clear of leaves and needles.**

The exterior wall material is to be cement board. Soffits and fascia are to be 3/8" thick cement board. The structure will have 11 medium sized windows with the primary viewing direction being toward the northeast side of the structure. Windows will be double glazed with Low-E coating and tempered glass where required. Frames are to be made of aluminum clad wood. Exterior doors are to be 1 3/4", fire-rated, and made of steel. The structure will have 2 sliding glass doors located on the north side of the structure. **All operable windows must be provided with screening that is constructed of either aluminum, galvanized steel, copper or of an approved material that when exposed to flame for 15 seconds, will not burn through or melt, and remains intact. Windows are one of the weakest parts of a structure with regards to wildfire. They often crack and fail before the structure itself ignites, providing a direct path for embers and radiant heat to reach the interior. It is best to minimize the number of windows, especially on the downhill side of the structure. Fire typically burns up hill faster and will create a great deal of radiant heat.**

UTLITIES

The propane tank is to be set on a pad of crushed rock overlaying a weedbarrier ~50 ft to the northeast of the residence. Utilities for the property are buried from a pole ~200 ft west of the residence. The septic field is located ~50 ft west of the residence. A well is located ~60 ft to the northeast.

EMERGENCY EGRESS

Depending on the location of a fire, a potential evacuation route would begin by heading east on Riverside Dr to Hwy 7 and travel east to the town of Lyons. An alternate plan would be to head west on Riverside Dr to Hwy 72 and head north to Allenspark or south to Nederland.

DRIVEWAY ACCESS FOR EMERGENCY VEHICLES

The existing driveway will create minimal amount of site distrubance and soil compaction and will require the removal of no trees. The driveway is ~12 feet wide with a vertical clearance of 13'6" and a grade that is less than 12 percent. The

driveway is approximately 135 feet long therefore no turn around will be required. Since the driveway is less than 400 ft., no pull-outs are required along the driveway.

EMERGENCY WATER SUPPLY FOR FIRE FIGHTING

The water source will be from a 1,800 gallon individual cistern. The cistern will be located a minimum of 50 feet from the front of the house and no further than 150 ft from the rear of the structure. The cistern will have a dry hydrant connection with a 6 inch NH threaded connection and cap (note that a 2-1/2" adaptor may be needed, depending upon the requirements of your fire protection district). Alternatively, a contribution may be made to the fire protection district community cistern fund (if available). Contact the Allenspark Fire Protection District (303-747-2586) for more information and specific details.

FUELS REDUCTION

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 and need to be pruned to a height of 8ft or 1/3 the height of the tree, whichever is less. 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 when possible. Slash from the harvest will be hauled off site. Note that if you decide to burn piles, you must obtain a valid Open Burning Permit from the Boulder County Environmental Health Department (303-441-1180) and notify your local fire protection district Allenspark Fire Protection District (303-747-2586).

FOREST COMPONENT AND HEALTH

The site has a dominant overstory consisting of Douglas fir (*Pseudotsuga menziesii*) with a ponderosa pine (*Pinus ponderosa*), Douglas-fir (*Pseudotsuga menziesii*), quaking aspen (*Populus tremuloides*), Engelman spruce (*Picea engelmannii*) and Sub-alpine fir (*Abies lasiocarpa*) component. The understory consists of a dense cover of native grasses, forbs and shrubs. The forested area is best represented by Fuel Model 9. Fuel Model 9 is represented by closed canopy stands 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 may be present. This model can exist from foothills to subalpine.

There were no current signs of insect or disease problems on the property at the time of the inspection.

DEFENSIBLE SPACE MANAGEMENT

There are three defensible space zones to be created around the structure(s) on the site. Please note that it is possible that one or more of these zones will cross over the subject property onto adjacent properties. Property boundaries must be respected; mitigation work is not required beyond immediate boundaries. However, landowners are encouraged to contact and work with neighbors if property lines limit the ability to mitigate within the prescribed area. **Defensible space is a benefit, not only to the individual but also to the community as a whole.**

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 five-foot wide, non-flammable strip should be created using crushed 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 should be removed. Any large dead woody material on the ground should also be removed. Firewise plants should be used for landscaping and re-vegetation. Grasses should 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) should 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 can to be retained for screening. All remaining trees in this zone should 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 should 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 20 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 should 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 <http://www.ext.colostate.edu/pubs/natres/pubnatr.html> 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 can 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.

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 the building process, 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
- Establish an escape route and safety zone with the aid of your local fire protection district
- 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; your nearest fire danger sign is located at your fire station or check the Boulder Fire Weather website at www.crh.noaa.gov/bou
- 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

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.

Duff – a layer of accumulated dead organic matter (pine needles).

Eddies – Small wind occurrences that are separate from normal wind flows.

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

Fire danger - An assessment of both fixed and variable factors of the fire environment, which determine the ease of ignition, rate of spread, difficulty of control, and the fire impact.

Fire hazard - The potential fire behavior for a fuel type, regardless of the fuel type's weather-influenced fuel moisture content or its resistance to fireguard construction. Assessment is based on physical fuel characteristics, such as fuel arrangement, fuel load, condition of herbaceous vegetation, and presence of elevated fuels.

Fire management - The activities concerned with the protection of people, property and forest areas from wildfire and the use of prescribed burning for the attainment of forest management and other land use objectives, all conducted in a manner that considers environmental, social and economic criteria.

Fire risk - The probability or chance of fire starting determined by the presence and activities of causative agents.

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

Forest health - A forest condition that is naturally resilient to damage; characterized by biodiversity, it contains sustained habitat for timber, fish, wildlife, and humans, and meets present and future resource management objectives.

Ladder fuels - Fuels that provide vertical continuity between the surface fuels and crown fuels in a forest stand, thus contributing to the ease of torching and crowning.

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

Noxious weeds - Any weed so designated by the Weed Control Regulations and identified on a regional district noxious weed control list.

Overstory – The tree species that forms the uppermost forest layer (dominant and co-dominant).

Slash – The residue left on the ground as a result of forest and other vegetation being altered by forest practices or other land use activities.

Snag – Standing dead tree, often used by wildlife such as woodpeckers, owls, and other various mammals.

Understory – Plants that grow underneath the overstory species.

Wildland urban interface – a popular term used to describe an area where various structures (most notably private homes) and human developments meet or are intermingled with forest and other vegetative fuel types.



Annual fire safety checklist

- Thin trees and brush properly within defensible space.
- Remove trash and debris from defensible space.
- Remove needles and pine cones from window wells.
- Remove trees growing through a porch or other portions of a structure.
- Clear leaves and debris from the roof and gutters of structures.
- Remove branches that overhang a chimney or roof.
- Stack firewood uphill from a home or on a contour away from the home.
- Use noncombustible roof materials.
- Place shutters, fire curtains or heavy drapes on windows.
- Place screens on foundation and eave vents.
- Enclose sides of stilt foundations and decks.
- Remove any combustibles from under decks, porches or entrances ways.
- Use a chimney screen or spark arrester in fireplaces.
- Clear vegetation from around fire hydrants, cisterns, propane tanks, etc.
- Place placards on garages if storing flammable materials inside.
- Make sure that an outdoor water supply is available with a hose, nozzle and pump.
- Post address signs that are clearly visible from the street or road.
- Make sure that driveways are wide enough for fire trucks and equipment.
- Check with appropriate highway agencies to make sure load limits are posted on bridges and for the appropriate protocol for posting load limits for bridges on private property.
- Install and test smoke detectors.
- Practice a family fire drill and evacuation plan.

Evacuation tips

- If a wildfire is threatening your area, listen to the radio for updated reports and evacuation information.
- Confine pets to one room and make plans to take care of them in the event of evacuation.
- Arrange for temporary housing with a friend or relative whose home is outside the threatened area. Leave a note in a prominent place in your home that says where and how you can be contacted.
- If your home is threatened by wildfire, you will be contacted and advised by law enforcement officers to evacuate. If you are not contacted or you decide to stay and help defend your home, evacuate pets and family members who are not needed to protect your home.
- Remove important documents, mementos, etc. from the possible fire area.
- Choose an evacuation route away from the fire if possible. Watch for changes in the speed and direction of the fire and smoke.

Take a disaster supply kit containing:

- Drinking water.
- A change of clothing and footwear for each family member.
- Blanket or sleeping bag for each person.
- First-aid kit and prescription medications.
- Emergency tools including a battery-powered radio, flashlight and extra batteries.
- Extra set of car keys and credit cards, cash or traveler's checks.
- Extra pairs of eyeglasses or other special items for infants, elderly or disabled family members.

Defending your home

Whether you choose to stay to defend your home or to evacuate, complete as many of the following preparations as possible.

- **DO NOT JEOPARDIZE YOUR LIFE. NO MATERIAL ITEM IS WORTH A LIFE.**
- Wear fire-resistant clothing and protective gear.
- Remove combustible materials from around structures.
- Close or cover outside vents and shutters.
- Position garden hoses to reach the entire house, but do not turn the water on until it is needed. Hoses should have an adjustable nozzle.
- Place large, full water containers around the house. Soak burlap sacks, small rugs or large rags in the containers.
- Place a ladder against the roof of the house on the opposite side of the approaching wildfire. Place a garden hose near the ladder, prepared as described previously.
- Place portable pumps near available water supplies, such as pools, hot tubs, creeks, etc.
- Close all windows and doors. Do not lock them.
- Close all inside doors.
- Turn on a light in each room and all outside lights. Leave them on even during daylight hours.
- Fill tubs, sinks and similar containers with water.
- Shut off gas supplies to structures at outside meters. Shut off propane supplies at the outside meter of the tank.
- Remove curtains made of lace, nylon or other light materials. Close blinds, heavy drapes and fire resistant window covers.
- Move overstuffed furniture into the center of the house, away from windows and sliding doors.
- Cars should be parked in the garage, facing out. Close the windows of the vehicle but do not lock the doors. Leave the keys in the ignition.
- Close the garage door but leave it unlocked. Disconnect automatic garage door openers.

For additional copies of these checklists, visit www.colostate.edu and search for wildfire, view the Colorado State Cooperative Extension fact sheet at <http://www.ext.colostate.edu/PUBS/NATRES/06304.html>, or contact the local Cooperative Extension office usually listed under the county government section of your local phone book.

(Information provided by Colorado State University Cooperative Extension and the Colorado State Forest Service.)

Safety Zone Guidelines

A Safety Zone is an area that in the event of a wildland fire you could survive the passing fire without the aid of a fire shelter. A natural safety zone could be an area already burned clean by the fire (in the black), rock areas where flashy fuels are absent, or large bodies of water. A manmade safety zones could be pre-constructed sites such as clear cuts. It should be close enough to your home to consider escape time to reach the safety zone. They should not be located upslope or downwind of the fire or in heavy fuels.

1. Avoid locations that are downwind from the fire.
2. Avoid locations that are in chimneys, saddles, or narrow canyons.
3. Avoid locations that require a steep uphill escape route.
4. Take advantage of heat barriers such as lee side of ridges, large rocks, or solid structures.
5. Burn out safety zones prior to flame front approach.
6. For radiant heat only, the distance separation between you and the flames must be at least four times the maximum flame height. This distance must be maintained on all sides, if the

fire has ability to burn completely around the safety zone. Convective heat from wind and/or terrain influences will increase this distance requirement.

Calculations Assuming No Slope and No Wind

<u>Flame Heights</u>	<u>Distance separation</u>	<u>Area in Acres</u>
10 feet	40 feet	1/10 acre
20 feet	80 feet	1/2 acre
50 feet	200 feet	3 acres
75 feet	300 feet	7 acres
100 feet	400 feet	12 acres
200 feet	800 feet	50 acres

Note: Distance separation is the radius from the center of the safety zone to the nearest fuels. When fuels are present that will allow the fire to burn on all sides of the safety zone this distance must be doubled in order to maintain effective separation in front, to the sides, and behind the person.

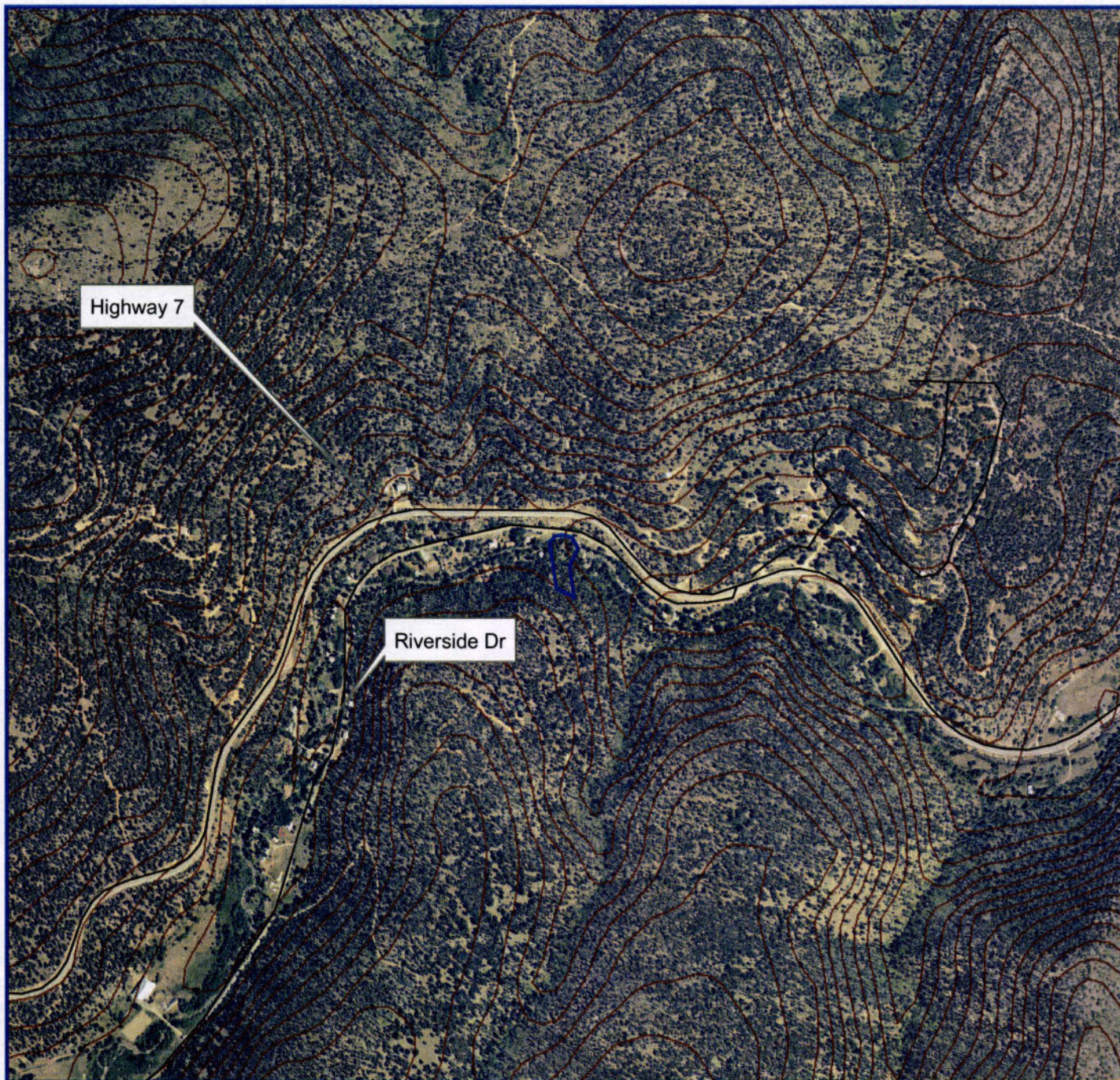
Area in Acres is calculated to allow for distance separation on all sides for a three person family and a vehicle. One acre is approximately the size of a football field or exactly 208 feet x 208 feet.

Example: Given a fire with 10 foot flame heights (no wind or slope). You would need a minimum of 40 feet between you and the flames. So your total safety zone should be 80 feet x 80 feet. If you are settled into the middle of the safety zone you will have a minimum distance of 40 feet to each edge of the zone.

Boulder County Wildfire Mitigation Plan Map



Landscape view of the Dale J and
Dwilette B Paulsen Property
00000 Riverside Drive
SPR - 08 - 003



Legend

— Property Boundary



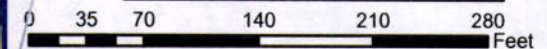
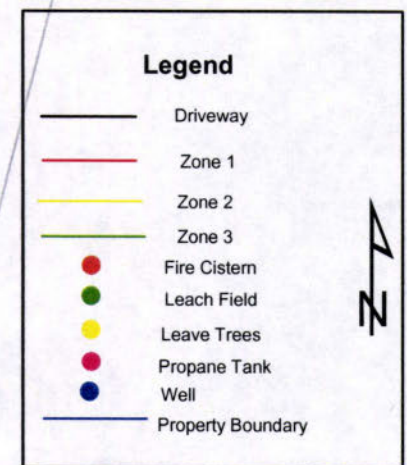
0 300 600 1,200 1,800 2,400
Feet

This map is intended for display purposes only
and is not intended for any legal representations

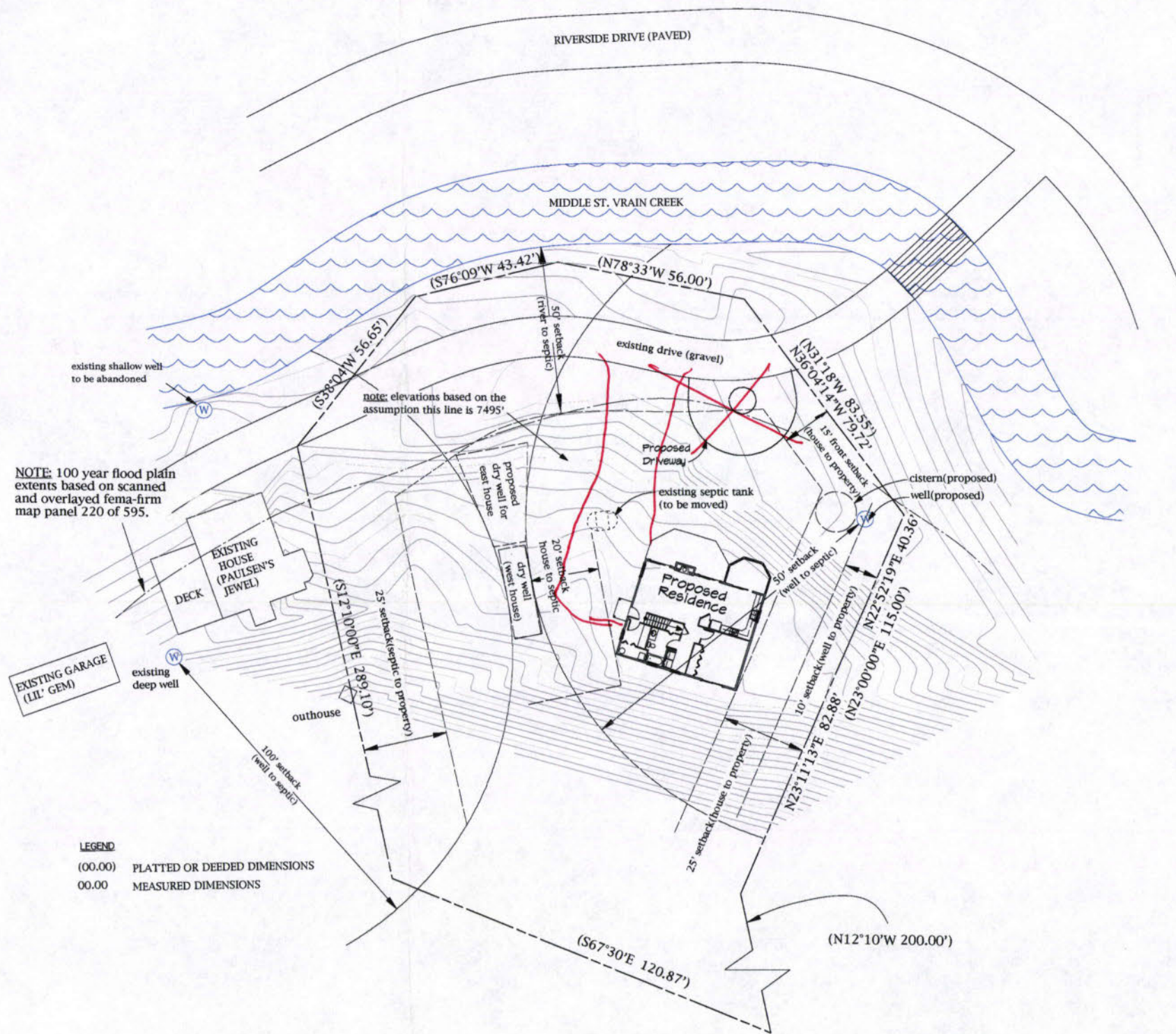
Boulder County Wildfire Mitigation Plan Map



Property of Dale J and Dwilette B
Paulsen 00000 Riverside Drive
SPR - 08 - 003



This map is intended for display purposes only
and is not intended for any legal representations



NOTE: 100 year flood plain extents based on scanned and overlaid fema-firm map panel 220 of 595.

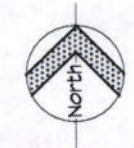
note: elevations based on the assumption this line is 7495'

LEGEND
 (00.00) PLATTED OR DEEDED DIMENSIONS
 00.00 MEASURED DIMENSIONS

Legal Description
 1.00 ac M/L of NW1/4 SE 1/4 TR 3970 & 3971 34-3N-72
 000000 S St Vrain Dr Mountains

Site Plan

1" = 40'-0"



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000 Riverside Drive
 Raymond, Colorado

Paulsen Cabin
 site Plan

date: 28 Dec 07
 revised:



sheet no.
A 1
 of 6

Colorado State Forest Service Wildfire Mitigation Plan Data Form

Please be specific. Fill out the data form as completely and as accurately as possible, **do not** leave any blanks. Leaving blanks can delay the process of your wildfire mitigation plan. You may email it to Matthew Jedra at mjedra@lamar.colostate.edu or fax it to 303-823-5768, or bring it to the scheduled appointment.

Any **Bolded** categories will be filled in by the Colorado State Forest Service (CSFS) representative at the time of initial site visit. If you have any questions about this form please contact Matthew Jedra at 303-823-5774.

Inspection Date: 1/9/08

Landowner name: Dale L. Paulsen and Dwilette^B Paulsen

Mailing address: 143 SE 146th Ave

City, State, Zip: STARKER, KS 67578

Site address: 000000 Riverside Drive (W.L. Thomas Tract)

Phone number: None

Road access: (Directions from main access road)

Old Highway 7 West from Lyons

Docket number: SPR-08-003 (SPR, SPRW, LU, Etc.)

Section: 34

Township: 3N

Range: 72W

Legal Description:
000000 S. ST VRAIN Mountains aka
W.L. Thomas Tract at Block 1 of the Amended
1935 Plat of Riverside, BOULDER Co., COLORADO

Elevation: 7500 (feet)

Lot size: One (1) more/less (Acres)

Driveway length: 100' (Actual length in feet from road to home)

Driveway trees removed: 0 (few/many/none)

House design: Simple (simple – rectangle shape, moderately complex – any shape with a few alcoves, complex – any shaped with a number of alcoves complex design)

Home buffer material: Crushed Gravel (Material that is spread 5 ft. wide around the house - stone/crushed gravel/decorative stone)

Roof Design: Simple (simple/complex)

Roof material: Asphalt (Class A- Asphalt shingles/concrete tiles/metal (wood roof is not permitted in Boulder County))

Soffit type and thickness: Cement Board (Plywood/hardboard/cement board, thickness)

Siding material: Cement Board (Cement/hardboard/log/stucco/stone/wood, etc...)

Windows (#): 11 (number of windows in the structure)

Window Size: 3x4 (On average: small - <3x4', medium - 4x5', large <5x6')

Window Frames: Al. Clad Wood (Wood or aluminum clad wood/ **vinyl is not permitted**)

Window Aspect: NE (Dominant viewing direction)

Window Construction: LowE (Low E- Coating/Tempered glass/etc...)

Window Wells: NA (Number and location if present, these are windows that sit below ground level, usually in a basement)

Sliding Glass Doors: 2 on front (Location and Number)

Door Material: Steel (Wood/steel/fiberglass/composite)

Deck material: Composite (Wood/composite materials)

Deck Description: 1 Enclosed - 1 open (Enclosed deck/open deck/enclosed underneath/open underneath)

Deck support type: Concrete (Timber posts/logs/steel/concrete/decorative stone)

Deck buffer material: Gravel/Decorative Rock (Crushed rock/gravel/decorative stone)

Deck weed barrier: polyester (Fiberglass/polyester)

Number of Structures: 1 (All structures to be present, including sheds, garages and out buildings)

Existing Structures: none (House/barn/garage/etc.)

New Structure: 1 House (House/Barn/garage/new addition/etc...)

Structure Square feet: 1880 (Total sq.ft. of structure – this **must** be accurate and match the sq.ft that you submitted for SPR, if it has changed, please specify)

Structure aspect: NE (Dominant facing direction/view, N, S, E, W)

Utility Location: Buried 200' W (Pole/buried: Direction and distance from residence – N, S, E, W/20ft, 30ft, 40ft, etc...)

Detached Garage (if applicable): None (Total square feet)

Out buildings: None (Total square feet of any and all sheds, cabins, ect...)

Leach field: 50' W (Direction and distance from residence – N, S, E, W/20ft, 30ft, 40ft, etc...)

Cistern size (if applicable): 1800 gal ~~150 NE~~ (gallons)

Cistern Location: 150' NE (Direction and distance from residence – N, S, E, W/20ft, 30ft, 40ft, etc...)

Cistern Type: Fire Cistern (Domestic Cistern or Fire Cistern)

Making a donation to community cistern : No (Yes or No)

Have you talked to the local fire department : No (Yes or No)

Are you required to have a sprinkler system : No (Yes or No) (If your house/addition is greater than 3,600 sq.ft. you are required to have an a full interior NFPA 13 D Sprinkler system per Boulder County)

Water supply: Well (Well or main line)

Well (if applicable): 60' NE (Direction and distance from residence – N, S, E, W/20ft, 30ft, 40ft, etc...)

Propane or natural gas: Propane

Propane Tank location: 50' NE (Direction and distance from residence – N, S, E, W/20ft, 30ft, 40ft, etc...)

Slash disposal: Hauled (Chipped/hauled/burned/lop-scatter)

Can you provide a copy of a map with locations : Yes (Yes or No)

Comments: _____

This part will be filled out by the CSFS inspecting forester

FPD: AP

Dominant fuel type: 6 FS (Grass/forbs/shrubs/slash/etc)

Dominant overstory: Spruce

Co-dominant overstory: _____

Fuel model type: 9

Aspect: N (Direction of slope)

Slope: 2-50 (Percent)

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

Site moisture: Wet

Natural fire barrier: Roughly Dr.

Insect & Disease Diagnosis: N/A

Comments: _____



Boulder County Land Use Department

Courthouse Annex Building
2045 13th Street • PO Box 471
Boulder, Colorado 80302
Phone: 303-441-3930 • Fax: 303-441-4856
Email: planner@co.boulder.co.us •
<http://www.co.boulder.co.us/lu/>

Office Hours: Monday – Friday 8:00 AM to 4:30 PM

499417, CK # 3058 \$400.⁰⁰ RS

Shaded Areas for Staff Only
Intake Stamp
DEC 28 2007
BOULDER COUNTY LAND USE

Application Form

Project Number		Project Name	
* No Application Deadline		* Application Deadline: First Wednesday of the Month	
* Application Deadline: Second Wednesday of the Month			
<input type="checkbox"/> Limited Impact Special Use <input checked="" type="checkbox"/> Site Plan Review <input type="checkbox"/> Site Plan Review Waiver <input type="checkbox"/> Subdivision Exemption <input type="checkbox"/> Exemption Plat <input type="checkbox"/> Extension of Approval <input type="checkbox"/> 1041 State Interest Review <input type="checkbox"/> Other: _____		<input type="checkbox"/> Sketch Plan <input checked="" type="checkbox"/> Preliminary Plan <input type="checkbox"/> Final Plat <input type="checkbox"/> Resubdivision (Replat) <input type="checkbox"/> Special Use/SSDP <input type="checkbox"/> Rezoning <input type="checkbox"/> Road/Easement Vacation <input type="checkbox"/> Location and Extent <input type="checkbox"/> Road Name Change	
Location(s)/Street Address(es) W.L. Thomas TRACT 00000 S ST VRAIN MOUNTAINS			
Subdivision Name ARLINGTON SUBDIV TO Riverside			
Lot(s)	Block(s)	Section(s) 34	Township(s) 3N
Area in Acres 1.4	Existing Zoning	Existing Use of Property OPEN LOT	Range(s) 72W
Proposed Water Supply Well	Proposed Sewage Disposal Method SEPTIC		

Applicants:

Applicant/Property Owner Dale J. Paulsen and DWILETTE B. PAULSEN		Email Address dpaul75@earthlink.net	
Street Address 143 SE 140th Ave			
City STAFFORD	State KS	Zip Code 67592	Phone 620-234-5918
Applicant/Property Owner		Fax 620-549-3237	
City		Email Address	
Applicant/Property Owner/Agent/Consultant		Phone 620-549-3236	
City		Email Address	
City	State	Zip Code	Phone
Agent/Consultant		Fax	
Street Address		Email Address	
City	State	Zip Code	Phone
Agent/Consultant		Fax	

Certification: (Please refer to the Regulations and Application Submittal Package for complete application requirements.)

I certify that I am signing this Application Form as an owner of record of the property included in the Application. I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge. I understand that all materials required by Boulder County must be submitted prior to having this matter processed. I understand that public hearings or meetings may be required. I understand that I must sign an Agreement of Payment for Application processing fees and that additional fees or materials may be required as a result of considerations which may arise in the processing of this docket. I understand that the road, school, and park dedications may be required as a condition of approval.

I understand that I am consenting to allow the County Staff involved in this application or their designees to enter onto and inspect the subject property at any reasonable time, without obtaining any prior consent.

All landowners are required to sign application. If additional space is needed attach additional sheet signed and dated.

Signature of Property Owner Dale J. Paulsen	Date 12-26-07	Signature of Property Owner Dwilette B. Paulsen	Date 12-26-07
Other Signature	Date	Other Signature	Date

* Only if the Land Use Director waives the landowner signature requirement for good cause shown under the applicable provisions of the Land Use Code.



Site Plan Review Fact Sheet

Each section of this Fact Sheet is required to be completed, even if the information is duplicated elsewhere in the application. Completed Fact Sheets cut application review time, and assist staff in expediting determinations. Please make duplicates of this page if the project involves more than two structures.

Structure Information

TYPE OF STRUCTURE: Single family residence
(e.g. residence, studio, barn, etc.)

TOTAL EXISTING FLOOR AREA: 0 sq/ft DEMOLISH: 0 sq/ft
(Finished + Unfinished sq.ft. - always include garage if attached)

Is new floor area proposed in areas where demolition is will occur?

Yes No

If Yes, please be sure this area is included in the table below.

PROPOSED FLOOR AREA (new construction only)

	Finished	Unfinished	Total
Basement	<u>0</u> sq/ft	<u>0</u> sq/ft	<u>0</u> sq/ft
1st Floor	<u>1226</u> sq/ft	<u>0</u> sq/ft	<u>1226</u> sq/ft
2nd Floor	<u>630</u> sq/ft	<u>0</u> sq/ft	<u>630</u> sq/ft
Garage <input type="checkbox"/> Detached <input type="checkbox"/> Attached	<u>0</u> sq/ft	<u>0</u> sq/ft	<u>0</u> sq/ft
Covered Deck	<u>24</u> sq/ft	<u>0</u> sq/ft	<u>24</u> sq/ft
Total	<u>1880</u> sq/ft	<u>0</u> sq/ft	<u>1880</u> sq/ft

Height above existing grade 27' 6"

Exterior wall: James Hardie concrete siding

Roofing: Timber Bark Class A fire resistant comp.

Color Dark Brown

When completed, this structure will have a total of 3 bedrooms.

Project Identification

Project Name:

Paulsen Cabin

Property Address/Location:

Current Owner:

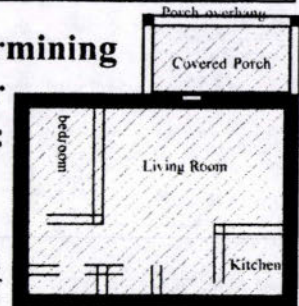
Dale J. Paulsen

Size of Property in Acres:

0.965 acres

Determining Floor Area:

Floor area is measured in terms of square feet as everything within the inside of the outside walls and includes covered porches, garages and basements. The shaded area on the diagram above indicates the area counted as square feet.



Please note: If existing walls and/or roof are removed and new walls/roof are constructed, the associated floor area due to the new walls and/or roof is considered new construction and must be included in the calculation of floor area for Site Plan Review & shown on the Fact Sheet.

If a Limited Impact Special Use Review is required, then call 303-441-3930 and ask for a new Preapplication conference for the Limited Impact Review.

This document prepared by:
Boulder County Land Use Dept.
Courthouse Annex, 13th & Spruce St.
PO Box 471; Boulder, CO 80306
Phone: 303-441-3930
Fax: 303-441-4856
Web Site:
<http://www.co.boulder.co.us/lu/>
or <http://www.bouldercounty.us/lu/>
E-mail: planner@co.boulder.co.us

Office Hours:

Monday through Friday
8:00 AM to 4:30 PM

Earth Work / Grading

This worksheet is to help you accurately determine the amount of grading for the property in accordance with the *Boulder County Land Use Code*. Please fill in all applicable boxes.

Note that applicants must fill in the shaded boxes even though foundation work does not contribute toward the 500 cubic yard trigger requiring Limited Impact Special Use Review.

Also, note that all areas of earthwork must be represented on the site plan.

	Cut	Fill	Total
Driveway & Parking Areas	41	0	41
Berms			
Other Grading: dry well / house	67	4	71
Total			112 ^{Box 1}

If the total in Box 1 is more than 500 cubic yards, then a Limited Impact Special Review is required.

	Cut	Fill	Total
Foundation	247	0	247

Material cut from foundation excavation to be removed from the property. Excess material will be transported to the following location:

247

151 Ute Hwy, Longmont

Narrative

Use this space to describe any special circumstances that you feel the Land Use Office should be aware of when reviewing your application. If more room is needed, feel free to attach a separate sheet.

See attachment

Grading Calculation Note

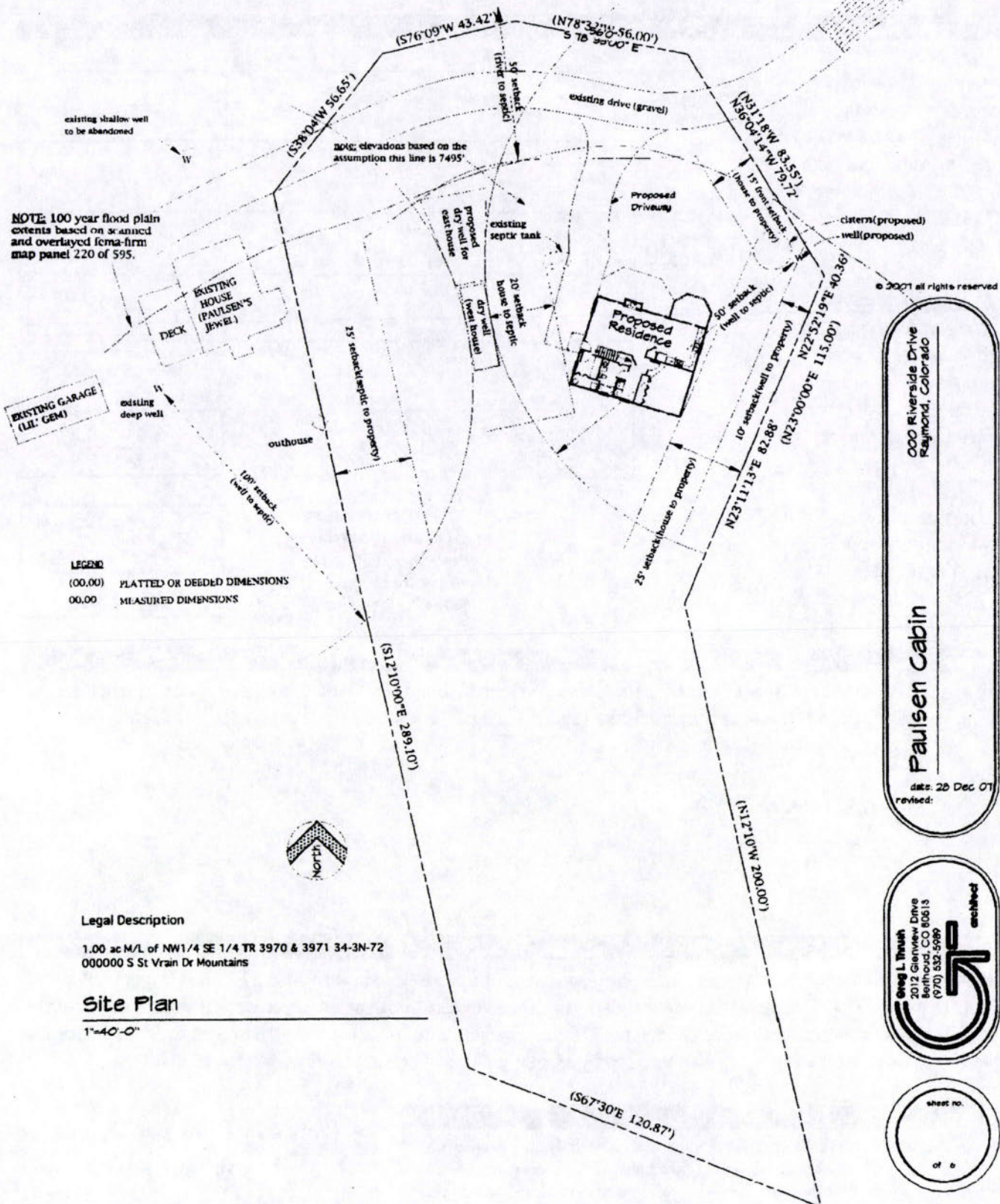
Cut and fill calculations are necessary to evaluate the disturbance of a project and to verify that a Limited Impact Review (LU) is not required. A LU is required when grading for a project involves more than 500 cubic yards (minus normal cut/fill and backfill contained within the foundation footprint). If grading totals are close to the 500 yard trigger, additional information may be required, such as a grading plan stamped by a Colorado Registered Professional Engineer.

Certification

I certify that the information submitted is complete and correct. I agree to clearly identify the property (if not already addressed) and stake the location of the improvements on the site within four days of submitting this application. I understand that the intent of the Site Plan Review process is to address the impacts of location and type of structures, and that modifications may be required. Site work will not be done prior to issuance of a Grading or Building Permit.

Signature _____ Date _____

Is your property gated and locked? If county personnel cannot access the property, then it could cause delays in reviewing your application.



000 Riverside Drive
Raymond, Colorado

Paulsen Cabin

date: 28 Dec 07
revised:

Eugene L. Thrush
2012 Glenview Drive
Berthoud, CO 80615
(970) 532-5989

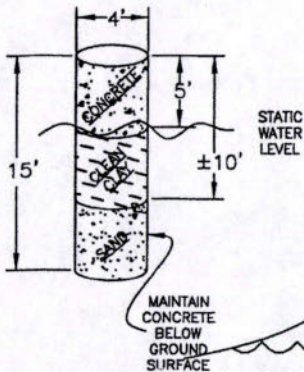
sheet no.

SITE PLAN

JAN 24 2008

1.00 AC M/L OF NW1/4 SE 1/4 TR 3970 & 3971 34-3N-72 000000 S ST VRAIN DE MOUNTAIN
(Paulsen Property)

EXISTING SHALLOW WELL ABANDONMENT DETAIL



RIVERSIDE DRIVE (PAVED)

NOTE: RIVER CENTERLINE
BASED ON FEMA-FIRM
MAPPING AND CENTERLINE
OF RIVER AT BRIDGE.

MIDDLE ST. VRAIN CREEK

EXISTING SHALLOW WELL
TO BE ABANDONED
(SEE DETAIL)

NOTE: 100 YEAR FLOOD
PLAIN EXTENTS BASED ON
SCANNED AND OVERLAYED
FEMA-FIRM MAP PANEL
220 OF 595.

NOTE: ELEVATIONS BASED
ON THE ASSUMPTION THAT
THIS POINT IS AT 7495
FEET

DRIVE (GRAVEL)

FOUND 1/2" PIPE

FOUND 1" PIPE

WELL (PROPOSED)
40'x10'x4.25'N
105'25'57.50"W

EXISTING SEPTIC TANK
(TO BE MOVED)

EXISTING HOUSE
(PAULSEN'S
JEWELRY)

DECK

TOILET=7498.95

EXISTING GARAGE
(LIL' GEM)

EXISTING DEEP WELL

OUTHOUSE

LEGEND

- PERC HOLE
- ⊙ WELL
- FOUND MONUMENTATION
- (00.00) PLATTED OR DEEDED DIMENSIONS
- 00.00 MEASURED DIMENSIONS
- ⊖ SEPTIC TANK

SILT FENCE

BUILDING
SETBACKS
LINE

FINISHED
CONTOURS

FOUND #5 REBAR

EXISTING LIMITS OF SEPTIC
FIELD. AREA TO BE RECLAIMED
FOR BUILDING SITE.

PROPOSED SEPTIC SYSTEM
EASEMENT ON AND ACROSS
221 RIVERSIDE FOR 219
RIVERSIDE (DEDICATED BY
SEPERATE INSTRUMENT)

(S67°30'E 120.87')

(N12°10'W 200.00')

SCALE
1" = 40'

Site Volume Table

	Cut cu.yds	Fill cu.yds	Gross cu.yds	Method
House/Grading Quantities	21	0	21 (C)	Grid
Drive Quantities	41	0	41 (C)	Grid
Grading for Drywells Quantities	46	4	50 (C)	Grid
House Foundation Quantities	247	0	247 (C)	Grid
Drywell Quantities	174	0	174 (C)	Grid

NOTES:

1. FOUNDATION CUT QUANTITIES AND SEPTIC SYSTEM CUT QUANTITIES NOT INCLUDED IN THE LIMITED IMPACT SPECIAL USE REVIEW, THE TOTAL EARTHWORK THUS, IS CALCULATED TO BE 112 CUBIC YARDS.
2. THIS SITE PLAN IS REPRESENTATIONAL ONLY AND NOT TO BE INTERPRETED AS A BOUNDARY SURVEY.

DRAWN

DATE

VAN HORN ENGINEERING

SCALE

PROJ. NO.

TWB

1-17-08

1043 Fish Creek Road - Estes Park, CO 80517
Phone: (970) 586-9388 - Fax: (970) 586-8101

1" = 40'

2007-10-24

Paulsen Grading Narrative

This narrative addresses site grading proposed for the Paulsen Property as shown on the attached site plan. The proposed contours represent a driveway no steeper than 14%. The length of the driveway is 75 feet. There is an existing access on the property that continues to the building site. That access has a maximum grade of 20% and has been used in the past without difficulty. The grading of the proposed driveway results in 41 CY of excavation.

All additional excavated soils from the proposed construction will be hauled off site to the excavator's (Triple R) Storage yard at 151 Ute Highway in Longmont. Predicted volumes are as follows:

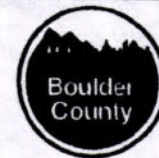
- Net 41 CY cut for driveway
- Net 21 CY cut for foundation grading
- Net 46 CY cut and 4 CY fill for dry well grading
- Net 247 CY cut for foundation
- Net 174 CY cut for dry well septic system

Calculations for the Limited Impact Special Use Review result in a total earthwork volume of 112 CY.

All disturbed areas will be reseeded with native grass species for erosion control. Two small strips of silt fence are indicated on the site plan for protection from siltation into the creek during construction.

Boulder County Land Use Department PreApp - Location Map

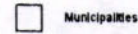
3



This map is for informational purposes only and, in itself, does not indicate whether property will conflict with any Comprehensive Plan or Environmental Resources Review processes may also reveal environmental resources not found on County maps.

Legend

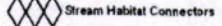
Archeologically Sensitive Travel Routes



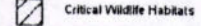
Archeologically Sensitive Areas



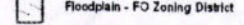
Open Corridors, Streamside



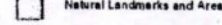
Significant Riparian Corridors



Rare Plant Areas



Environmental Conservation Areas



Significant Natural Communities

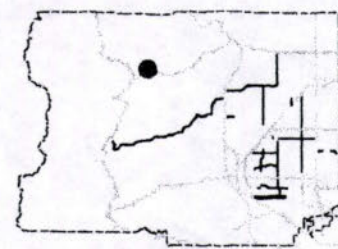
Significant Agricultural Lands

National Importance

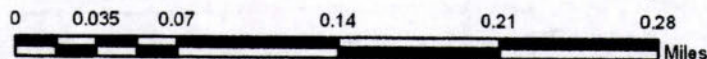
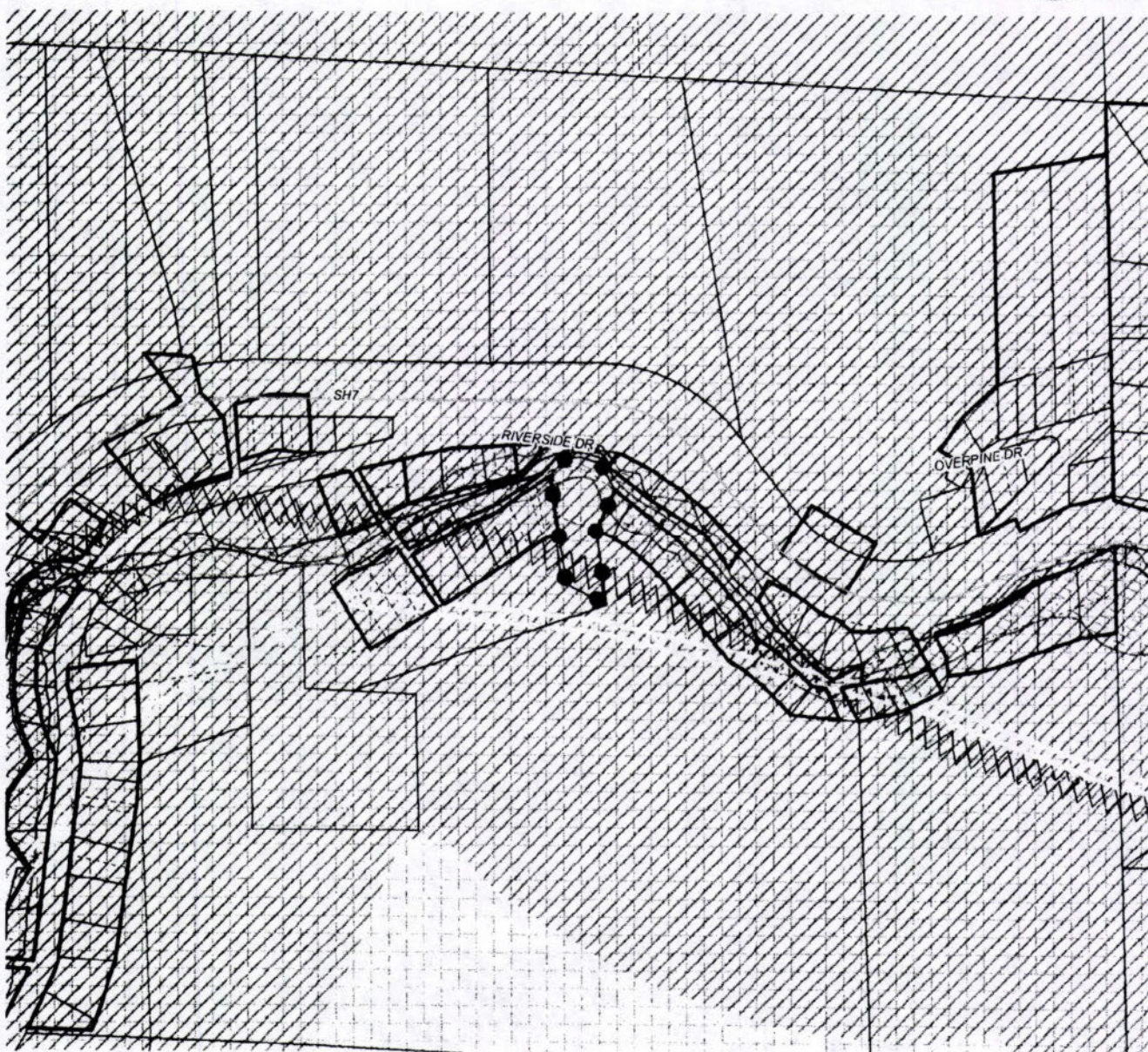
Statewide Importance

Local Importance

Map Location

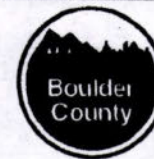


This map is for informational purposes only and is not suitable for parcel specific decision making. The areas depicted here are approximate. More site-specific studies may be required to draw accurate conclusions.
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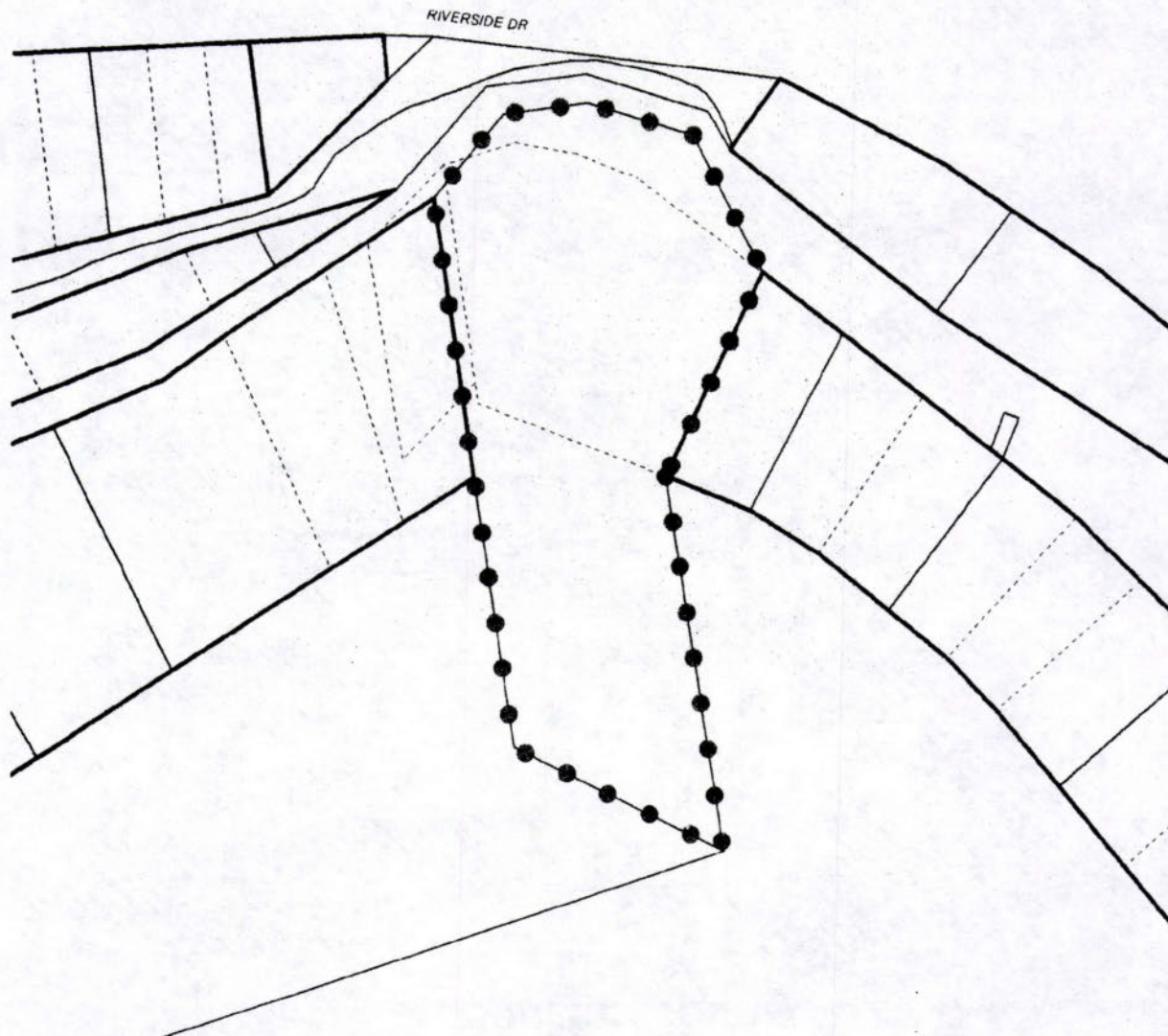


Boulder County

Land Use Department
PreApp - PREBLES Map



S47



Legend

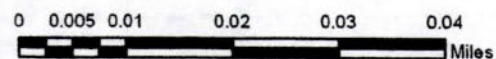
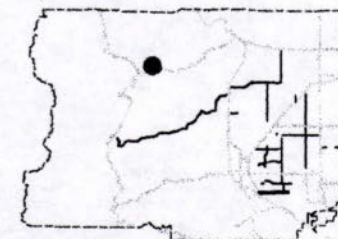
- ACCOUNT_NUMBER_R0053743
- Highway Symbols
- Automated Street Names
- Oldest heavy
- BOCO.PARCEL_POLYGONS
- - - IPM dashed
- - - Oldest dashed

Prebles

ZONE_DESCR

- 1st priority - Mouse Management Areas, mouse found
- 2nd priority - Suitable Habitat, contiguous to mgmt areas
- 3rd priority - Potential Habitat, contiguous to mgmt areas
- 4th priority - Suitable Habitat, noncontiguous to mgmt areas
- Lowest priority - Potential Habitat, non contiguous to mgmt
- No priority - Possible Linkages between mgmt areas

Map Location



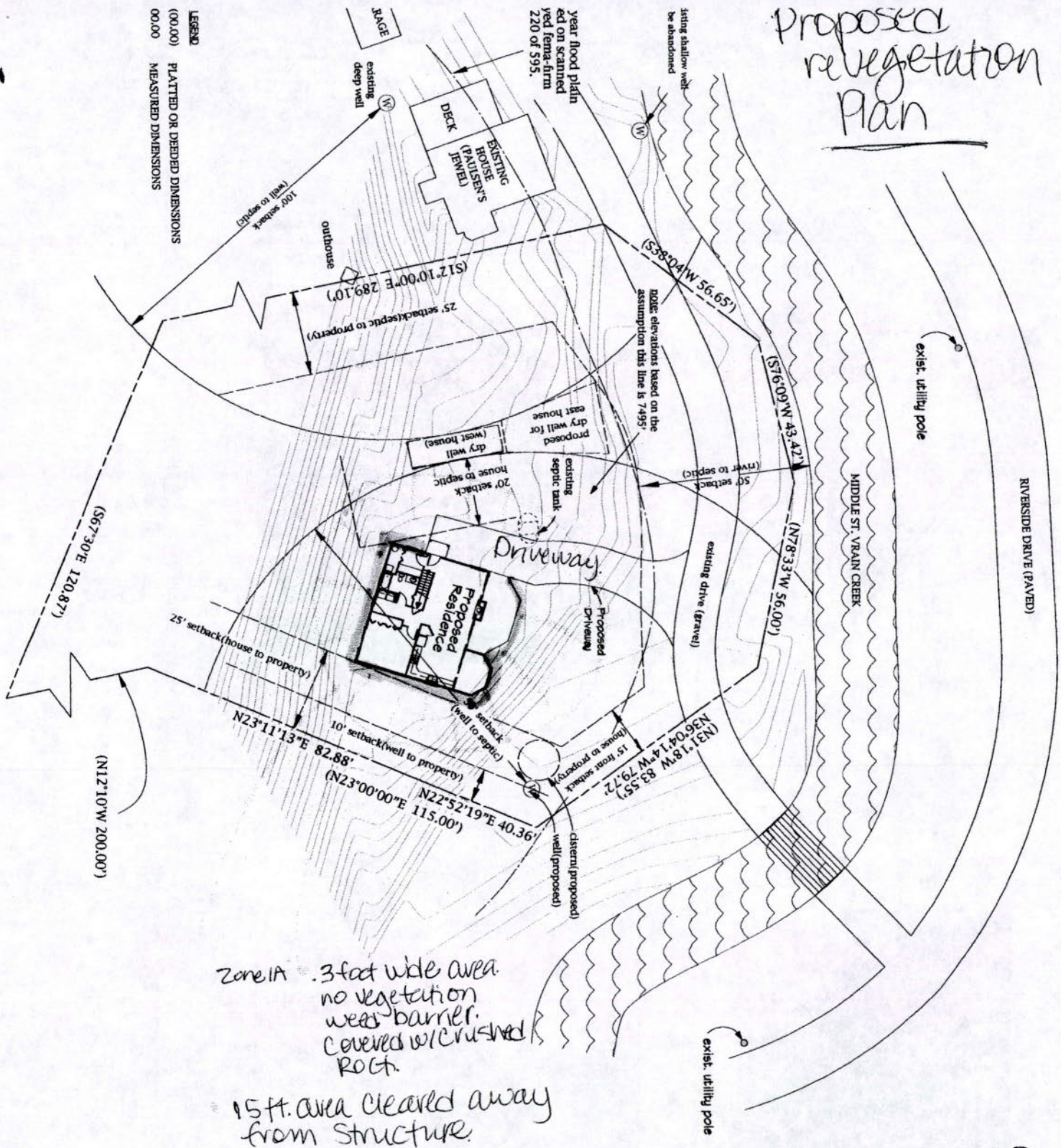
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LEGEND

(00.00) PLATTED OR DEEDED DIMENSIONS

00.00 MEASURED DIMENSIONS



15 ft. area cleared away
from structure.

grass area's with a combo of
also to include native seeds
of wild flowers from the
existing property

2590 western wheatgrass
2510 Blue Grama
2570 Canada Wildrye
2510 Canby Bluegrass

- ① Disturbed areas shall have topsoil stockpiled and the surface roughened prior to seeding.
- ② Apply at rate of 1-2 lbs/1000 ^{sq ft}

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Paulsen Cabin

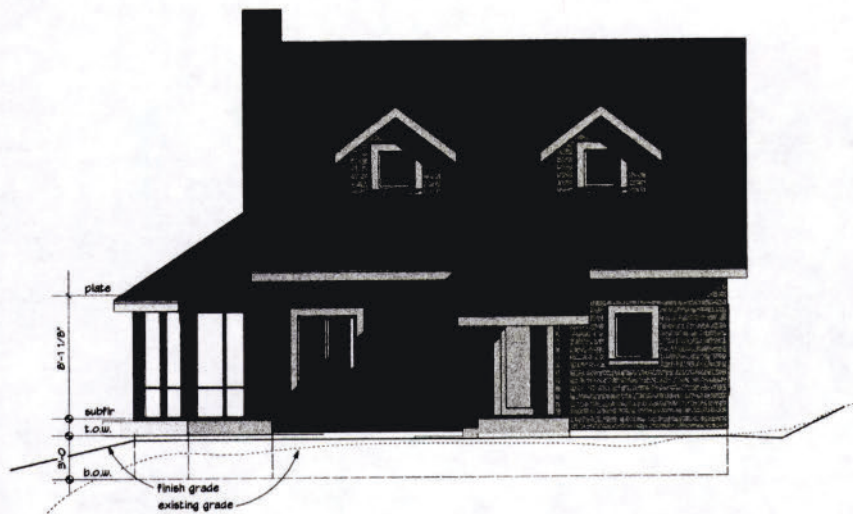
Site Plan

000 Riverside Drive
Raymond, Colorado

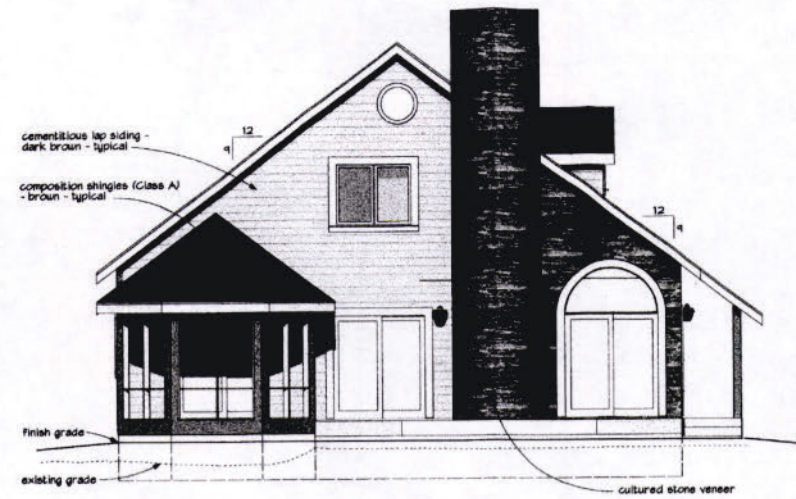
date: 28 Dec 07
revised:

Drive
D513

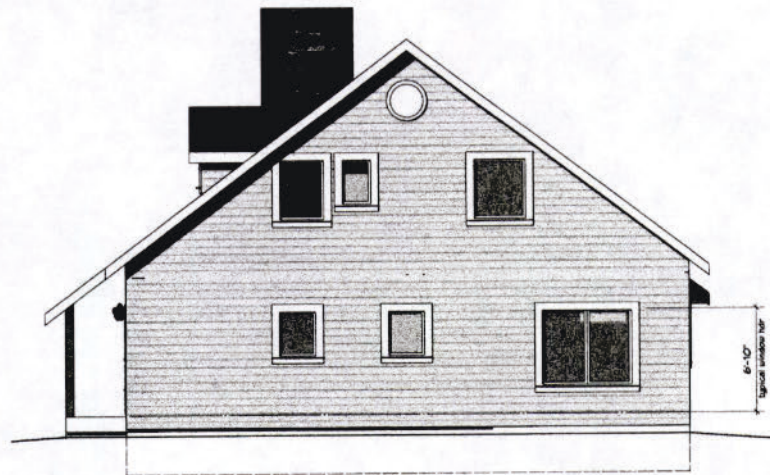
reflect



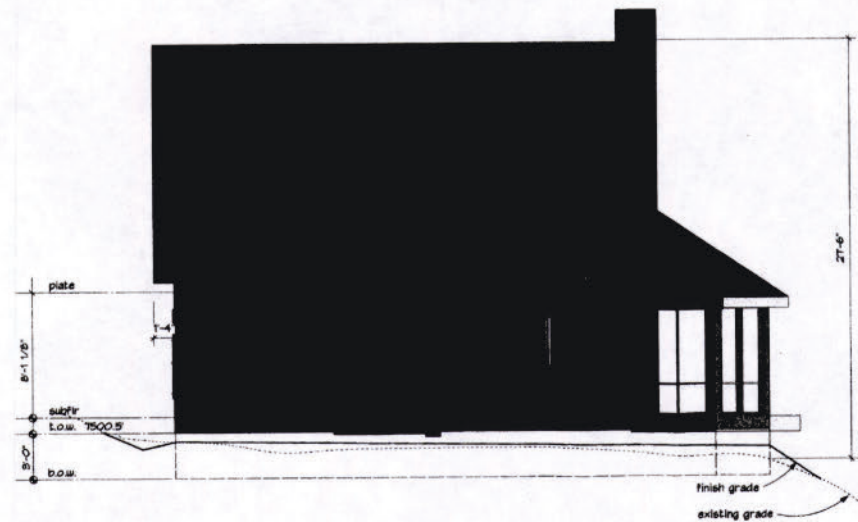
South Elevation
scale 1/8"=1'-0"



West Elevation
scale 1/8"=1'-0"



East Elevation
scale 1/8"=1'-0"



North Elevation
scale 1/8"=1'-0"

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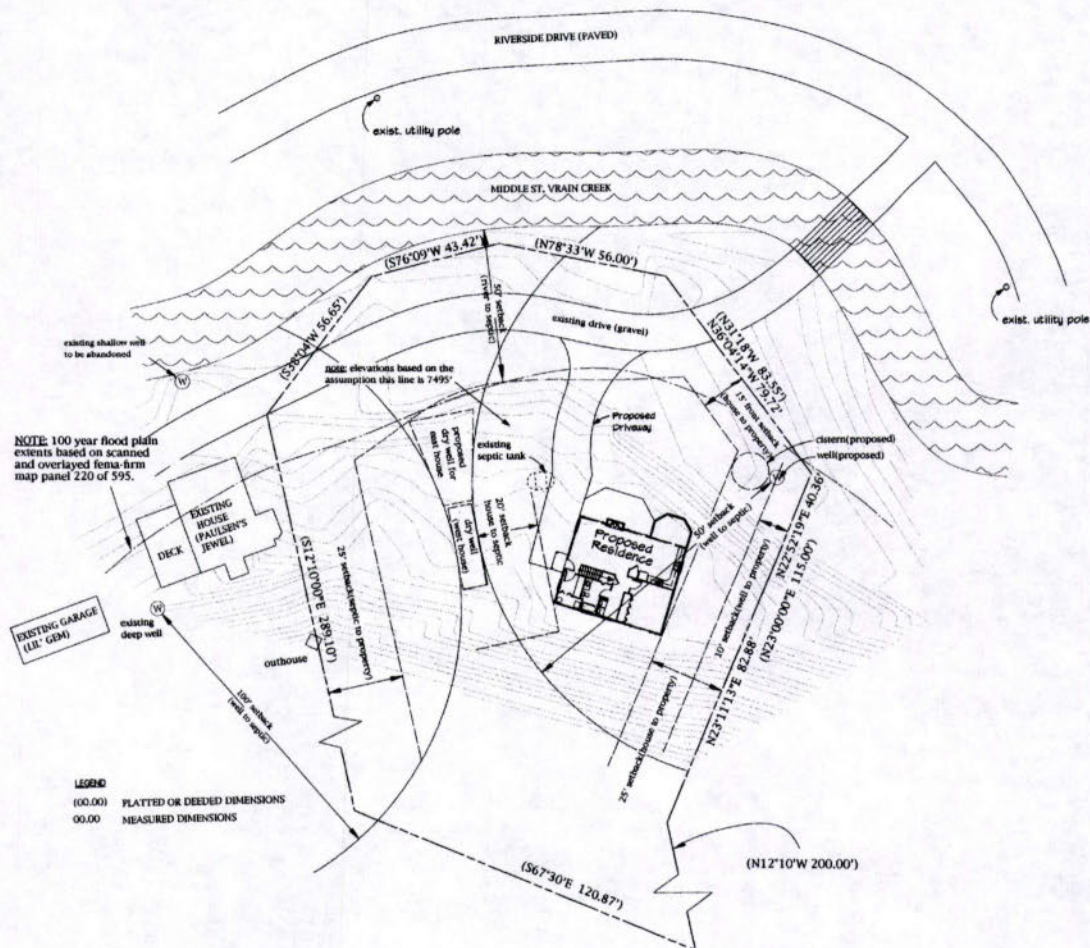
000 Riverside Drive
Raymond, Colorado

Paulsen Cabin
Elevations

date: 20 Dec 07
revised:

Greg L. Smith
2010 Glenview Drive
Boulder, CO 80513
(970) 332-0096

sheet no.
A 4
of 4



Legal Description

1.00 ac M/L of NW1/4 SE 1/4 TR 3970 & 3971 34-3N-72
 000000 S St Vrain Dr Mountains

Site Plan

1" = 40'-0"



© 2007 all rights reserved

000 Riverside Drive
 Raymond, Colorado

Paulsen Cabin
 site plan

date: 28 Dec 07
 revised:

