

WILDFIRE MITIGATION PLAN

For Jan Mitchell
407 Alpine Way, Boulder, CO
Docket: SPRW - 07 - 063
Inspection date: 11/2/2007

**Colorado
State**
FOREST
SERVICE
Boulder District
5625 Ute Highway
Longmont, CO 80503
(303) 823-5774
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Prepared for:

Jan Mitchell
407 Alpine Way
Boulder, CO 80304
Phone: 303-939-9691

Prepared by:

Matthew Jedra
Forester - Boulder District
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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 23, Township 1N, and Range 71W, Lot 363 Pinebrook Hills 7. The property is located within the Boulder Mountain Fire Protection District (303-440-0235). An addition of 1,529 sq.ft is proposed for the existing residence. The lot is 1.27 acres in size and has a modest ~5-45 percent slope with a north aspect. The site is at ~6,770 feet in elevation and located on a midslope which is relatively dry and moist. Alpine Way to the north creates a small natural barrier that may help slow the spread of a surface fire on the site.

CONSTRUCTION DESIGN AND MATERIALS

The proposed addition will have a moderately complex design with a simple roofline and will be oriented with a north 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 hardiboard. Soffits and fascia are to be 1/4" thick hardiboard. The structure will have 34 medium sized windows with the primary viewing direction being toward the north 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 wood. **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.**

UTILITIES

The natural gas for the residence will be off the main line. Utilities for the property are buried from a pole ~80 ft northeast of the residence. The septic field is located ~125 ft to the southwest. The water for the residence will be off the main line.

DRIVEWAY ACCESS FOR EMERGENCY VEHICLES

Access the property from Boulder by heading west on Linden, left towards Timber Lane, right towards PineTree Lane, left on Balsam to Alpine Way.

The existing driveway will not create additional site disturbance or 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 200 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 hydrant located ~500ft from the residence. The hydrant is located at intersection of Bristlecone and Alpine Way. Alternatively, a contribution may be made to the fire protection district community cistern fund (if available). Contact the Boulder Mountain Fire Protection District (303-440-0235) 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. 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 chipped and 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 Boulder Mountain Fire Protection District (303-440-0235).

FOREST COMPONENT AND HEALTH

The site has a dominant overstory consisting of ponderosa pine (*Pinus ponderosa*) with a ponderosa pine component. The understory consists of a dense cover of native grasses, forbs and shrubs. The forested area is best represented by Fuel Model 8. Fuel Model 8 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 decomposed granite 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 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 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 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
- 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.

Landscape view of the Jan Mitchell Property
407 Alpine Waym, Boulder, CO 80304
SPR - 07 - 063

Balsam Ln

Bristlecone Way

407 Alpine Way

Legend

— Property Boundary

0 550 1,100 2,200 3,300 4,400
Feet



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

Property of Jan Mitchell
407 Alpine Waym, Boulder, CO 80304
SPR - 07 - 063

Balsam Ln

Alpine Way

Bristlecone Way

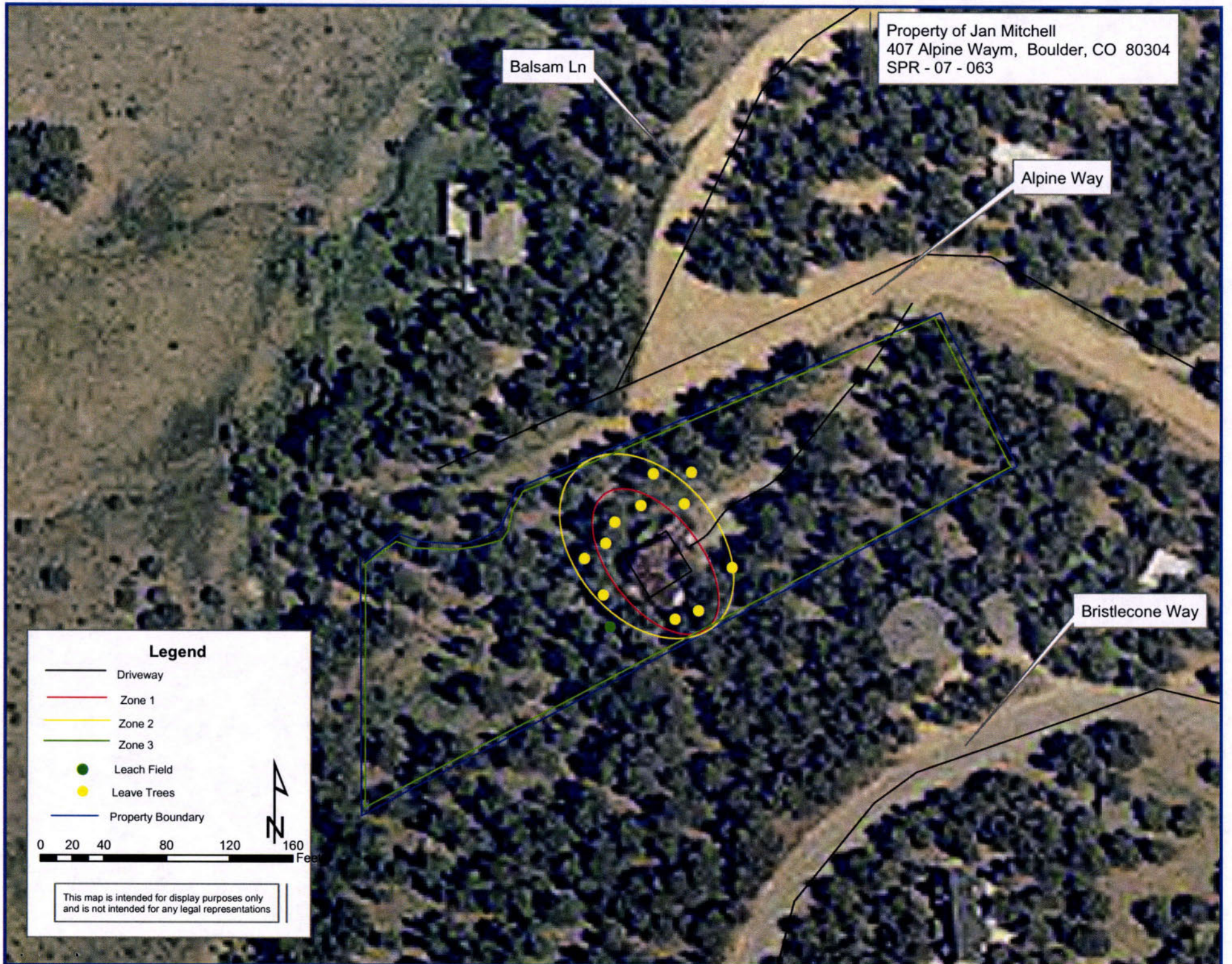
Legend

- Driveway
- Zone 1
- Zone 2
- Zone 3
- Leach Field
- Leave Trees
- Property Boundary

0 20 40 80 120 160 Feet



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Colorado State Forest Service
Wildfire Mitigation Plan Data Form

Colorado
State
FOREST
SERVICE
Boulder District
5625 Ute Highway
Longmont, CO 80503
(303) 823-5774
FAX: (303) 823-5768

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: 11-2-07
Landowner name: Jan Mitchell
Mailing address: 407 Alpine Way
City, State, Zip: Boulder, CO 80304
Site address: 407 Alpine Way
Phone number: 303-939-9691

Road access: (Directions from main access road)

Take Linden West from Broadway. Left towards Timber Lane.
Right towards Pine Tree Lane. Left on Balsam to Alpine way.

Docket number: SPRW 07-063 07-1687 ^{← Bldg Permit} (SPR, SPRW, LU, Etc.)

Section: 23

Township: 14

Range: 71

Legal Description:

Lot 363 Pinebrook Hills 7
000407 Alpine Way Boulder

Elevation: ± 6760' or 6770' (feet)

Topo nail assumed elevation = 984.98'

Lot size: 1.27 Acres (Acres)

Driveway length: ± 200' (Actual length in feet from road to home)

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

Addition - Octagonal shape
House design: moderately complex (simple - rectangle shape, moderately complex - any shape with a few alcoves, complex - any shaped with a number of alcoves complex design)

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

Roof Design: simple (simple/complex)

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

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

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

In Addition

Windows (#): 34 (number of windows in the structure)

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

Window Frames: Alum. clad wood (Wood or aluminum clad wood)

Window Aspect: all sides (Dominant viewing direction)

Window Construction: low e - some temper (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: NA (Location and Number)

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

Deck material: Composite Mat. (Wood/composite materials)

Deck Description: Open deck (Enclosed deck/open deck/enclosed underneath/open underneath)

Deck support type: steel columns with concrete piers (Timber posts/logs/steel/concrete/decorative stone)

Hydrant at Bristlecone + Alpine Way (NW corner)
± 500' distance

Deck buffer material: decomposed granite (Crushed rock/gravel/decorative stone)

Deck weed barrier: Fiberglass (Fiberglass/polyester)

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

Existing Structures: 1 = House + attached addition (House/barn/garage/etc.)

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

Structure Square feet: 1529 sf ^{includes FINISHED SF, COVERED ENTRY + DECK FOR ADDITION} - ADDITION (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: North - longer side of addition (Dominant facing direction/view, N, S, E, W)

Utility Location: 80' buried undergrd (Pole/buried: Direction and distance from residence - N, S, E, W/20ft, 30ft, 40ft, etc...) NE
Pole 80'

Detached Garage (if applicable): NA (Total square feet)

Out buildings: NA (Total square feet of any and all sheds, cabins, ect...)

Leach field: ± 125' West - South West (Direction and distance from residence - N, S, E, W/20ft, 30ft, 40ft, etc...)

Cistern size (if applicable): NA (gallons)

Cistern Location: Hydrant note above (Direction and distance from residence - N, S, E, W/20ft, 30ft, 40ft, etc...)

Cistern Type: within 1000' of hydrant (Domestic Cistern or Fire Cistern)

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

Have you talked to the local fire department: Yes (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: Pine Brook Hills (Well or main line)
Water

Well (if applicable): NA (Direction and distance from residence - N, S, E, W/20ft, 30ft, 40ft, etc...)

Propane or natural gas: Natural gas underground - Xcel

Propane Tank location: NA (Direction and distance from residence - N, S, E, W/20ft, 30ft, 40ft, etc...)

Slash disposal: Combination hauled + spread out on site (Chipped/hailed/burned/lop-scatter)

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

Comments: Please note that the house + addition are located about 500' from a Pinebrook Hills fire hydrant.

This part will be filled out by the CSFS inspecting forester

FPD: _____

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

Dominant overstory: _____

Co-dominant overstory: _____

Fuel model type: _____

Aspect: _____ (Direction of slope)

Slope: _____ (Percent)

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

Site moisture: _____

Natural fire barrier: _____

Insect & Disease Diagnosis: _____

Comments: _____



Land Use Department

Courthouse Annex
2045 13th Street • 13th & Spruce Streets • Boulder, Colorado 80302 • (303) 441-3930
<http://www.bouldercounty.us/lu/>

MEMORANDUM

TO: AGENCIES, ADJACENT PROPERTY OWNERS AND INTERESTED PARTIES

FROM: Kim Sanchez, Senior Planner

SUBJECT: Request to waive Site Plan Review for a 1,529 sq.ft. addition to existing house at 407 Alpine Way

DOCKET: SPRW-07-063: MITCHELL addition

DATE: August 3, 2007

The purpose of this memorandum is to inform interested parties that the above listed address is under consideration by the Land Use Director for a waiver from the Site Plan Review process for a **1,529 sq.ft. addition to existing house at 407 Alpine Way**.

In May of 2000, the Site Plan Review regulations were revised in order to allow for certain accessory structures to be waived from the full Site Plan Review process that would normally be required to approve their construction. In the plains, accessory structures up to 5,000 square feet are eligible to be waived from Site Plan Review; in the mountainous areas of the county, accessory structures up to 2,000 square feet are eligible to be waived from Site Plan Review.

In June of 2003, these regulations were expanded in order to allow Site Plan Review waivers for additions under 2,000 square feet and grading involving less than 500 cubic yards of earthwork. Waivers from Site Plan Review may be granted if the Land Use Department does not find the proposal to be in conflict with the standards listed in Article 4-806 of the Boulder County Land Use Code.

Article 4-802(C) requires that adjacent property owners be notified of the request to waive Site Plan Review and be given seven days to respond. The project, even if waived from Site Plan Review, is still subject to the applicable building permits and building code requirements.

The Board of County Commissioners and the Land Use Department appreciate any comments that you may have regarding this proposal. Please direct any written or verbal comments to the Land Use Department by **August 10, 2007**.

If you have any questions or comments, feel free to contact this office at (303) 441-3930.

cc: applicant, Stephanie Ridgway (Architect)



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

489370, CK# 1073, \$260.00, R

Shaded Areas for Staff Only
Intake Stamp
P A T D
AUG 01 2007
BOULDER COUNTY LAND USE

Application Form

Project Number		Project Name Mitchell Residence	
* No Application Deadline		* Application Deadline: First Wednesday of the Month	
* Application Deadline: Second Wednesday of the Month			
☐ Limited Impact Special Use	☐ Variance	☐ Preliminary Plan	☐ Road Name Change
☐ Site Plan Review	☐ Appeal	☐ Location and Extent	☐ Special Use/SSDP
☒ Site Plan Review Waiver		☐ Resubdivision (Replat)	☐ Extension of Approval
☐ Subdivision Exemption		☐ Road/Easement Vacation	☐ Sketch Plan
☐ 1041 State Interest Review		☐ Final Plat	☐ Rezoning
☐ Exemption Plat			
☐ Other:			
Location(s)/Street Address(es) 407 Alpine Way			
Boulder, Colorado 80304			
Subdivision Name Pinebrook Hills			
Lot(s) 303	Block(s)	Section(s) 23	Township(s) 1N
Range(s) 71W			
Area in Acres 1.27 AC	Existing Zoning Forestry	Existing Use of Property Residential	Number of Proposed Lots 1 = same
Proposed Water Supply Pinebrook Hills water	Proposed Sewage Disposal Method Septic		

Applicants:

Applicant/Property Owner Jan Mitchell		Email Address k9quarters@comcast.net	
Street Address 407 Alpine Way			
City Boulder	State Colorado	Zip Code 80304	Phone 303-939-9691
Fax			
Applicant/Property Owner		Email Address	
City	State	Zip Code	Phone
Fax			
Agent/Consultant Architect: Stephanie Ridgway		Email Address stephanie@303architecture.com	
Street Address 1942 Broadway, Suite 314			
City Boulder	State Colorado	Zip Code 80302	Phone 303-641-6708
Fax 303-648-5683			
Agent/Consultant		Email Address	
City	State	Zip Code	Phone
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.

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

Signature of Property Owner Jan Mitchell	Date 07-20-07
Signature of Property Owner	Date
Other Signature Stephanie Ridgway, AIA Architect	Date 08-01-07

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



Boulder County Land Use Department Planning Publications

Site Plan Review Waiver 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. **Please note:** If a project is granted a SPR Waiver but the building permit floor area calculations result in new floor area exceeding 2,000 sq.ft., then the project will trigger a full SPR prior to issuance of a building permit.

Structure Information

TYPE OF STRUCTURE: Addition to existing home
(e.g. residence, studio, barn, etc.)

TOTAL EXISTING FLOOR AREA: 2,749 sq/ft **DEMOLISH:** 0 sq/ft
(Finished + Unfinished sq.ft. - always include garage if attached)

Is new floor area proposed in areas where demolition 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	778 sq/ft	0 sq/ft	778 sq/ft
1st Floor	521 sq/ft	0 sq/ft	521 sq/ft
2nd Floor	121 sq/ft	0 sq/ft	121 sq/ft
Garage ☐ Detached ☐ Attached	0 sq/ft	0 sq/ft	0 sq/ft
Covered Deck ENTRY		109 sq/ft	109 sq/ft
Total	1420 sq/ft	109 sq/ft	1529 sq/ft

Height above existing grade 30'-10"

Exterior wall: Hardi-Board Siding

- Material Light Brown

Roofing: Dim. Asphalt Shingles

- Material green, to match existing

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

STRUCTURE #1

STRUCTURE #2

TYPE OF STRUCTURE: _____

(e.g. residence, studio, barn, etc.)

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

	PROPOSED FLOOR AREA (new construction only)		
	Finished	Unfinished	Total
Basement	sq/ft	sq/ft	sq/ft
1st Floor	sq/ft	sq/ft	sq/ft
2nd Floor	sq/ft	sq/ft	sq/ft
Garage ☐ Detached ☐ Attached	sq/ft	sq/ft	sq/ft
Covered Deck		sq/ft	sq/ft
Total	sq/ft	sq/ft	sq/ft

Height above existing grade _____

Exterior wall:
- Material _____

- Color _____

Roofing:
- Material _____

- Color _____

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

Project Identification

Project Name:

Mitchell Residence

Property Address/Location:

407 Alpine Way

Current Owner:

Jan Mitchell

Size of Property in Acres:

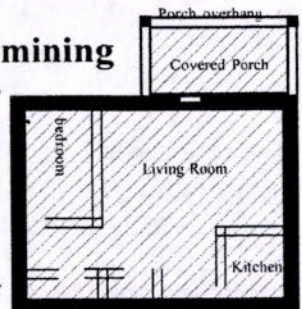
1.27 Acres

Determining Floor Area:

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

Please note: If a project is granted a SPR Waiver but the building permit floor area calculations result in new floor area exceeding 2,000 sq.ft., then the project will trigger a full SPR prior to issuance of a building permit.

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	0	0	0
Berms	↓	↓	↓
Other Grading:	↓	↓	↓
Total	0	0	0 <i>Box 1</i>

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

	Cut	Fill	Total
→ Foundation	62.84 yd ³	0	62.84 yd ³

See calculations sheet

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

62.84 yd³

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.

The addition will be located on parts of the site that have previously been leveled or constructed upon. The Lower Level Pool Area is in the same location as where the existing above ground pool sits today. The Mud Room Area extends onto the existing driveway, this minimizes soil disturbance.

Grading Calculation Note

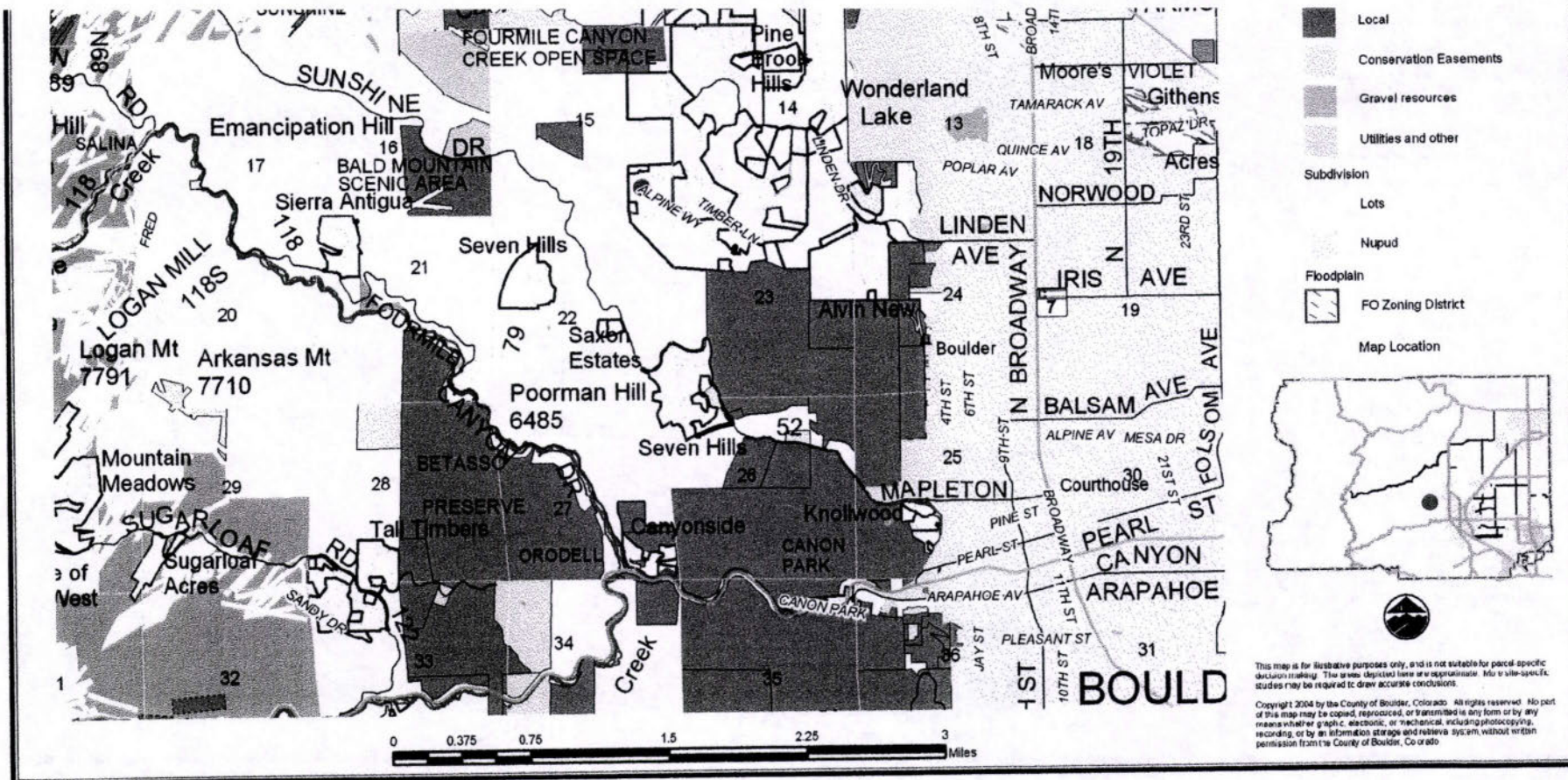
Cut and fill calculations are necessary to evaluate the disturbance of a project and to verify that a Limited Impact Review (LU) is not required. A LU is required when grading for a project involves more than 500 cubic yards (minus normal cut/fill and backfill contained within the foundation footprint). 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.

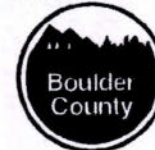
Signature: Stephanie Ridgway Date: 08-01-07
Architect

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



Boulder County

Land Use Department
PreApp - Location Map



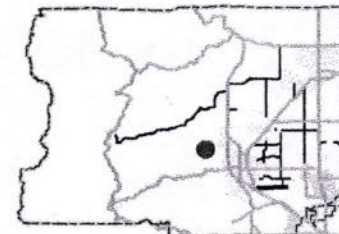
This map is for informational purposes only and, in itself, does not indicate whether property will conflict with any Comprehensive Plan or Environmental Resources. Review processes may also reveal environmental resources not found on County maps.

Legend

Archaeologically Sensitive Travel Routes

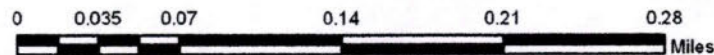
- Municipalities
- Archaeologically Sensitive Areas
- Open Corridors, Roadside
- Open Corridors, Streamside
- Overland Habitat Connectors
- Stream Habitat Connectors
- Significant Riparian Corridors
- Critical Wildlife Habitats
- Rare Plant Areas
- Floodplain - FD Zoning District
- Environmental Conservation Areas
- Natural Landmarks and Areas
- Significant Natural Communities
- Significant Agricultural Lands**
 - National Importance
 - Statewide Importance
 - Local Importance

Map Location



This map is for illustrative 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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Earth Work Calculations
Mitchell Residence
407 Alpine Way

Contour Number	Area (SF)	Interval (FT)	Area (Cubic Ft)		Area of Cut (Cubic Ft)	Area of Fill (Cubic Ft)
-------------------	--------------	------------------	--------------------	--	---------------------------	----------------------------

LOWER LEVEL:

Mud Room: this space is located over the existing driveway
so the grading calcs here are made up of foundation excavations &
soil removal for the floor slab

SLAB	122.2	1	122.2	CUT	122.2	
FOUNDATION	9	29.75	267.75	CUT	267.75	
	SF/Lin. Ft	Linear Ft				
Mud Room Total:					389.95	0

Entry Area & Stair: this space is located over a flagstone patio & a flattened
dog run area so the grading calcs here are made up of foundation excavations
& soil removal for the floor slab

SLAB	250.4	1	250.4	CUT	250.4	
FOUNDATION	9	30.75	276.75	CUT	276.75	
	SF/Lin. Ft	Linear Ft				
Entry Area & Stair Total:					527.15	0

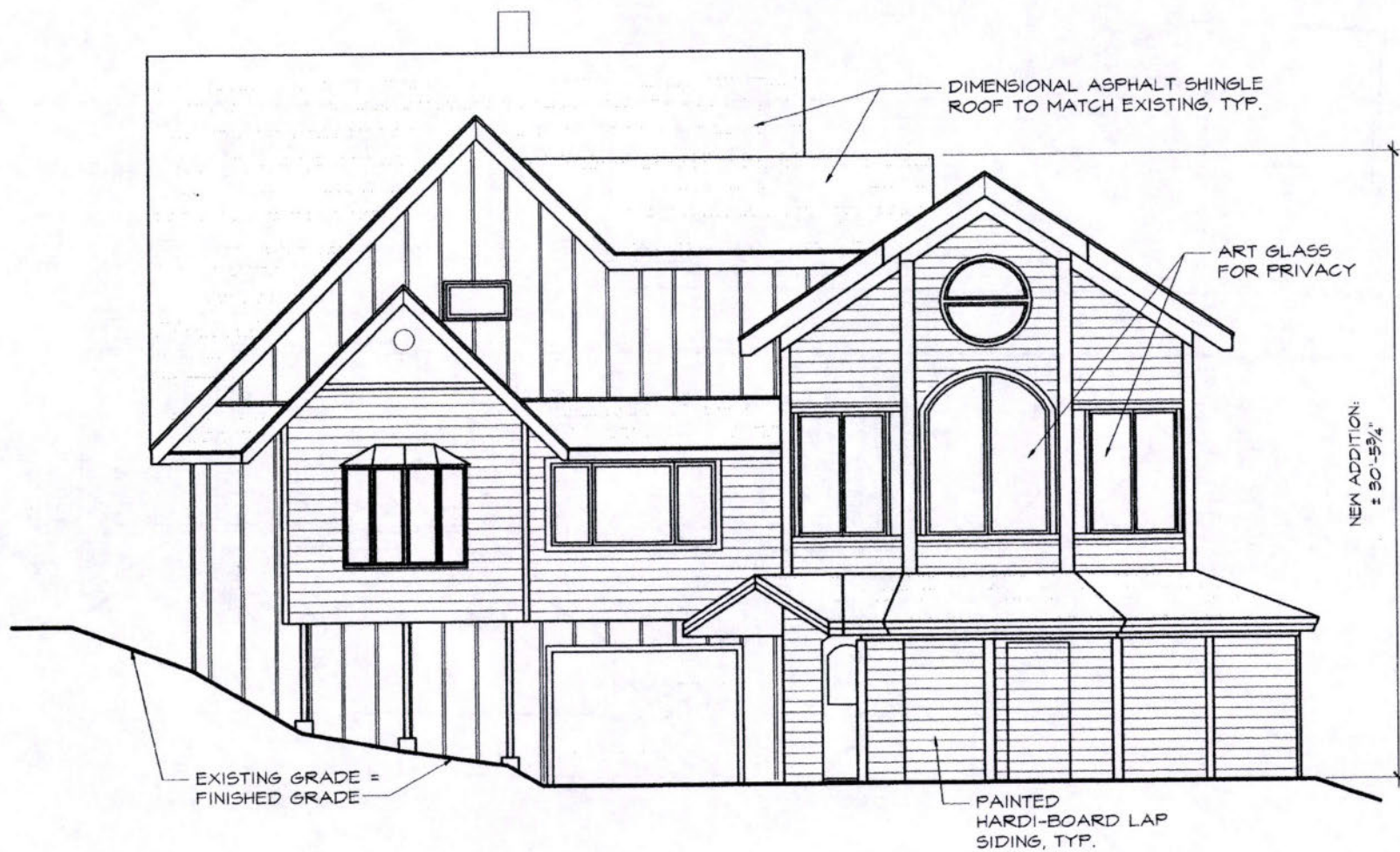
Pool Area: this space is located over an existing flagstone patio where the pool
is currently located so the grading calcs here are made up of foundation excavations
& soil removal for the floor slab

SLAB	397.2	1	397.2	CUT	397.2	
FOUNDATION	9	40.5	364.5	CUT	364.5	
	SF/Lin. Ft	Linear Ft				
Entry Area & Stair Total:					761.7	0

Piers for new deck supports: assuming the addition of 2 steel posts and concrete bases
to support the new deck portion as seen on the Main Level Plan

PIER 1	6	1.5	9	CUT	9	
PIER 2	6	1.5	9	CUT	9	
	SF/Lin. Ft	Linear Ft				
Deck Pier Total:					18	0

TOTAL:	1696.8	0
	Cubic Feet Cut	Cubic Feet Fill
	62.84	0.00
	Cubic Yards Cut	Cubic Yards Fill

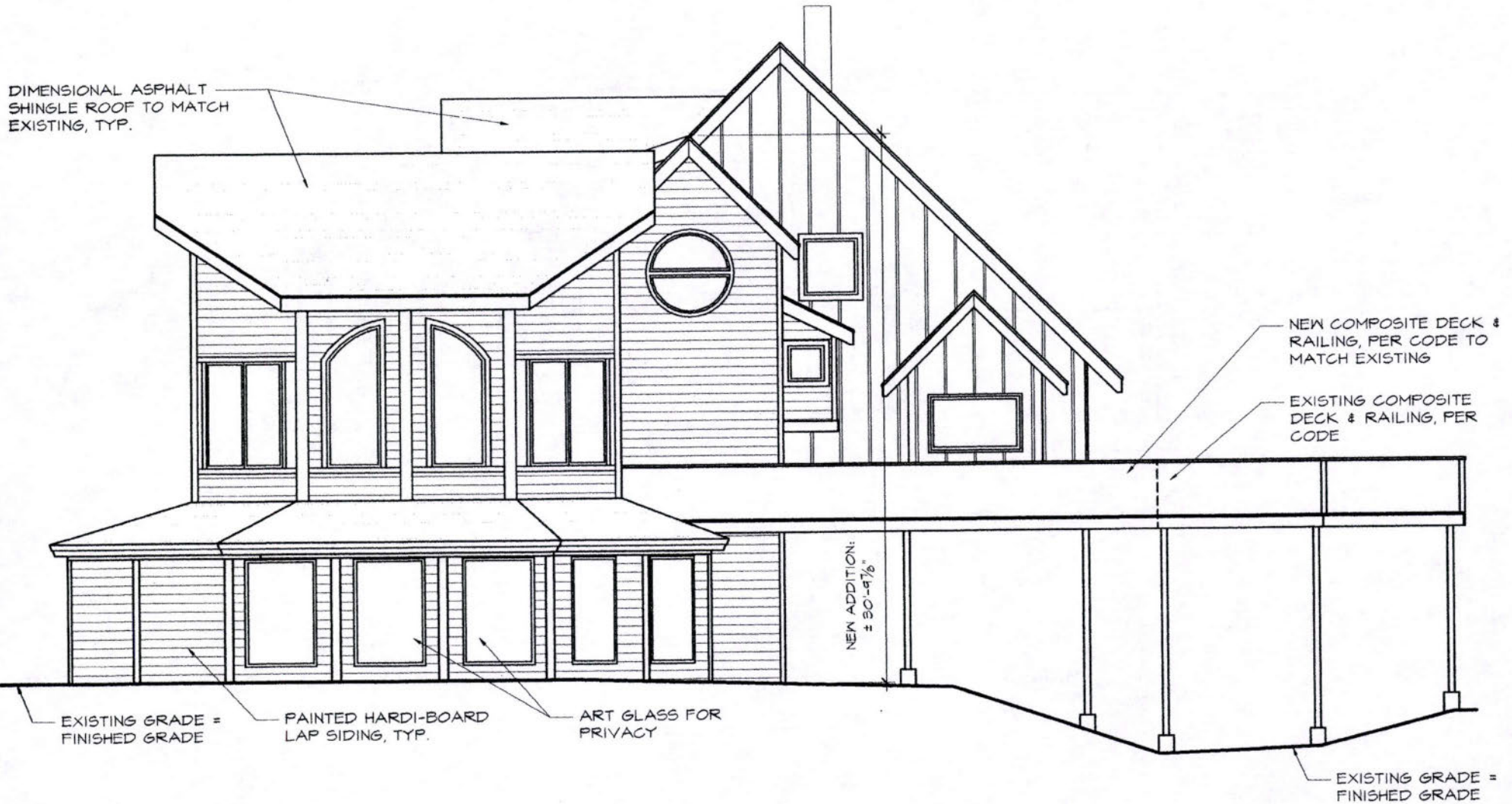


Proposed Front Elevation 07-31-07

SCALE: 1/8"=1'-0" © 2007 303 Architecture, Inc.

Mitchell Residence

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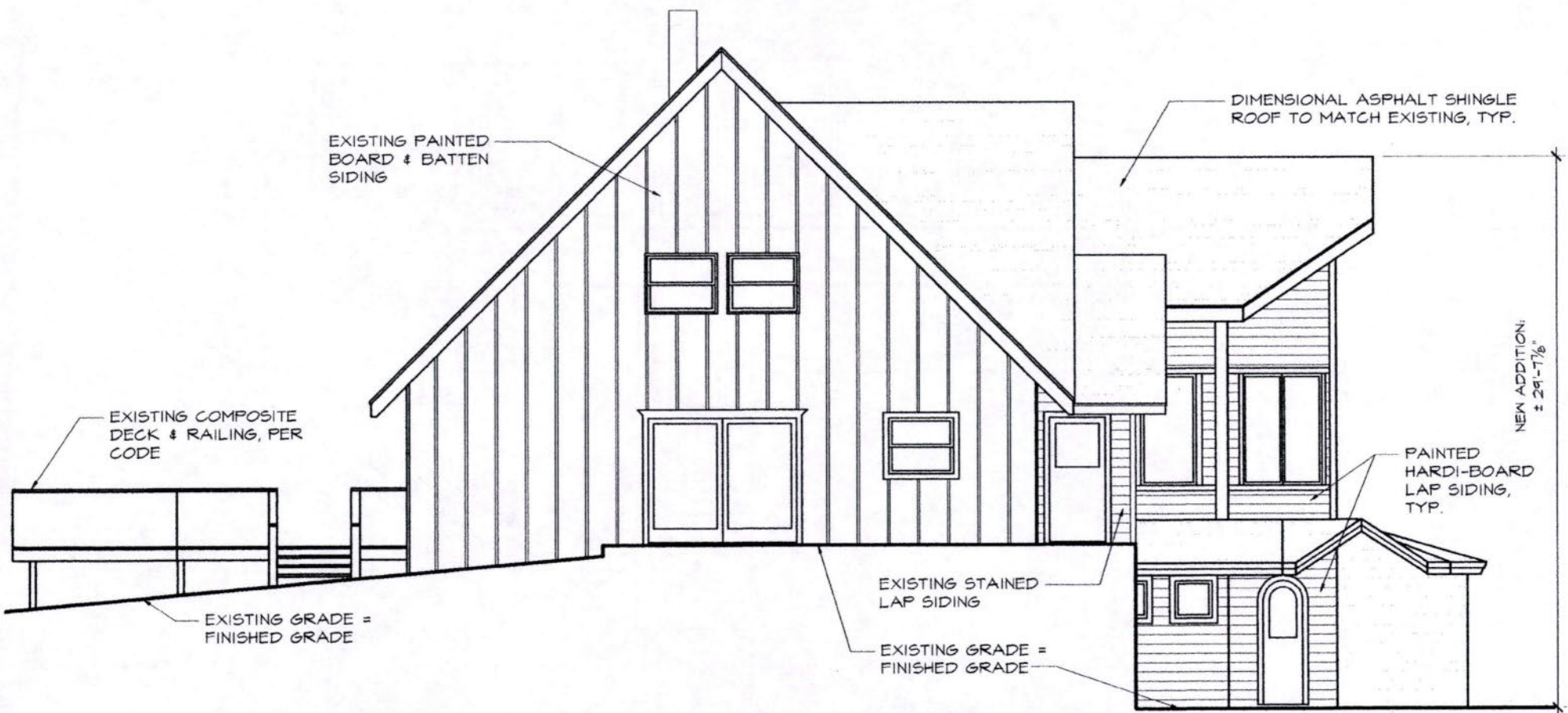


Proposed Right Elevation 07-31-07

SCALE: 1/8"=1'-0" © 2007 303 Architecture, Inc.

Mitchell Residence

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INC.



Proposed Left Elevation 07-31-07

SCALE: 1/8"=1'-0" © 2007 303 Architecture, Inc.

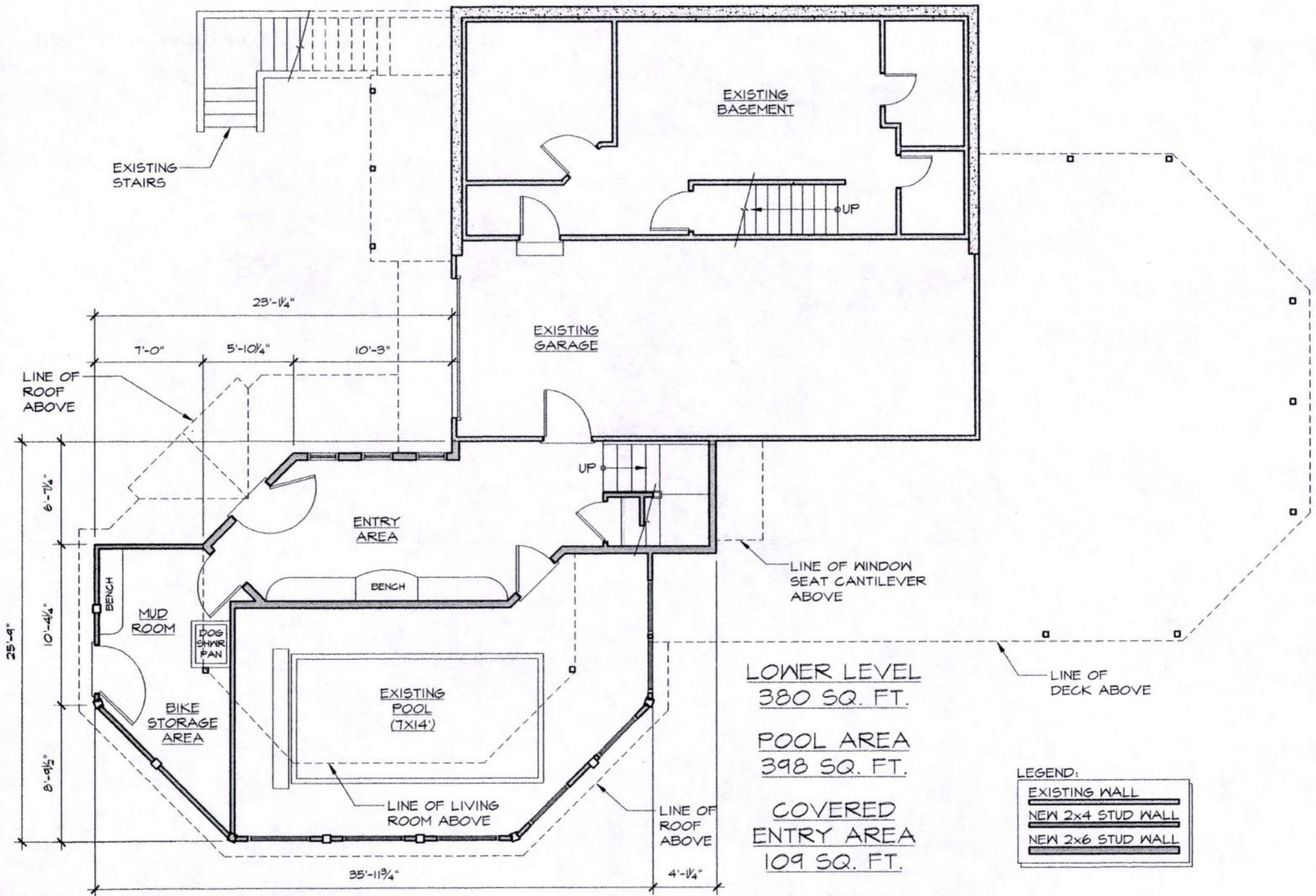
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Proposed Rear Elevation 07-31-07
SCALE: 1/8"=1'-0" © 2007 303 Architecture, Inc.
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Proposed Lower Level Plan 07-31-07

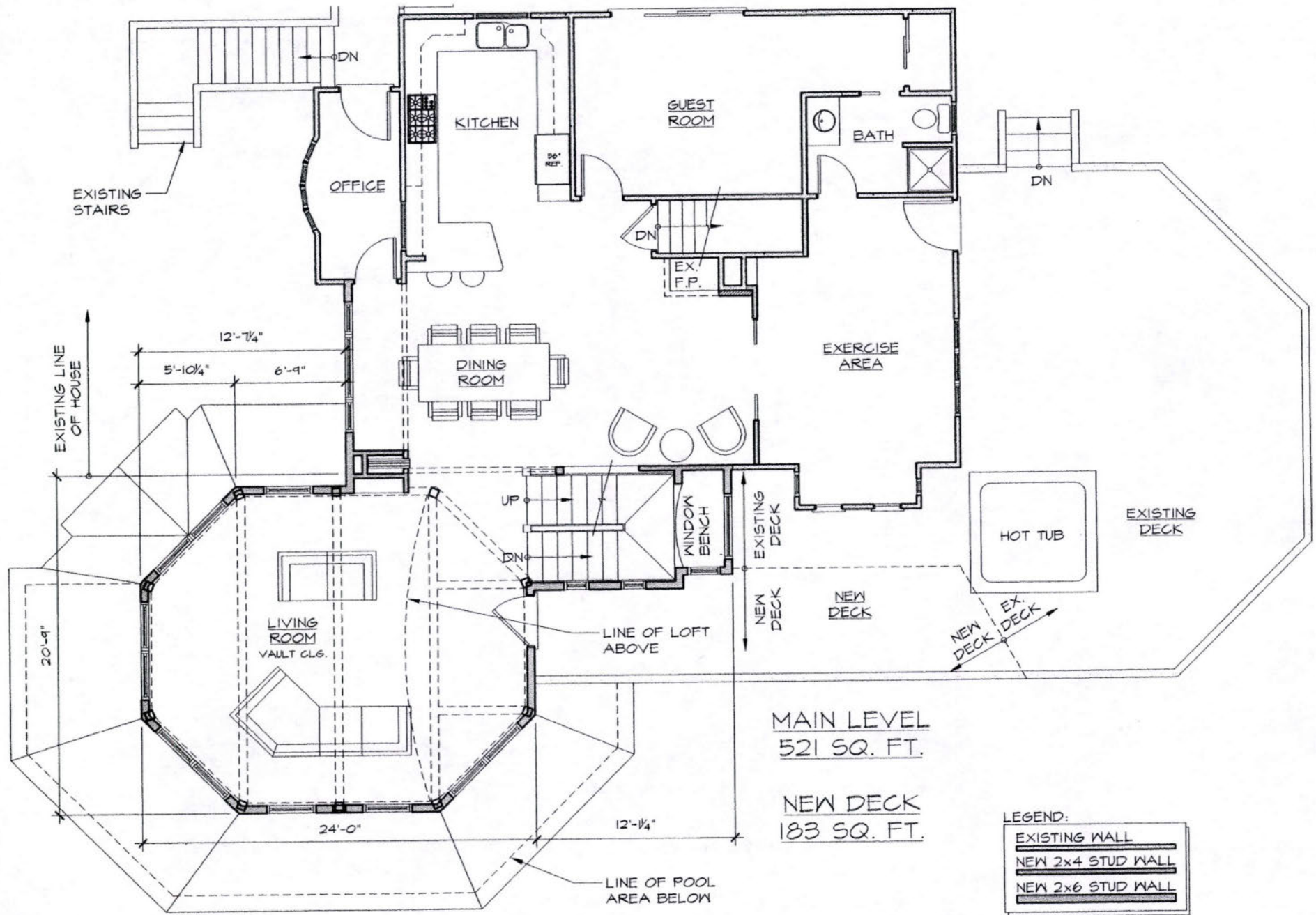
SCALE: 1/8"=1'-0"

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Proposed Main Level Plan

07-31-07

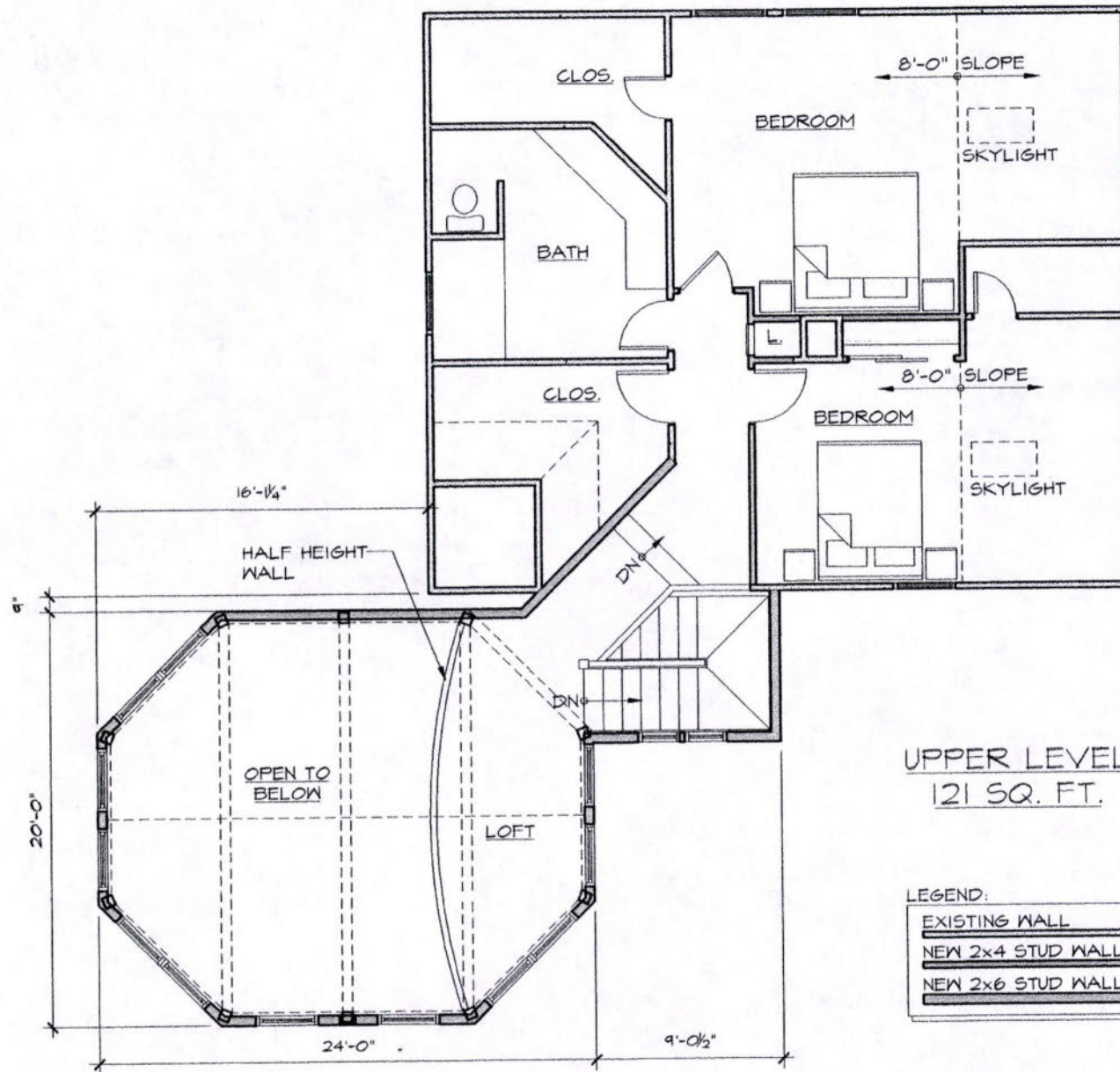
SCALE: 1/8"=1'-0"

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UPPER LEVEL
121 SQ. FT.

LEGEND:

EXISTING WALL
NEW 2x4 STUD WALL
NEW 2x6 STUD WALL

Proposed Upper Level Plan 07-31-07

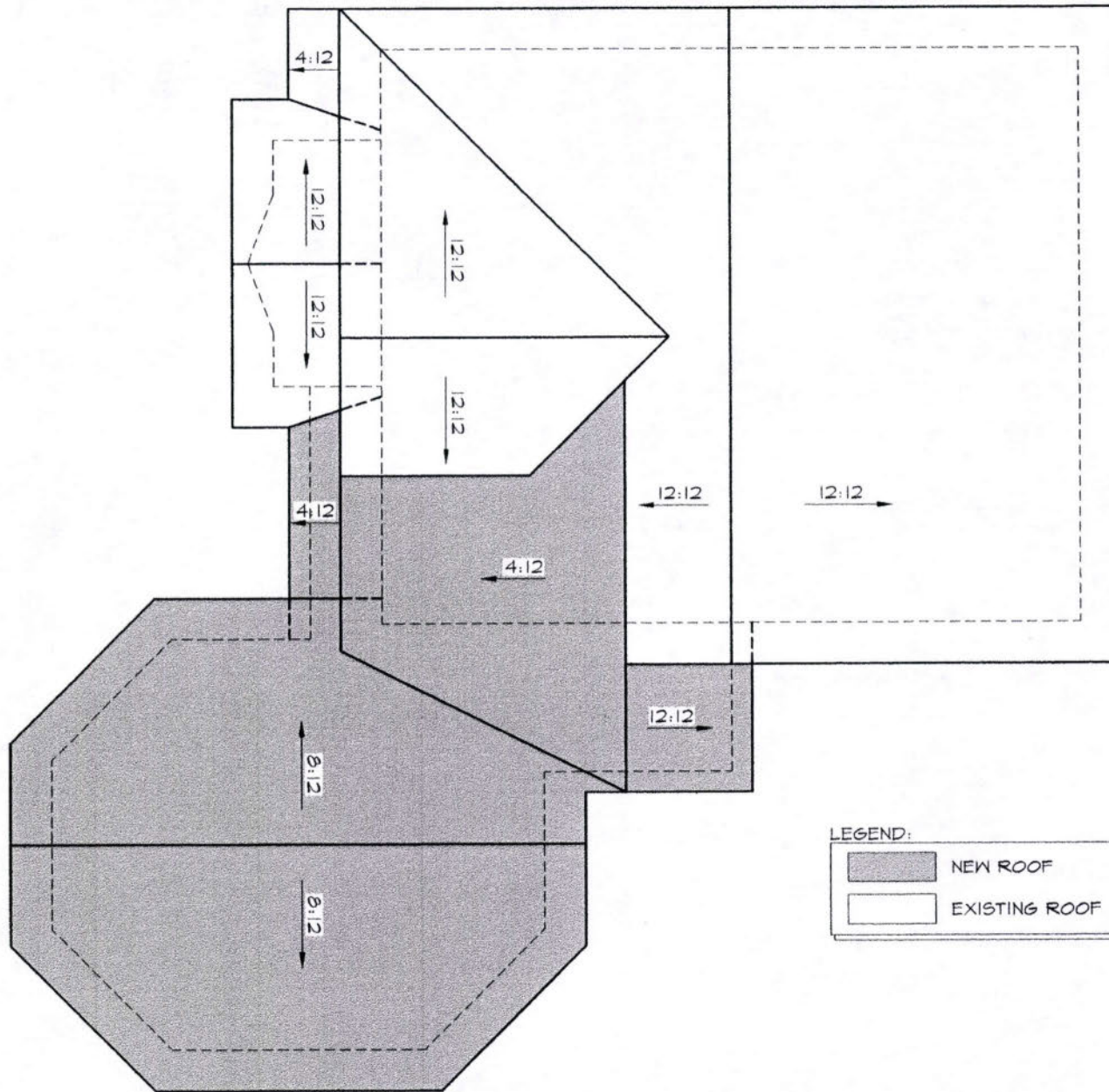
SCALE: 1/8"=1'-0"

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Mitchell Residence



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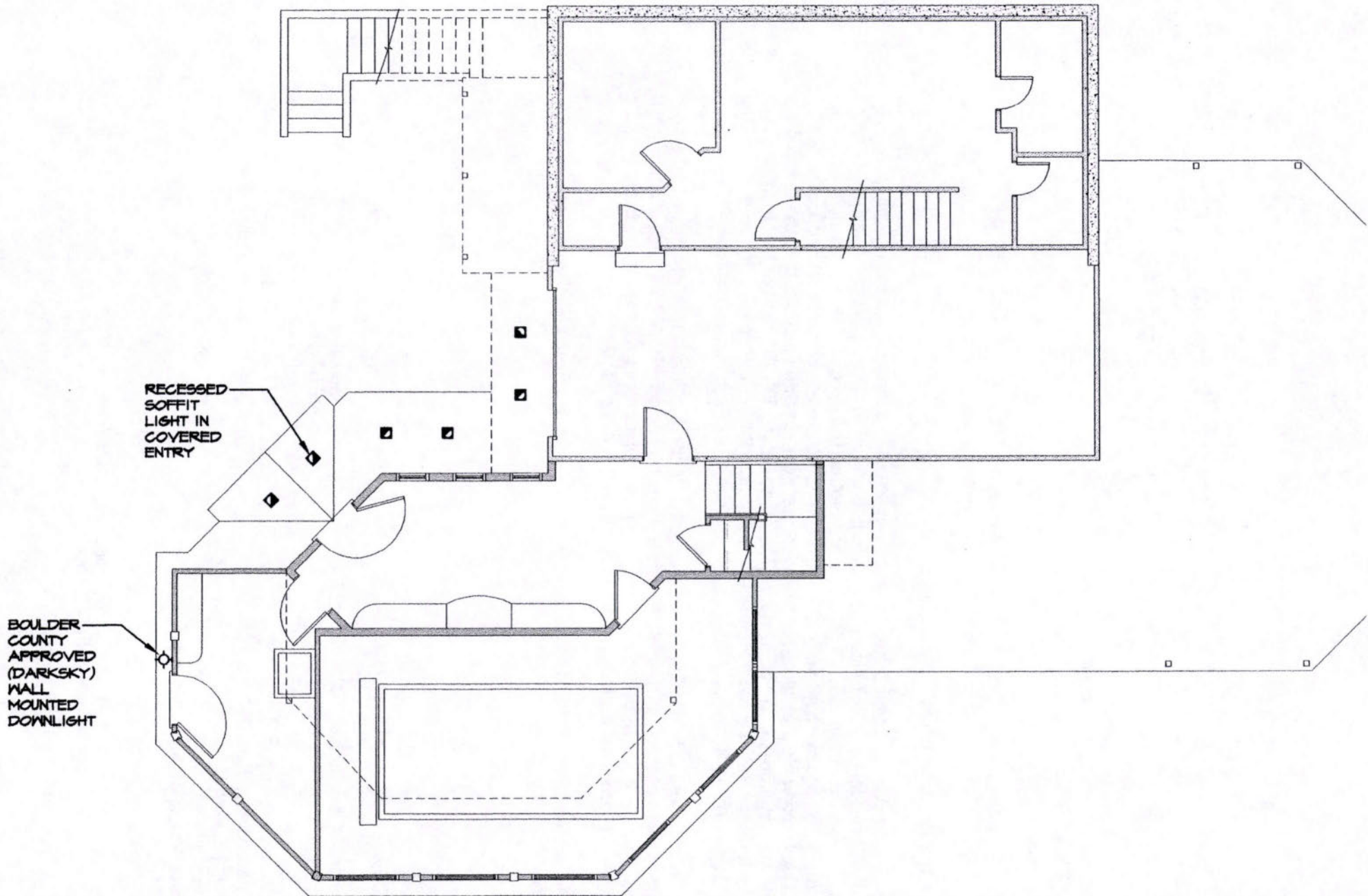
Proposed Roof Plan
 SCALE: 1/8"=1'-0"
Mitchell Residence

07-31-07

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Proposed Lighting Plan

07-31-07

SCALE: 1/8"=1'-0"

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Mitchell Residence



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APPROVED

FOR CONSTRUCTION

By Pine Brook Hills Architectural Committee

Janet K. Loh 7/10/07
CHAIRMAN DATE

[Signature] 7/10/07
MEMBER DATE

[Signature] 7-10-07
MEMBER DATE

THIS APPROVAL MUST BE SIGNED BY THREE
MEMBERS OF THE ARCHITECTURAL COMMITTEE

303
Architecture,
Inc.

June 22, 2007

Architectural Review Committee
Pine Brook Hills

Re: Addition to Mitchell Residence at 407 Alpine Way - Boulder, Colorado 80304

Dear Architectural Review Committee,

I am writing you this cover letter to accompany our ARC submittal for an addition to Jan Mitchell's residence at 407 Alpine Way in Pine Brook Hills. We are proposing an addition that will add approximately 1,518 finished square feet and 183 square feet of new deck onto the existing 2,341 square foot home. The addition is designed to compliment the look of the existing home while providing much needed space for specific functions that the existing home currently doesn't accommodate. The approximate 30'-6" height of the addition stays well within the 35' maximum allowable height in the PBH development and compliments the rooflines of the existing home.

The addition will consist of materials with colors that compliment the existing home. Non-combustible materials, such as Hardi-board siding (as recommended by Boulder County) will be used on the exterior of the addition. The new roof surfaces will match the County-approved dimensional asphalt shingle roof that was installed in 2002.

Thank you for reviewing this submittal, please feel free to call Jan Mitchell or myself with any further questions.

Sincerely,

Stephanie Clark Ridgway

Stephanie Clark Ridgway, AIA, Assoc. ASLA
Architect

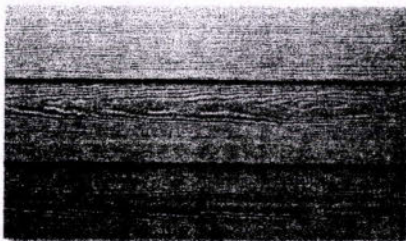
303 Architecture, Inc.
1942 Broadway, Suite 314
Boulder, Colorado 80302
Phone: 303-447-6448
Stephanie@303Architecture.com

Jan Mitchell
Homeowner

Jan Mitchell
407 Alpine Way
Boulder, Colorado 80304

Phone: 303-939-9691

1942 Broadway, Suite 314, Boulder, Colorado 80302
Cell: 303-641-6708 Phone: 303-447-6448 Fax: 818-647-6708



Select Cedarmill®

SPECIFICATIONS

Select Cedarmill

Thickness: 5/16"
 Weight: 2.3 lbs./sq.ft.
 Length: 12' planks
 Widths: 5 1/4" (4" exposure)*
 6 1/4" (5" exposure)
 7 1/4" (6" exposure)
 8 1/4" (7" exposure)
 9 1/4" (8" exposure)
 12" (10 3/4" exposure)*

- Painted Hardi-board
 Lap siding to match
 existing Light Brown



- Roof Sample:
 New roof to match
 existing

COLOR SAMPLES

407 Alpine Way