



BOULDER MOUNTAIN FIRE PROTECTION DISTRICT

1905 LINDEN DRIVE • BOULDER, CO 80304 • (303) 440-0235 • FAX (303) 440-5247

March 15, 2007

Boulder County Land Use Department
Eric Tkachenko, Staff Planner
Eric Phillips, Wildfire Mitigation Coordinator
2045 13th St.
Boulder, Co 80302

RE: LU-06-014: Nickel residence

Dear Eric T and Eric P.

After reviewing the above-mentioned Docket LU-06-014, the following comments can be found below.

1. An NFPA residential sprinkler system will need to be installed in accordance with the Boulder County Land Use and building requirements. When looking at the house arrangement you will notice, I have located where your FDC needs to be located in the event that the fire department needs to supply water to the sprinkler system. Because of the location of the garage and proximity, the FDC needs to be moved for better and safer access by firefighters.
2. A wildfire plan and analysis will need to be completed.
3. A contribution to the Boulder Mountain Fire Protection District cistern fund will not be required due to the hydranted water system in Pine Brook Hills.
4. Please, notice the area where I have marked for a turn around for fire apparatus. You will find these standards in the Boulder County Land Use Regulations.

Thank you for including the Boulder Mountain Fire Protection District in your review process. If you have any further questions regarding this review, please feel free to contact me at 303-440-0235.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "John Benson", is written over a horizontal line.

John Benson
Fire Chief
Boulder Mountain Fire Protection District

Cc. Nicole Palestro, Colorado State Forest Service
Rick Peterson, OZ Architecture

Property of Jake and Shondi Nickell
807 Timber Lane, Boulder, CO
LU 06 - 014

Legend

- Zone 1
- Zone 2
- Driveway
- Leach field
- Leave trees





March 30, 2007

Jake and Shondi Nickell
5225 N. Ravenswood Ave., Suite 101
Chicago, IL 60604

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

Dear Jake and Shondi Nickell,

Upon the request of your architect, the Colorado State Forest Service has completed your Wildfire Mitigation Plan per Boulder County Land Use regulations for your property located at 807 Timber Lane, Boulder, CO. We have submitted a copy of this plan to the Boulder County Land Use department and your local fire chief, Chief John Benson, the day we sent this plan to you.

The next step in this process is to remove all trees marked with blue spray paint. Trees that do not have blue marking on them should be pruned 6 feet from base of tree or 1/3rd the height of the tree; whichever is less. Once trees have been removed and the remaining trees limbed, please call Eric Philips for an inspection. Boulder County Land Use must inspect all Site Plan Review properties before final plan approval is granted.

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

We thank you for your compliance and look forward to assisting you in the future. If you have any questions regarding the Site Plan Review process please contact your local Land Use Department, Eric Philips – Wildfire Mitigation Coordinator at 720-564-2625 or if you have question regarding the Wildfire Mitigation Plan or forest health please call Nicole Palestro at 303-823-5774.

Sincerely,

A handwritten signature in cursive script that reads "Nicole Palestro".

Nicole Palestro
Boulder District
palestro@lamar.colostate.edu
(303) 823 - 5774

WILDFIRE MITIGATION PLAN

For Jake and Shondi Nickell
807 Timber Lane, Boulder, CO
Docket: LU - 06 - 014
Inspection date: 3/14/2007



Prepared for:

Jake and Shondi Nickell
5225 N. Ravenswood Ave., Suite 101
Chicago, IL 60604
Phone: 312-479-5695

Prepared by:

Nicole Palestro
Boulder District
Phone: (303) 823-5774
E-mail: palestro@lamar.colostate.edu

Boulder District

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

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 at Section 23, Township 1N, and Range 71W, Pine Brook Hills, Boulder County. The fire protection district is the Boulder Mountain Fire Protection District (303-440-0235). There are currently no existing structures on the site. A new residence built on the site. The lot is 1.3 acres in size and has a ~25-30% percent slope with a southeast aspect. The residence is at 6,583 feet in elevation, and will have a total of 5,000 square feet. The proposed building site is on a ridge and it is a relatively dry site. The main road to the west of the residence creates a small natural barrier that may help stop or slow the spread of a surface/crown fire on the site.

CONSTRUCTION DESIGN AND MATERIALS

The proposed house will have a moderate complex design with a moderately complex roofline and will be oriented with a south 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 metal. **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 cedar with a concrete base. Soffits will be 3/4" thick T&G cedar.

The structure has many small to medium sized windows with the primary viewing direction being toward the south side of the structure. Windows will be double glazed with high efficiency Low-E glass and tempered glass where required. Frames will consist of aluminum clad wood. Exterior doors will be 1-3/4", fire-rated, and made of aluminum clad wood. There will be 4 sliding glass doors located on the main level. **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.**

The deck will be constructed of composite materials and supported by heavy timber. The deck will be open partially overhead and open underneath. The deck will be isolated from the surrounding landscape with gravel and stone over a fiberglass weed barrier. This material should be spread underneath the entire deck surface and to 2' past the drip-line of the deck.

UTILITIES

Natural gas for the residence will be off the main line. Utilities for the property will be buried underneath the driveway. The septic field is located ~80 feet to the southeast of the residence. The water for the residence will be off the main line.

DRIVEWAY ACCESS FOR EMERGENCY VEHICLES

Access to the property from Boulder, take Linden Ave. west to Timber Lane to High View Drive.

The existing driveway will create additional site disturbance and soil compaction and will require the removal of few trees. The driveway will be 12 feet wide with a vertical clearance of 13'6" and a grade that is less than 12%. The driveway is approximately 361 feet long and therefore a turn around will be required. The driveway is less than 400 feet therefore no pull-outs will be required.

EMERGENCY WATER SUPPLY FOR FIRE FIGHTING

The emergency water source will be from a hydrant. The structure will have a full interior NFPA 13 D Sprinkler system as required by Boulder County. A contribution to the Boulder Mountain Fire Protection District cistern fund will not be required due to the hydrated water system in Pine Brook Hills. 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. 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 chipped and scattered. 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 and Rocky Mountain juniper (*Juniperus scopulorum*) component. The under story consists of a dense cover of native grasses, shrubs and forbs. The area is predominantly fuel model 9. Fuel model 9 is represented by closed canopy stands of ponderosa pine and mixed conifer. The understory may consist of small trees, 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 gravel and stone 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 10 feet from chimneys.

Zone 2 - This zone extends out from Zone 1C, and acts as a transition zone between the heavily thinned areas near the house to the existing forest setting. It extends down slope between 100-170 feet depending upon slope steepness. Zone 2 also extends on either side of the structure a minimum of 100 feet and behind the house between 70-100 feet assuming no boundary restrictions. Tree spacing begins as in Zone 1C and gradually decreases as you approach the outer edge of the zone. Thinning and crown spacing becomes greater in areas of steep slopes. Ladder fuels and poor quality, suppressed and/or diseased trees, 6 to 8 inches in diameter, make up the majority of the removals. The remaining mature trees 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 www.colostate.edu/Depts/CSFS/ and find the *Quick Facts 6.302 Creating Wildfire Defensible Space*.

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

- Thin suppressed trees and trees with disease and insect infestations and retain the larger, healthier trees.
- Snags 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; check the Boulder Fire Weather website at www.crh.noaa.gov/bou/awebphp/fireindx.php.html
- Keep driveways and property address marked with reflective easy to see signs
- Maintain screens on foundations, soffit vents, roof vents, and attic openings
- Get rid of unnecessary accumulations of debris and trash from yards
- Keep tools such as shovels, rakes, ladders, and axes available and ready for use
- Clean debris from the roof and gutters at least two times annually
- Check screens and maintain spark arresters on chimneys annually
- Avoid storing combustibles under decks such as wood piles, scrap lumber, and fuels

DEFINITIONS

Aspect – (Exposure). The direction a slope faces.

Canopy – The cover of branches and foliage formed collectively by crowns of adjacent trees.

Crown – Branches and foliage of a tree.

Dominant fuel type – Matter that would carry a fire, found on the ground.

Fuel 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 a fire starting which are determined by the presence and activities of causative agents.

Fire season - The period(s) of the year during which fires are likely to start, spread and do damage to values-at-risk sufficient to warrant organized fire suppression; a period of the year set out and commonly referred to in fire prevention legislation. In B.C. the fire season is considered to extend from April 1 to October 31.

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

Forest ecology - The relationships between forest organisms and their environment.

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.

New forestry - A philosophy or approach to forest management that has as its basic premise the protection and maintenance of ecological systems. In new forestry the ecological processes of natural forests are used as a model to guide the design of the managed forest.

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).

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



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 on [Forest Home Fire Safety](#), 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.



Why Should We Thin Our Forests?

Many of Colorado's mountain residents are becoming aware of the current state of our forests, and understand that our forests have become dangerously out of balance from their natural state. Due to the active suppression of wildfire and the increase of people living and recreating in our wildland ecosystem, Colorado's forests are now at greater risk than previously thought. Overcrowded stands of trees competing for limited resources, especially in this time of drought, has resulted in a decline in the overall health of our forests. In many areas along the Front Range, there are more than five times the amount of trees than the natural and historic holding capacity of a healthy stand. The resulting wildfires, insect infestations, and disease outbreaks are becoming much more apparent with each passing year. Nature is attempting to reset its natural successional balance through insect and disease epidemics and wildfires. Again, this fact is magnified due to our current drought conditions. The more out of balance our forests become, the more drastic and potentially devastating this successional change can be. If we don't make the choice to take care of our forests, our forest integrity will suffer.

Our best option is to mimic natural forest regimes that have historically kept the ecosystem healthy. This can be done by the reintroduction of fire in controlled circumstances, the implementation of forest thinning, or both. It is the responsibility of all forest landowners to restore their land to a healthy, resilient, and natural state. In a forest consisting primarily of ponderosa pine, this often includes the removal of overcrowded, overtopped, and diseased trees while promoting the health and vigor of larger/healthier trees. In certain circumstances, foresters select to cut a few large trees in order to produce a healthy multiple-age forest or to create additional spacing between trees. Most forest treatments promote forest health by retaining multiple species and age diversity.

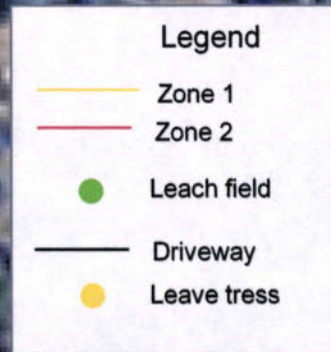
Initially, the most important area to treat is the forest directly surrounding your home. We do this in order to create a wildfire defensible space. Defensible space is the area around a structure where fuels and vegetation are treated, reduced or cleared to slow the spread of wildfire towards a structure, stop a structure fire from reaching the wildland, and to give a margin of life safety to firefighters. A wildfire defensible space is not only natural and beautiful, but easy to create by following standard guidelines and/or utilizing professional guidance. Foresters treat each property as a unique setting with distinct characteristics and take landowner objectives into account before a plan is developed. A concise plan for your forest is important to create prior to marking or thinning in order to maximize forest health, aesthetics, wildlife, and of course fire safety.

Either landowners thin their property in a controlled fashion, or nature will take care of it through some sort of drastic measure. Forest thinning and management can be achieved through an educated and concise planning process and implementation. If we choose to wait and let drought, insect and disease, or catastrophic fire decide the fate of our forests, the forest dynamic and integrity, as we know it, will suffer. As always, the landowner is the ultimate decision maker and your objectives are always our first priority. We are here to help you, the forest landowner, achieve your goals in an educated and concise manner.

Bob Bundy
Front Range Fuels Treatment Partnership Forester
Colorado State Forest Service
(303)-823-5774
rbundy@lamar.colostate.edu

Cory Secher

Property of Jake and Shondi Nickell
807 Timber Lane, Boulder, CO
LU - 06 - 014



0 112.5 225 450 Feet

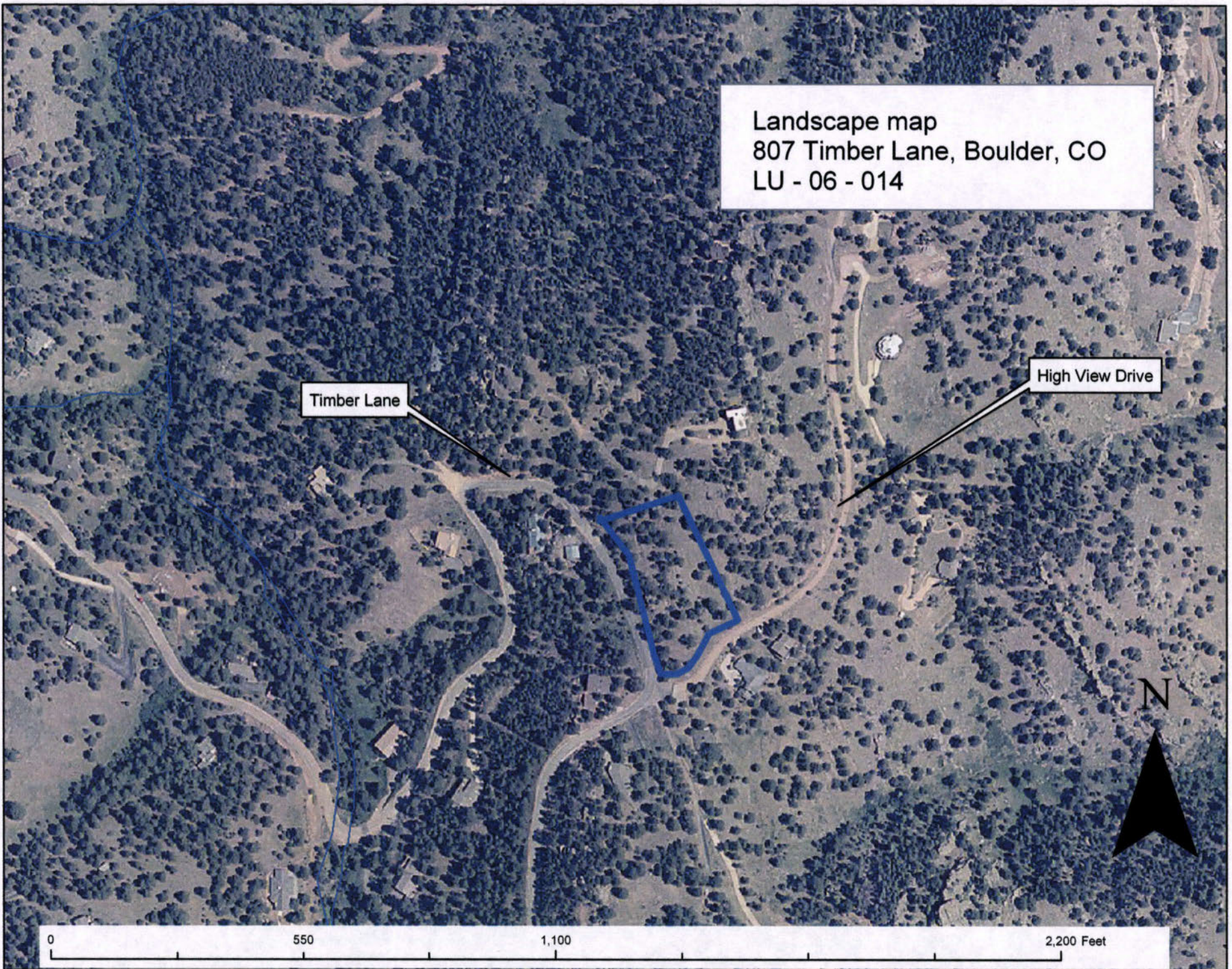
Landscape map
807 Timber Lane, Boulder, CO
LU - 06 - 014

Timber Lane

High View Drive

N

0 550 1,100 2,200 Feet



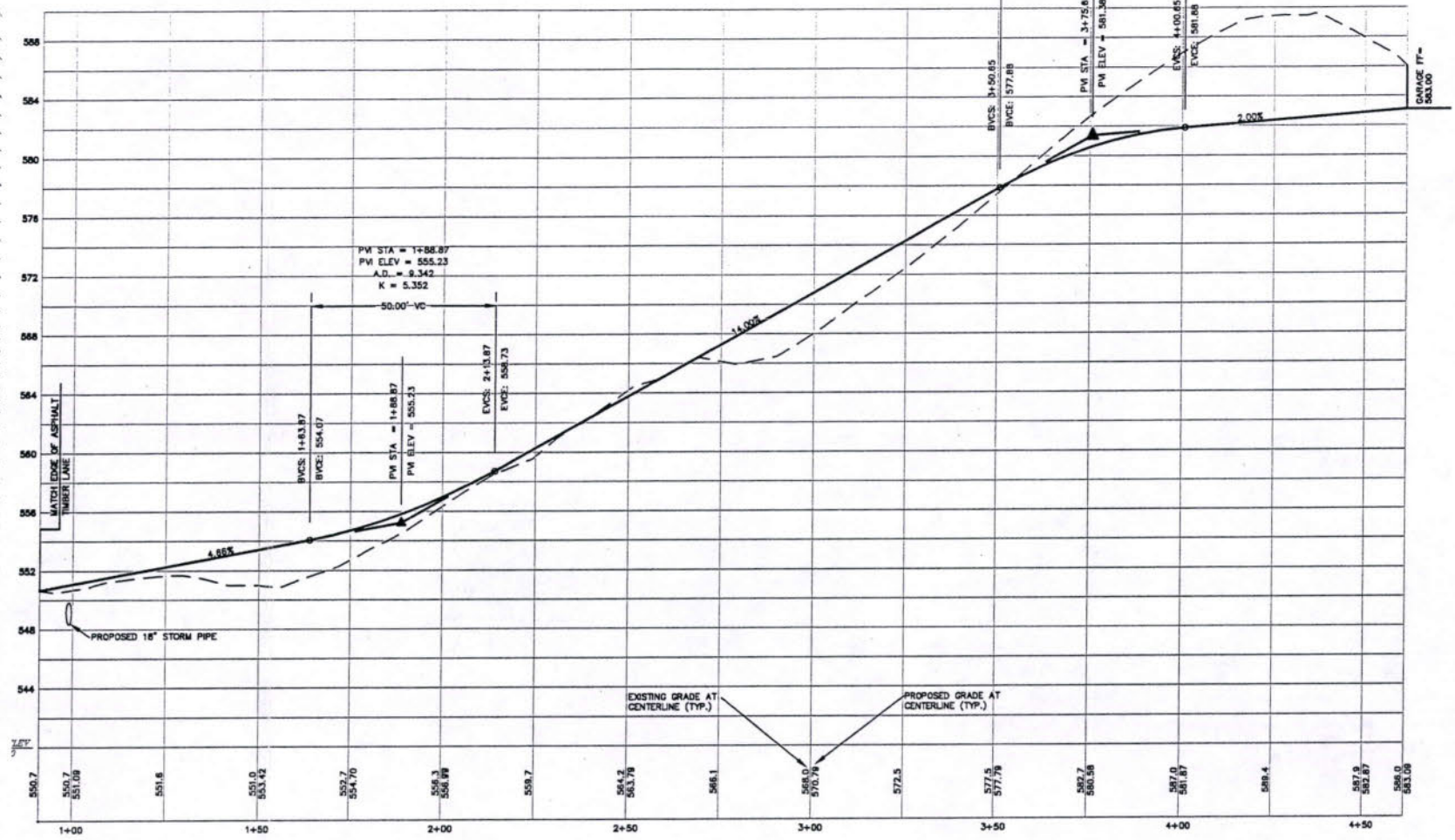
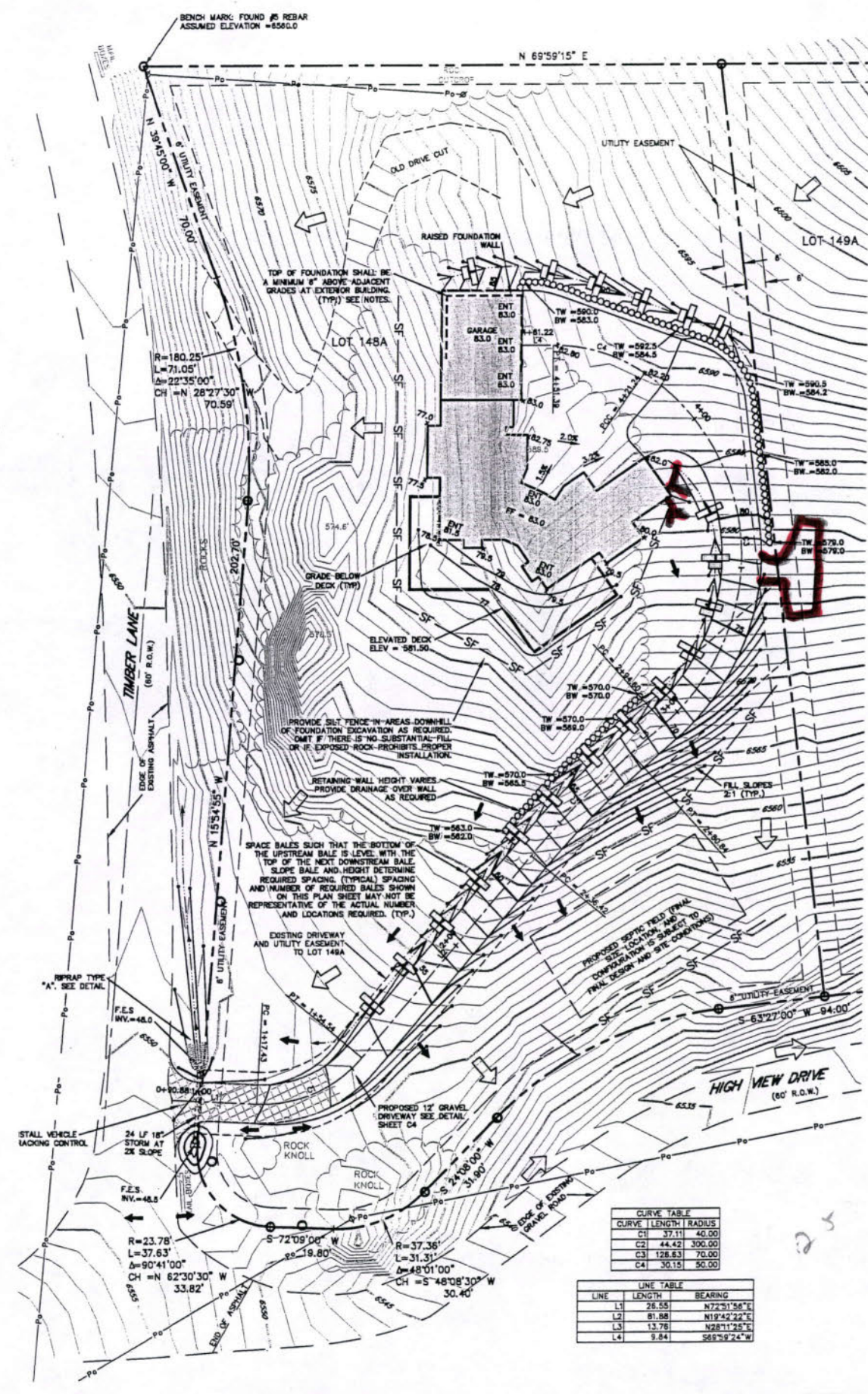
Property of Jake and Shondi Nickell
807 Timber Lane, Boulder, CO
LU 06 - 014

Legend

- Zone 1
- Zone 2
- Driveway
- Leach field
- Leave trees



Please see MARKINGS in RED



X = FDC CONNECTION Th
 J = HAMMER HEAD TURNAROUND

DRIVEWAY PROFILE
 STA. 0+90.88 TO 4+61.22
 SCALE: HORIZONTAL 1" = 20'
 VERTICAL 1" = 5'



GRADING AND DRAINAGE PLAN
 LOT 148 PINE BROOK HILLS
 UNIT THREE - REPLAT 'A'
 BOULDER COUNTY, COLORADO

SCOTT, COX & ASSOCIATES, INC.
 consulting engineers • surveyors
 1530 55th Street • Boulder, Colorado 80303
 (303) 444 - 3051

Designed by	WMK	Date	10/19/06	Scale	1"=20'	Survey	Sheet C2	Drawing no.	06195B-2
Drawn by	WMK	Revision		Description		Date		Project no.	06195B
Checked by	DPA								



NICKELL RESIDENCE GRADING AND DRAINAGE PLAN AND DRIVEWAY PROFILE

10.26.06

LOT 148A PINEHILLS, BOULDER, CO





**BOULDER MOUNTAIN
FIRE PROTECTION DISTRICT**

STEVE LYNN

Wildfire - Mitigation Coordinator
mitigation@bouldermountainfire.org

PINE BROOK HILLS STATION
1905 LINDEN DRIVE
BOULDER, CO 80304

BOULDER HEIGHTS STATION
50 OVERLOOK LANE
BOULDER, CO 80302

CELL (303) 859-4661 • PHONE (303) 440-0235 • FAX (303) 440-5247
DIAL 911 IN CASE OF EMERGENCY

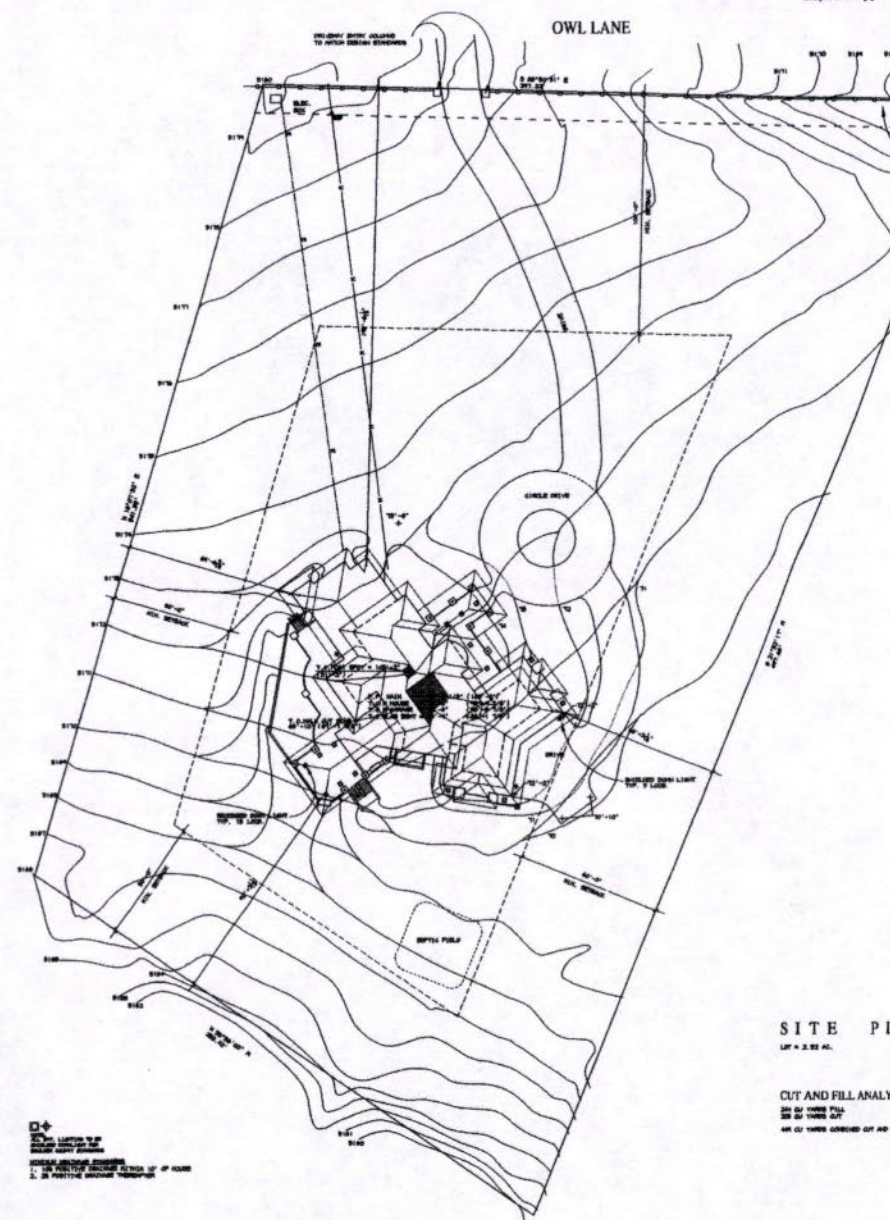
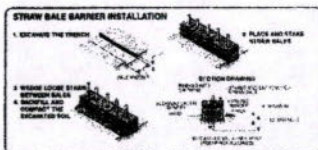
GENERAL DESIGN NOTES

- ### SHIELDED DOWNLIGHT



- [illegible]

SILT FENCE DETAIL



SITE PL

CUT AND FILL ANALYSIS

Nichols

DIRECTIONS FOR FILLING OUT FORM:

Please fill out as complete as possible and fax to Nicole Palestro at 303-823-5768 or mail to 5625 Ute Highway, Longmont CO 80503-9130, or bring to scheduled marking appointment.

Any **Bolded** categories will be filled in by the CSFS representative at the time of initial site visit and tree marking for the defensible space. If you have any questions about this form please contact Nicole Palestro at 303-823-5774.

Wildfire Mitigation Plan
FIELD DATA FORM

Inspection Date:

3-14-07

Landowner name:

Jake and Shondi Nickell

Mailing address:

5225 N. Ravenswood Ave., Suite 101

City, State, Zip:

Chicago, IL 60604

Site address:

807 Timber Lane
Boulder, CO 80304

Phone number:

(312) 479-5695

Road access:

Linden Ave. west from Broadway (Linden Ave. becomes Linden Dr),
Linden Dr to Timber Lane to High View dr. Site located at northeast
corner of Timber Lane & High View Dr.

Docket Number:

LU-06-014

Section:

Section 23

Township:

T 1N

Range:

R 71W

Legal Description: Lot 148A of Pine Brook Hills Unit 3 Replat A

Elevation: 6583 (main level)

Lot size (acres): 1.3 Acres +/-

Number of Structures: 1 structure

Existing Structures: No current structures

New Structure: One new dwelling

Structure SQR. FT.: Approximately 5,000 SF

Structure aspect: View to the south

Garage if detached: The garage is attached to the dwelling

Out buildings: None

Driveway length: 361.25 feet (Actual length in feet from road to home)

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

House design: Simple (simple/complex)

Home buffer material: Gravel/Stone as required

Roof Design: Simple (simple/complex)

Roof material: Metal roof (standing metal seam)

Soffits type: Stained wood T&G (cedar)

Siding material: Concrete base with integral color with stained wood (cedar) horizontal channel lapsiding above

Windows (#): Multitude of small and medium windows mulled together each elevation

Windows Size: Small and medium in combinations (On average: small/medium/large)

Windows Frames: Aluminum clad wood windows

Windows Aspect: Dominant view is to the south (Dominant viewing direction)

Window Construction: High efficiency Low-E windows, tempered as required by code and location

Sliding Glass Doors: Main level, (4) large accordion sectional doors

Door Material: Aluminum clad wood doors

Deck material: Composite wood deck (Trex, Evergrain or similar)

Deck Description: Elevated deck with minimum roof overhang above

Deck support type: Heavy Timber with integral color concrete column bases

Deck buffer material: Material to match around house as required

Deck weed barrier: Fiberglass as needed

Utility Location: Buried, beneath driveway

Leach field: Approximately 80 from dwelling to the south east

Cistern: Cistern not required by Boulder Mountain Fire Protection District

Cistern Type: N/A

Cistern size: N/A

Making a donation to community cistern: No, not required by BMFPD

Have you talked to the local fire department: Yes

Are you required to have a sprinkler system: Yes, compliant with NFPA 13D Boulder County Building Code

Water supply: Main Line, Pine Brook Hills Water District

Well (if applicable): N/A

Propane or natural gas: Natural Gas

Propane Tank location: N/A

Slash disposal: Chipped and Scattered

Can you provide a copy of a map with locations: Yes, see attached.

This part will be filled out by the inspecting forester

FPD: _____

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

Dominant overstory: _____

Co-dominant overstory: _____

Fuel model type: _____

Aspect: _____ (Direction of slope)

Slope: _____

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

Site moisture: _____

Natural fire barrier: _____

Insect & Disease Diagnosis: _____



Address **807 Timber Ln**
Boulder, CO 80304

