

WILDFIRE PROTECTION PLAN

**CRYSTAL PARK SITE # S-160(VR)
ADD TO CRYSTAL PARK, SUB NO2,
MANITOU SPRINGS, CO 80829**

**DEVELOPED FOR
COLE JOLLY, OWNER**

**Prepared by
Dawn Streb LGA Studios**

**Revised March 13, 2026
Submitted to
El Paso County Land Use Office, the Crystal Park Fire Department and
the Crystal Park Architectural Control Committee**

Reviewed By: _____



Steven Rose
Fire Marshall, Crystal Park Volunteer Fire Department

WILDFIRE PROTECTION PLAN

This wildfire protection plan is submitted to the Land Use Office of the El Paso County Colorado, County Zoning Department and the Crystal Park Fire Department to satisfy the requirements of both entities in regard to planning for wildfire protection and mitigation in connection with construction of buildings within the wildland-urban interface characteristic of much of El Paso County.

Property Subject to Plan

This plan is presented in connection with the planned construction of a new garage for Cole Jolly at 6065 Waterfall Loop.

The site plan for the proposed garage, including contour plot lines, is provided in the attached figure/site plan and stamped topo by Rampart Surveys.

Application for a building permit for the garage is in process.

Site 2-160(VR) site addition to Crystal Park, subdivision NO. 2, lying in the SW ¼ of section 18, Township 14 South, Range 67 West of the 6th P.M., El Paso County, Colorado, located at **6065 Waterfall Loop**.

In developing this plan, it was necessary to determine the required allocation of defensible space around the proposed home site and to identify the vegetation and forest characteristics in the immediate surroundings.

Drawing upon the information presented in Colorado State Forest Service, "The Home Ignition Zone: A Guide to preparing your home for Wildfire and Creating a Defensible Space", an inspection of the site and surrounding terrain has been conducted and the attached site plan has been developed in accordance with the guidance of the subject fact sheet specifically relating to the property's **Three Defensible Zones**.

Most importantly, the homeowner needs to recognize that firefighters will always do their best to protect you and your home, but ultimately, **it is the homeowner's responsibility to protect life, family, animals, and property from Wildfire**.

Structural Ignitability

Use of fire-resistant building materials is greatly encouraged in Crystal Park to the degree that all new construction or reroofing is required to be a Class "A" material. Most decks are highly combustible heat traps. For this reason, patios are preferred or even concrete decks with steel supports. Exterior walls of non-combustible materials such as stucco or concrete boards are a desirable choice. The roof eaves and fascia can

also be stucco, cement board, or other fire-resistant materials. Finally, windows are one of the weakest parts of a building and should be given careful consideration. For more information, refer to the *CSFS Fire Wise Construction: Site Design and Building Materials* at www.csfs.colostate.edu. Go to publications (Home Ignition Zone Guide).

Defensible Space

Defensible space is the area around a home/garage that has been modified to reduce fire hazard. It will give your home/garage a fighting chance against wildfire. This entails developing three zones around all structures on the property as follows.

Within these Defensible Zones, the following will be accomplished: In accordance with the guidelines of "The Home Ignition Zone" by Colorado State Forest Service.

Defensible Space Management Zone 1: 0-5 ft. This zone requires the maximum hazard reduction and will consist of an area of 5' feet around all structures on the site in which all flammable vegetation is removed. No trees shall exist in this zone. These 5 feet are measured from the outside edge of the structures' eaves and any attached structures, such as decks. This zone is designated to prevent flames from coming in direct contact with the structure, Use nonflammable, hard surface materials in this zone, such as rock, gravel, cement, bare earth, or stone/concrete pavers.

CRITICAL STEPS: Within this defensible zone, the following will be accomplished:

- Plant nothing within 5 feet of the structure. No plants may be placed directly beneath windows or next to foundation vents. Install non-flammable ground cover such as decorative rock.
- Remove all flammable vegetation, including shrubs, slash, mulch, and other woody debris.
- If the siding is noncombustible (stucco, concrete, stone, or brick), widely spaced foundation plantings of low-growing shrubs or other fire-resistant plants are acceptable, but not beneath windows or next to foundation vents. Be sure areas of continuous grass are not adjacent to plantings. Information about fire-resistant plants is available on the CSFS website at www/csfs.colostate.edu.
- Prune and maintain any plants in Zone 1 to prevent excessive growth. Also, remove all dead branches, stems, and leaves within and below the plant.
- Due to the wells in Crystal Park being for household use only, we are unable to irrigate and are required to keep all landscape wild. Revegetate with native plants. Keep wild grasses mowed to a height of 6 inches or less.
- Do not store firewood or other combustible materials anywhere in this zone. Keep firewood at least 30 feet away from structures, and uphill if possible.
- Enclosed or screen decks with 1/8th inch or smaller metal mesh screening (1/16th inch mesh is preferable). Do not use areas under decks for storage.
- Remove all trees from Zone 1 to reduce fire hazards. The more trees you remove, the safer your home will be.
- Prune tree branches that overhang or touch the roof and remove all fuels within 10 feet of the chimney.

- Remove all pine needles and other debris from the roof, deck, and gutters.
- Rake and dispose of pine needles, dead leaves, mulch, and other organic debris within 5 feet of all decks and structures. Farther than 5 feet from structures, raking material will not significantly reduce the likelihood of ignition and can negatively affect other trees.
- Remove slash, Wood chips, and other woody debris from Zone 1.
- Do not use space under decks for storage.

Defensible Space Management Zone 2: 5-30 ft. This zone is designed to give an approaching fire less fuel, which will reduce its intensity as it gets nearer to your home or any structures. It is an area of fuels reduction designed to diminish the intensity of a fire approaching your home. The width of Zone 2 is typically 5 feet to 30 feet from all structures. This garage is to be built on sloped ground. If this zone extends beyond your property line, work with adjoining property owners to complete the defensible space. If this zone extends into common ground, please see the “Implementation” section on the final page of this document.

CRITICAL STEPS: Within this defensible zone, the following will be accomplished: In accordance with the guidelines of “Creating Wildfire-Defensible Zones”.

Thinning and Pruning

- Remove all stressed, diseased, dead, or dying trees and shrubs.
- Remove enough trees, (with the exception of mature stands of aspen – see section on aspen), and large shrubs to create at least 10 feet between crowns. Crown separation is measured from the outermost branch of one tree to the nearest branch on the next tree. On steep slopes, increase the distance between tree crowns even more.
 - This will include maintenance of a minimum distance of 30 feet between tree crowns on the steep slope of 20' where the slope is 21-40%, 15' where the slope is 11-20% and 10' if less than 11%.
- Remove all ladder fuels from under remaining trees. Prune tree branches off the trunk to a height of 10 feet from the ground or 1/3 the height, whichever is less.
- If your driveway extends more than 100 feet from your home, thin out trees within a 30 feet buffer along both sides of your driveway, all the way to the main access road. Again, thin all trees to create 10 feet spacing between tree crowns.
- Small groups of 2 or 3 trees may be retained but leave a minimum distance of 30 feet* between their crowns and surrounding trees, to ensure fire doesn't jump from one group to another.
- Prune tree branches to a height of 6-10 feet* from the ground or a third of the total height of the tree, whichever is less.
- Because Zone 2 forms an aesthetic buffer and provides a transition between zones, it is necessary to blend the requirements for Zone 1 and Zone 3.

Example - if you have a tree in Zone 2 with branches extending into Zone 1, the tree can be retained if there is proper crown spacing.
- Limit the number of dead trees (snags) to one or two per acre. Be sure snags cannot fall onto the house, power lines, roads, or driveways.

- As in Zone 1, the more trees and shrubs removed, the more likely your home will survive a wildfire.

Shrub Thinning/Gambel Oak/Pruning and Surface Fuels

- Isolate shrubs may remain in Zone 2, provided they are not under tree crowns.
- Keep shrubs at least 10 feet away from the edge of tree branches. This keeps them from becoming ladder fuels.
- Minimum spacing recommendations between clumps of shrubs is 2 ½ times the mature height of the vegetation. As with tree-crown spacing, all measurements are made from the edge of vegetation crowns.

Example – for shrubs 6 feet high, spacing between shrub clumps should be 15 feet or more (measured from edge of the crowns of vegetation clumps). The diameter of these shrub clumps should not exceed 12 feet.

- Periodically prune and maintain shrubs to prevent excessive growth and remove dead stems from shrubs annually. Common ground junipers should be removed whenever possible because they are highly flammable.
- Mow grasses as needed through the growing season, keeping them a maximum of 6 inches high. This is extremely critical in the fall when grasses dry out.
- Mow Gambel Oak sprouts at least once a year in Zone 1 and Zone 2.
- Avoid accumulation of surface fuels, such as logs, branches, slash, and wood chips greater than 4 inches deep.
- Spacing between clumps of shrubs should be at least 2 ½ times* their mature height. Each clump should have a diameter no more than twice the mature height of the vegetation. Example: For shrubs that grow 6 feet tall, space clumps 15 feet apart or more (measure from the edge of the crowns of vegetation clumps). Each clump of these shrubs should not exceed 12 feet in diameter.

** Horizontal spacing recommendations are minimums and can be increased to reduce potential fire behavior, particularly on slopes. Consult a forestry, fire, or natural resources professional for guidance with spacing on slopes.*

Firewood

- Stack firewood uphill or on the same elevation as any structure, but at least 30 feet away. Never stack wood under a deck or against the structure.
- Clear any flammable vegetation that is within 10 feet of woodpiles.

Propane Tanks – No Natural Gas in Crystal Park

- Locate propane tanks at least 30 feet from any structures, preferably on the same elevation as the structure. Clear any flammable vegetation that is within 10 feet of the tank.
- The propane tank should not be located below your house because if it ignites, the fire will tend to burn uphill. Conversely, if the tank is located above your home and it develops a leak, gas will flow downhill into your home.

- Do not visibly screen propane tanks with shrubs, vegetation, or flammable fencing. Instead, install 5 feet of non-flammable ground cover around the tank.

Clipper

- Dispose of slash (limbs, branches, and other woody debris) by clipping or lop-and-scatter (cutting into very small pieces and distributing it over the ground). Crystal Park has a chipper for this purpose. Contact the Park Office at 719-685-9729.

Defensible Space Management Zone 3: 30-100 ft. This is an area of fuel reduction designed to slow the intensity of a fire approaching your home. It should provide a gradual transition from Zone 2 to areas farther from the home that have other forest management objectives. This zone's width is from 30 feet to 100 feet from all structures on the property. Your local Colorado State Forest Service Forester can help you with this zone. This zone focuses on mitigation that keeps fire on the ground, but it's also a space to make choices that can improve forest health. Healthy forests include trees of multiple ages, sizes, and species, where adequate growing room is maintained over time.

If the distance of 100 feet to the edge of Zone 3 stretches beyond your property lines, it's encouraged to work with adjoining property owners and Crystal Park HOA to complete an appropriate defensible space. If your house is on steep slopes or has certain topographic considerations, this zone may be larger.

CRITICAL STEPS: Within this defensible zone, consider the following when deciding forest management objectives in zone 3:

- Mow grasses not necessary in Zone 3.
- The healthiest forest is one that includes trees of multiple ages, size, and species and where adequate growing room is maintained over time.
- Watch for hazards associated with ladder fuels. The chance of a surface fire climbing into trees is reduced in a forest where surface fuels are widely separated, and low tree branches are removed.
- Tree crown spacing of 6-10 feet is suggested. Consider creating openings or meadows between small clumps of trees so fire must transition to the ground to keep moving.

Other Recommendations

Windthrow

Lodgepole pine, Engelman spruce and Douglas-fir, are very susceptible to damage and uprooting by high winds or windthrow. If you see evidence of this around your home, consider making adjustments to these guidelines. It is highly recommended that you contact a professional forester to help design your defensible space if you have windthrow concerns.

Water Supply

Crystal Park has several cisterns installed around the park for the express purpose of firefighting. There is no cistern in the area of this home.

Recommendations for Specific Forest Types

The above recommendations refer primarily to Ponderosa pine, Douglas fir and mixed conifer ecosystems which do not make up most of the Site.

Please refer to additional recommendations below:

Implementation

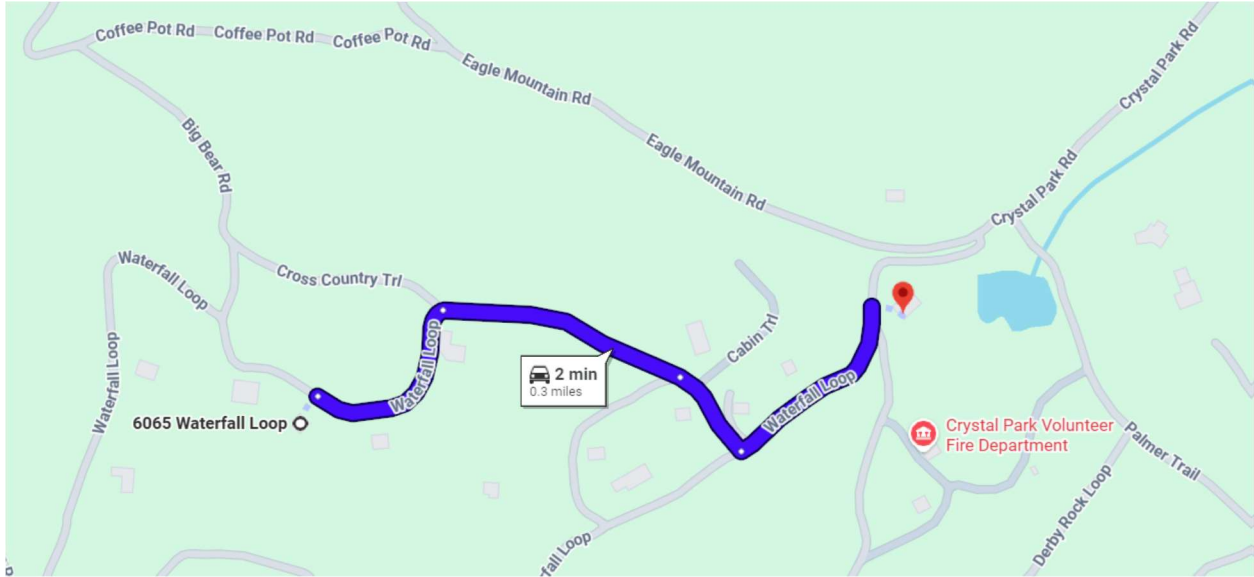
This plan is to be affected, and provisions implemented on the site by the time of construction completion. This does not include adjacent sites within the boundary of the Defensible Space Management Zones owned by others, nor common ground owned by Crystal Park. The owner is encouraged to work with adjoining property owners and Crystal Park HOA to complete the defensible space. The area owned by Crystal Park within the Defensible Space Management Zones may be brought into compliance with the Owner's Protection Plan by mutual agreement with Crystal Park. The owner is encouraged to contact the Crystal Park Forestry Committee (through the Crystal Park Office 719-685-9729) for further information.

FIRE ACCESS, INGRESS, EGRESS, and EVACUATION

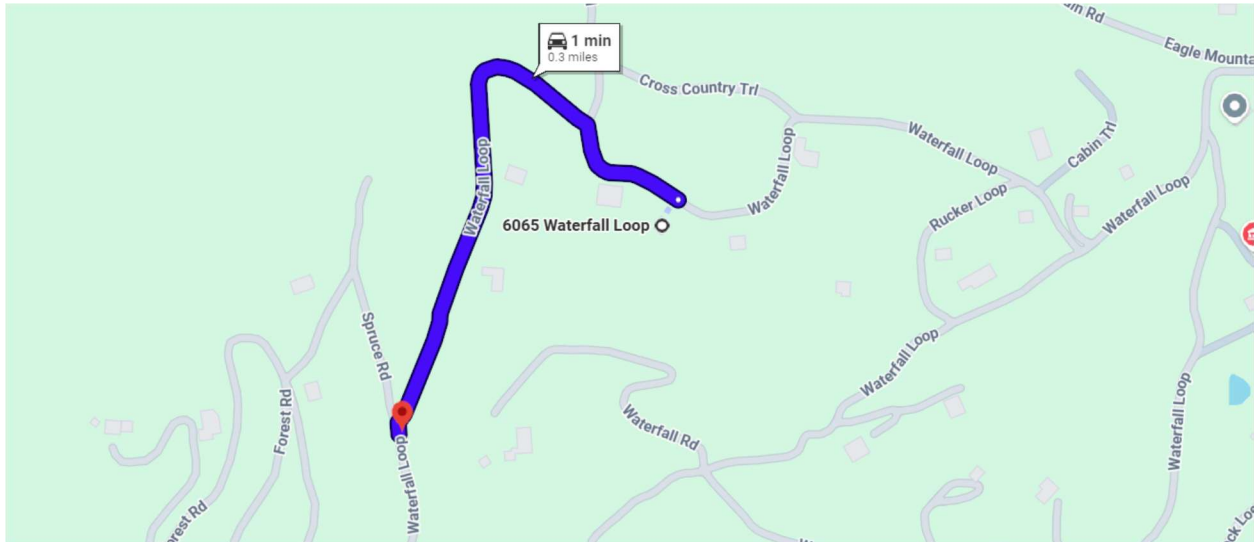
SEE ATTACHED SITE PLAN FIRE PROTECTION

The attached site plan shows the following information:

- A firetruck can access the house via existing roads. And approach the house via two directions.
- Fire truck parking on the existing Waterfall Loop Road which can be accessed from two directions.
- Egress from the house and/or the garage. 890 feet and 47 feet, respectively.
- It shows a hose lay around the house of approximately 217 feet. That is from fire truck to firetruck. From the cistern on property to the furthest firetruck is about 27 feet less.
- It shows the approximate location of the home's existing cistern and lid with an approximate size of 250 gallons.



Pond location = .3 mile approximate



Cistern Location +.3 mile approximate