FIRE PROTECTION PLAN
The Ridge Guest Ranch
APN 568-070-021
CUP 210121
Mountain Center, California
June 13, 2023

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EXECUTIVE SUMMARY

This Fire Protection Plan (FPP) evaluates the proposed The Ridge Guest Ranch Project, herein known as The Project, to ensure it does not unnecessarily expose people or structures to fire risks and hazards. The FPP identifies and prioritizes the measures necessary to adequately mitigate those impacts. The FPP has considered the property location, topography, geology, combustible vegetation (fuel types), climatic conditions and fire history. It considers water supply, access, structure ignitability and fire resistive building materials, fire protection systems and equipment, impacts to existing emergency services, defensible space, and vegetation management.

This FPP also lists fuel modification requirements to mitigate the exposure of people or structures from a significant risk of loss, injury, or death from wildland fires. Mitigation will include the development and maintenance of three Ignition Zones. Zone 1, or the Immediate Zone, consists of the first five feet from the exterior wall surface of the building extending out 5 feet horizontally. Within Zone 1, only hardscape or limited fire-resistant plantings acceptable to the Fire Authority Having Jurisdiction (FAHJ) shall be allowed. Zone 2, the Intermediate Zone, is commonly called the defensible space zone for fire suppression forces and protects structures from radiant and convective heat. Zone 2 consists of the area from 5'-50' from the exterior wall surface extending out in a horizontal plane. Within Zone 2, all vegetation shall consist of fire resistant, slow growing, drought tolerant plant species. Zone 3 is the area beyond Zone 2, from 50'-100' in a horizontal plane including manufactured slopes and excludes all prohibited highly combustible native vegetation. Plantings allowed by the FAHJ following approval of the Landscape Plan shall be from the Wildland/Urban Interface Development Standards plant palette. The goal within Zone 3 is the reduction or selective clearing of existing native vegetation by 50% and the planting and maintenance of only approved species. (See Section 6.0 for further description of Fuel Modification Zones and Appendix F for Fuel Treatment Map).

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1.0 General Description

The proposed project is located at 56475 Apple Canyon Road, east of the intersection with Highway 74 in the County of Riverside, south of the Community of Mountain Center, California (see Photo #1). The area designated for development is a single parcel which is located within a Very High Fire Hazard Severity Zone. The fire protection agency is the Riverside County Fire Department (RCFD).

Photo #1: Google Earth Photo of the Project. Note the Existing Access Road Off of Highway 74

The Project consists of the development of multiple structures containing approximately 31,000 square feet distributed across the northern portion of a 36-acre site. The northern area is flat with a slight slope towards Hurkey Creek on the western portion of the parcel. Jeffrey and Ponderosa pine trees cover the area proposed for development, areas with scattered, native wildland shrubs with a minimal grass understory area found around the area. A fifty-foot setback is required on the eastern boundary as the property is part of the San Bernardino Nation Forest. A setback on the western boundary is also required as Hurkey Creek, a seasonal creek, flows through the western portion of the site. The San Jacinto Fault

also bisects the property on an east west diagonal through the southern third of the site and permanent structures will not be built in the fault zone.

Multiple buildings will be constructed in The Project which will be wood framed, single story buildings housing both guests and staff members. The proposed structures include the following:

- 30 Guest Cabins, 6 "glamping" tents and a storage structure totaling 18,173 SF
- Common Areas Building: including a lounge, a commercial kitchen and dining room seating for forty-eight guests-4,872 SF
- An Activity/Wellness Hub & Support Buildings: 1,000 SF with an outdoor lap pool
- An Administration Quarters and Storage Building -2,578 SF
- Wellness Basecamp 3,409
- Wellness Cabins with 3,429 SF
- Greenhouse structure containing 972 SF
- A water and soil retention basin
- Two parking areas with a total of 60 individual parking spaces
- Propane tank for facility and emergency generator usage

Construction will also include two parking areas constructed on the south side of Apple Canyon Road on the northern property boundary. Fire hydrants, a fire pump, water storage tank(s), fire department connections for sprinklered buildings and turn-outs on the access road running throughout the northern portion of area will be constructed and located according to the Riverside County Fire Marshal's office. A backup power supply for the wells and fire pump will be installed. An existing developed orchard south of the access road will be maintained by facility personnel.

The Ridge Guest Ranch will be operated 24 hours per day, 365 days a year with a total of 51 employees working at the facility. No more than 35 employees will be on site at any given time.

This Fire Protection Plan (FPP) assesses the overall (on-site and off-site) wildland fire hazards and risks that may threaten life and property associated with the proposed commercial development. In addition, the FPP establishes both short and long-term fuel modification actions to minimize any projected fire hazard and risk and assigns annual maintenance responsibilities for each of the recommended fuel modification actions. The purpose of this FPP is to provide hazardous fuel treatment and construction feature direction for developers, architects, builders, the RCFD, Riverside County officials, and The Project owner(s) to use in making the structures in the proposed project relatively safe from future wildfires. Appendices attached to this FPP, which provide additional information, shall be considered part of this FPP.

This FPP is based upon requirements of the RCFD; California Code of Regulations Title 24, Part 9 and Title 14, Section 1280; 2022 California Fire Code and Local Amendments including Appendices to Chapters 1 & 4 and Appendices B, F & H; Chapter 7A-California Building Code; 2022 California Residential Code (CRC) R337; California Government Code, sections 51175 through 51189; California Public Resources Code Sections 4201 through 4204 and 4291; the California State and Local Responsibility Area Fire Hazard Severity Zone Map; the National Fire Protection Association (NFPA) Standard 13-D; the 2022 NFPA Standard 1140 for Wildland Fire Protection, 2021 International Fire Code; 2021 International Wildland-Urban Interface Code.

1.1 General Information

Owner:	Caroline LeGrand 8407 Wyndham Rd. Los Angeles CA, 90046
Approving Departments:	
Fire Authority:	Riverside County Fire Department

2.0 Wildland Fire Hazard and Risk Assessment

The following assessment is based upon historical weather data and existing and forecasted vegetation growth.

2.1 Weather Review and Assessment

Weather has a dramatic influence on wildland fire behavior. The most critical weather pattern to The Project area is a hot, dry offshore wind, typically called Santa Ana. Such wind conditions are usually associated with strong (>50 MPH), hot, dry winds with very low (<15%) relative humidity. Santa Ana winds originate over the dry desert land and can occur anytime of the year; however, they generally occur in the late fall (September through November). This is also when non-irrigated vegetation is at its lowest moisture content. Riverside County is one of the areas in southern California that is strongly influenced by powerful Santa Ana winds.

Fire Agencies throughout the western United States rely on a sophisticated system of Remote Automated Weather Stations (RAWS) to monitor weather conditions and aid in the forecasting of fire danger. The closest RAWS to site is the Keenwild RAWS located at Latitude 33° 66' 9 " N and Longitude 116° 76 ' 67" W at an elevation of 4812 feet in the County of Riverside, just south of on Highway 74. An evaluation of the past 5 years of wind gust data (the "worst case scenario") found wind gusting at ground level to 43 MPH in February 2018 and 2020. The Keenwild RAWS station has been in service only since August, 2017. Another RAWS facility located at the Kenworthy Forest Service Fire Station also shows wind gusts exceeding 40 MPH typically in November. (See Appendix 'I')

Data for all RAWS is archived in the Western Region Climate Center in Reno, Nevada. The typical prevailing summer time wind pattern is out of the west/southwest and normally is of a much lower velocity (7-15 MPH with occassional gusts to 25 MPH or more) and is associated with relative humidity readings ranging between 20% and occasionally more than 50%. The maximum recorded gusts have exceeded over 60 MPH from the north as recent as 2017. In addition to Santa Ana winds, there is a historic pattern of wildland fires burning from the west to southwest. Every 5-10 years, a "rare event" hot dry, southwest to west winds in excess of 30 MPH will occur. Most recently, in 2018, the Cranston Fire burned over 13,000 acres north of The Project under west wind conditions. This moderately strong, dry wind condition usually occurs in the late afternoon or early evenings on extremely hot days, especially during the normal summertime (June through September) months.

All other (northwest, southeast and south) wind directions may be occasionally strong and gusty; however, they are generally associated with cooler moist air and have higher relative humidity (>40%). They are considered a serious wildland fire weather condition when wind speeds reach >20-MPH.

2.2 Off-Site Fire Hazard and Risk Assessment

The Ridge Guest Ranch Project is located in Garner Valley, a narrow north-south valley. Hurkey Creek, a seasonal creek flowing into Lake Hemet which is directly west of Highway 74, flows through the western portion of The Project site. The vegetation consists of annual grasses and mountainous shrubs. Trees occur in narrow pockets and include Coulter and ponderosa pine trees with oak and willow trees in the creek drainages. Sage is the most common shrub found in the valley floor. Numerous burned tree skeletons from the 2018 Cranston Fire remain on the slopes and in the creek drainages north of Apple Canyon Road. Ground fuels were consumed during the fire and have yet to regrow to full size.

Hurkey Creek Campground is owned and maintained by Riverside County Parks Department and the Ronald McDonald retreat are directly north of Apple Canyon Rd. Both sites have well-maintained fuel treatments reducing the threat of wildfire within the campground and retreat. The 2020 Cranston Fire's southern progress was halted along the northern border of the Ronald McDonald retreat due to the well-maintained fuel treatment on the retreat property. North of the two recreational sites, the topography changes rapidly as the valley floor narrows and is broken up by intersecting drainages and short ridgelines. The elevation rapidly increases in height east and west of the site with dominate mountain peaks such as the 8,846 Tahquitz Peak to the north, 4920-foot Spitler Peak and 10,834-foot San Jacinto Mountain to the northeast forming the headwater for Hurkey Creek. The valley widens south of The Project site with dominate ridge lines east and west of the valley floor. Native vegetation remains in the valley floor and on the steep slopes on both the east and west sides of the valley. (see Photo #2).

Southern Boundary Fuels – The southern boundary abuts cattle grazing lands. The dominant fuels in this area are dry climate shrubs and annual grasses. The primary carrier of fire in the shrub fuel models is live and dead shrub twigs and foliage in combination with dead and down shrub litter. The topography is fairly flat within Garner Valley with low hills and intersecting drainages. Further south of The Project site the area is dominated with steep slopes and peaks ranging from 4,000 feet to over 6,000 feet. The fuel type changes with moderate to heavy shrubs on the slopes. Scattered trees are located in the steepest drainages and along the creeks and the shores of Lake Hemet. The fuel model immediately adjacent to the property boundary is a gr2, a moderate load, dry climate grass with a 1-foot average depth. Also found are areas of sh2, a moderate load, dry climate shrub with no grass present; 1-hour fuels of 4.0 tons/acre and 10-hour fuels of .6 tons/acre on the slopes.

Photo #2 Left - Looking South from The Project. Lake Hemet Campground is in the Lower Right Corner, Hwy 74 is in Front of the Building.

Photo #3 Southeast View of Project Site, Planned Location of Greenhouse, Solar Farm and Planters

Photo #4 – Looking Northeast Along the Eastern Boundary. The two-track road parallels The Project site and USFS property on the right of the picture. Photo taken prior to off-site fuel treatment by the US Forest Service.

Eastern Boundary Fuels – The Eastern Boundary abuts the San Jacinto Ranger District of the San Bernardino National Forest. Fuel models range from gr1, a dry climate grass with sparse grass being the carrier of fire to gs2 a moderate load, dry climate grass shrub with fuel loads of less than 2 ton per acre. The primary carrier of fire is through generally short, sparse grass in fuel model gs1, though lesser amounts of fine dead fuel may be present. Shrubs in gs1 are about 1 foot high; grass load is low, and the spread rate is moderate; the flame length is low. Further east the fuel type changes to gs2 where the shrubs are 1-3-feet high, and the grass load is moderate. The primary carrier of fire within the gs2 fuel model is grass and shrubs combined. The spread rate is higher than in gs1 and the flame length is rated as moderate.

Northern Boundary Fuels – The Northern Boundary abuts Apple Canyon Road, a two-lane paved road. Fuel type changes from grass and shrubs to open stands of Coulter and ponderosa pine trees. Typical understory vegetation includes pinecones and needles with light, sparse grass. Further north, the Cranston Fire was stopped along the fuel treatments on the northern perimeter of Camp Ronald McDonald for Good Times and Hurkey Creek Park. These fuel treatments were completed prior to the fire (See Photo #5).

Photo #5 Fuel Treatment Along Northern Boundary of the Apple Canyon Center

Western Boundary Fuels –State Highway 74, the Pines to Palms Scenic Byway, forms the Western Boundary of The Project site. The 64-mile Highway runs from the City of Banning to Palm Desert through Garner Valley over the Santa Rosa Mountains into the desert of Palm Springs. Fuel types along the western boundary include gr1, gs1 and gs2 and Timber Understory where the primary carrier of

fire is the forest litter with herbaceous or shrub fuels. tu1 is a light load, dry climate timber area with both grass and light shrubs. tu4 is a dwarf conifer forested area with a dry climate timber-shrub fuel mix with fuel loads of 6.5 tons per acre. Fires burning in fuel model gs1 have a moderate grass load with shrubs 1 to 3-feet tall, producing high rates of spread. The primary carrier of fire in tu1 is a light load, dry climate timber-grass-shrub while tu2 has a moderate litter load with a shrub component. The spread rate and flame lengths are low in tu1 and moderate in tu4.

2.3 On-Site Fire Hazard and Risk Assessment

The native and exotic vegetation within The Project area has been modified through prior on-site development including a well, horse facilities and until recently, a mobile home which has been removed from the site. The Project site has been served by a dirt road access road which follows the perimeter of the area, access is made from Apple Canyon Road.

Southern Boundary On-Site Fuels – The southern portion of the site has been cleared for development of farming activities under greenhouse conditions. A single bio-retention basin will be developed south of the access road along an active earthquake fault which runs east/west through the center of the site. No structures will be constructed over the fault zone. Fruit trees will be planted next to the greenhouses. A substantial portion of the site has been cleared and graded with the exception of small areas within the drainage basins which will remain undisturbed by construction. A 50-foot setback from the property lines on the east, south and west sides has been provided which prohibits the construction of any permanent structure within the setback area.

Western Boundary On-Site Fuels

The western portion of the site contains the Hurkey Creek floodplain. No fuel treatments will be allowed in the creek basin, so on-site fuel modifications and safety upgrades for all structures will be required.

Eastern Boundary On-Site Fuels – The eastern boundary has an area covered in gs1 fuels; these on-site fuels are continuous with the offsite fuels along the perimeter. To reduce the onsite threat from an offsite fire, The Project owner has reached an agreement with the USFS to maintain a 100-foot fuel treatment area on Forest Service lands along the eastern boundary of The Project. During the spring of 2022, the fuel treatment area was established, reducing the threat of an approaching wildfire from the east. The Project owners will be responsible for maintaining the fuel treatment zones to the standards set in the Fire Protection Plan.

Figure 6 Photo Eastern Fuel Treatment Area Following Spring Treatment by the US Forest Service, 100% Fuel Reduction 0-50', 50% Reduction 50-100'

Northern Boundary On-Site Fuels – Several pine trees dominate the northern portion of the site and will remain trimmed to improve fire safety. The site under the pine trees has a buildup of timber litter including pinecones, needles, and leaves.

No landscaping is proposed for The Project, but should any landscaping be desired in the future, plantings will be selected from native vegetation, limited to non-flammable species not found on the Prohibited Plant Species List for Fuel Modification Zones in High & Very High Hazard Areas. (See Appendix "A")

Photo #7 Typical Ground Fuel Litter Under Pine Trees

The greatest fire concern for the proposed project is through ember cast from a fire burning outside The Project facility or a structure fire within the ranch that could land on adjacent structures or vegetation within the facility especially during high winds and periods of low humidity. Construction of facilities adhering to California and Riverside County fire and building codes along with robust fuel treatments will reduce the threat of fire.

3.0 Predicting Wildland Fire Behavior

The BEHAVE Plus 5.0.5 Fire Behavior Prediction and Fuel Modeling System developed by USDA–Forest Service research scientists Patricia L. Andrews and Collin D. Bevins at the Intermountain Forest Fire Laboratory, Missoula, Montana, is one of the best systematic methods for predicting wildland fire behavior. The BEHAVE Plus fire behavior computer modeling system is utilized by wildland fire experts nationwide.

Wildland fire managers use the BEHAVE Plus modeling system to project expected fire intensity, rate-of-spread and flame lengths with a reasonable degree of certainty for use in Fire Protection Planning purposes. ***FIREWISE2000, LLC*** used the BEHAVE Plus 5.0.5 Fire Behavior Prediction Model to make the fire behavior assessments for the The Project project discussed below.

3.1 Wildland Fire Behavior Calculations for the Off-site and On-site Hazardous Vegetative Fuels

Wildland fire behavior calculations have been projected for the hazardous vegetative fuels located adjacent to and bordering the proposed Ridge project. These projections were based on "worst case" Riverside County fire weather assumptions in the vicinty of The Project area and from project site observations and fuel moisture levels typically observed during the local fire season. Weather data was obtained from the Kenworthy RAWS (Remote Automatic Weather Station) network station closest to The Project area. Weather data was also compared with the Keenwild RAWS Station and was determined to be similar to the Kenworthy weather station.

Two (2) scenarios are depicted below in Tables 3.1.1 through 3.1.2, for two (2) separate BEHAVE PLUS Fire Modeling System computer calculations of the wildland and treated fuels. All tables display the expected Rate of Fire Spread (expressed in feet/minute), Flame Length (expressed in feet), and Fireline Intensity (expressed in British Thermal Units/foot/second and include the calculation inputs used in the BEHAVE Plus program. The tables also show the change in Rate of Fire Spread, Flame Length, and Fireline Intensity following the completion of the required fuel treatments

Table 3.1.1
Fire Scenario #1 East Boundaries
Fire Approaching from the North and Northeast
(Late Fire Season With 60 MPH North and Northeast Wind Conditions)

Fire Behavior Calculation Input Data	**Anticipated Fuel Moistures**
• **1 percent slope** • **60 mph 20-foot wind speed** • **45º aspect from north** • **45º wind direction from north**	*** 1-Hour Fine Fuel Moisture of..……2%** *** 10-Hour Fuel Moisture of.……3%** *** 100-Hour Fuel Moisture of.....……...…...5%** *** Live Herbaceous Fuel Moisture of……..30%** *** Live Woody Fuel Moisture of…….....50%**
Expected Fire Behavior **Fuel Model sh2 – Moderate Load, Arid Climate Shrub, no Grass Present**	
Rate of Spread - 81.1 ft/min	
Fireline Intensity - 2096 BTU/ft/s	
Flame Length - 15.2 feet	
Expected Fire Behavior in Treated Fuels **Fuel Model gs1 – Low Load Dry Climate Grass-Shrub**	
Rate of Spread - 263.89 ft/min	
Fireline Intensity - 430 BTU/ft/s	
Flame Length - 7.3 feet	

Table 3.1.2 ***Fire Scenario #2 Southern Boundary*** ***Fire Approaching from the South and West*** ***(Late Fire Season With 50 MPH Northwest and West Wind Conditions)***	
Fire Behavior Calculation Input Data • **1º percent slope** • **50 mph 20-foot wind speed** • **45º aspect from north** • **300º wind direction from north**	**Anticipated Fuel Moistures** *** 1-Hour Fine Fuel Moisture of..……..2%** *** 10-Hour Fuel Moisture of.……..…3%** *** 100-Hour Fuel Moisture of.....……..……6%** *** Live Herbaceous Fuel Moisture of…...30%** *** Live Woody Fuel Moisture of…….....60%**
Expected Fire Behavior **Fuel Model sh2 – Moderate Load, Arid Climate Shrub, no Grass Present**	
Rate of Spread - 55.33 ft/min	
Fireline Intensity - 1401 BTU/ft/s	
Flame Length - 12.6 feet	
Expected Fire Behavior in Treated Fuels **Fuel Model gs1 – Low Load Dry Climate Grass-Shrub**	
Rate of Spread - 199.21 ft/min	
Fireline Intensity - 325 BTU/ft/s	
Flame Length - 6.4 Feet	

4.0 Assessing Structure Ignitions in the Wildland/Urban Interface

Structure ignitions from wildland wildfires come from three sources of heat: convective firebrands (flying embers), direct flame impingement, and radiant heat. The Behave Plus Fire Behavior Computer Modeling Program does not address wind blown embers or firebrands from a structure ignition perspective. However, even though ignition resistant exterior building materials will be used in the construction of The Project (see APPENDIX 'D' for the description of ignition resistive construction), wind driven embers and radiant heat issues are addressed in this FPP.

4.1 Firebrands/Embers

Firebrands or embers are pieces of burning materials that detach from a burning fuel due to the strong convection drafts in the flaming zone. Embers can be carried a long distance (one mile or more) by fire drafts and high winds. Severe wildland/urban interface fires can produce heavy showers of embers. The chance of these embers igniting a structure will depend on the number and size of the firebrand, how long it burns after contact, and the type of building materials, building design, and construction features of the structure. Embers landing on combustible roofing and decks are common sources for structure ignition. They can also enter a structure through unscreened vents, decks and chimneys, unprotected skylights, eave openings open windows, and overhangs.

Even with non-combustible roofing, embers landing on leaves, needles, and other combustibles located on a roof (due to lack of maintenance) can cause structure ignition. Any open windows, doors or other types of unscreened openings are sources for embers to enter a structure during a wildland fire. If these

maintenance issues are addressed on a regular basis through regular inspections, embers should not be a concern for the structures, as the buildings will be constructed with Chapter 7A building materials.

4.2 Radiant Heat/Direct Flame Impingement

Radiation and convection involve the transfer of heat directly from the flame. Unlike radiation heat transfer, convection requires that the flames or heat column contact the structure. An ignition from radiation (given an exposed flammable surface) heat transfer depends on two aspects of the flame: 1) the radiant heat flux to a combustible surface, and 2) the duration (length of time) of the radiant flux. The radiant heat flux depends on the flame zone size, flame-structure distance, and how much combustible material of the structure is exposed to the flame. While the flame from a wildfire may approach 1,800 degrees Fahrenheit, it is the duration of heat that is more critical. For example, a blow torch flame typically approaches 2,100 degrees Fahrenheit, yet a person can easily pass their hand through the flame. Heat duration only becomes critical to a home with a wood exterior surface if the heat is allowed to remain for 30-90 seconds.

Research scientist Jack Cohen of the United States Forest Service has found that a structure's characteristics--its exterior materials and design--in relation to the immediate 100-foot area around a home principally determines the home ignition potential. He calls the home and its immediate surroundings the home ignition zone. In a study of ignition of wood wallboard, tests by a USDA Forest Service research team described in the Proceedings of the 1st International Fire and Materials Conference showed that flame impingement for sufficient length of time (approximately 1 min.) ignites a typical hardboard siding material. Since the code requirement in this FPP is for a non-combustible wall or 1-hour rated fire resistive construction for the exterior portion of a structure (see 2022 California Fire Code), the likelihood of the homes' exteriors reaching ignition temperature is very unlikely due to either radiant or convective heat.

Fire agencies consider fuel treatment as a principal approach to wildland fire hazard reduction. Whenever the flame length, 1-2 minutes in duration or more, is equal to or more than the separation of combustible vegetation from a combustible structure, there is a high probability of structure ignition. Contact with a fire's convection heat column also may cause ignition but the temperature of the column's gases is generally not hot enough or long enough in duration to sustain the ignition of the structure.

Comparing the expected wildland fire behavior projections in each of the scenarios in Section 3.1 against the required fuel modification zones outlined in Section 6.0, demonstrate substantial reductions in the expected flame length and fireline intensity.

By requiring the structures exposed to the threat of wildfire to incorporate the following guidelines, those structures will be provided with the most effective treatment for minimizing losses from flame impingement and associated radiant heat intensities.

- Each structure is constructed of ignition resistant building materials as required by Chapter 7A.
- The tent material used for the Guest Accomodations will be constructed using Flame Resistant material. (See Appendix I for certification of material).
- Eaves will be fully enclosed with fire rated materials to reduce the threat of embers entering the eaves. Materials such as Hardiboard will be used to enclose the rafter tail ends.

- The area surrounding each structure contains three zones, a hardscaped 5-foot zone and either a Cleared or Irrigated Zone (defensible space) and a Thinning Zone (low fuel volume buffer strip) between the irrigated zone and the untreated fuels.
- Owners shall be required to maintain their properties to the fuel treatment standards outlined in Section 6.0 and shall keep the roof and any rain gutters free of leaves, needles and other combustible debris.
- All firewood and other combustible materials must be stored away from all structures so that burning embers falling on or near the structure have no suitable host.
- Regularly scheduled cleanup of leaves and pine needles from Zones 1 and 2.

4.3 Fire Resistant Plant Palette

Wildland fire research has shown that some types of plants, including many natives, are more fire resistant than others. These low fuel volume, non-oily, non-resinous plants are commonly refered to as "fire resistant". This term comes with the proviso that each year these plants are pruned, all dead wood is removed and all grasses or other plant material are removed from beneath the circumference of their canopies. Some native species are not considered "undesirable" from a wildfire risk management perspective provided they are properly maintained year round. Refer to APPENDIX 'A' for a list of prohibited plant species.

5.0 Fire Department Response Times

The proposed project is within the Riverside County Fire Department's response area. RCFD Station #53 located at 59200 Morris Ranch Road is approximately 5.4 miles and six to seven minutes driving time to The Project. Riverside County Fire Station #29, located at 56560 Highway 371 in Anza, is approximately 15.2 miles and nearly 17 minutes driving time to The Project location. RCFD Fire Station #53 would typically be the first engine to respond to the proposed development if the engine is available for response. Additional fire companies responding from Riverside County Fire Stations such as Station #77 in Aguanga and Station #28 in Sage would take over twenty minutes to arrive on scene from the time of dispatch. Other engine companies would respond based on the availability of resources and fire dispatch levels. U.S. Forest Service Engine 52 is located on Morris Ranch Rd. and may be available to respond to vegetation fires in The Project area. Other Forest Service Fire Stations are located within seven to ten minutes driving time. It should also be noted that the CALFIRE Air Attack Base is located in Hemet and could respond with fire retardant tankers or helicopters if available.

Although RCFD Fire Station #53 personnel and engines may be 6-7 minutes away, there is no assurance that the engine company will be in station on the day a wildfire threatens the facility. Engines may respond from other stations located further away or from other incidents. On days with extreme fire danger, there may be multiple fire starts and engine companies deployed on other incidents. This is why planned projects use *"defensible space"*, ignition resistant building features, and key fuel treatment strategies that enable residents to substantially increase their ability to survive a wildfire on their own, if necessary, without the loss of their structure. The goal of this FPP, therefore, is to either safely evacuate visitors and employees of The Project or make The Project and people as safe as possible in a Shelter-in-Place location until emergency resources arrive and then safely evacuated.

6.0 Fuel Treatment Zone Descriptions and Recommended Maintenance

Below are the descriptions and required treatments for the Fuel Treatment Zones. All distances in this report are measured horizontally. These distances are depicted on the enclosed Fuel Treatment Map. Zones 1, 2, and 3 combine to provide 100-feet of treated defensible space, which is more than sufficient to mitigate the radiant heat effects and direct flame impingment of a wildland fire with expected flame lengths of approximately 3.1 feet within the treated areas. Currently, no landscaping is planned for the site, however, should future owners want to provide landscaping around the facility, the Fuel Treatment requirements specified in this section will apply for the guest ranch facility. However, the Fuel Treatment Zone descriptions will also apply to native vegetation and the zones must be maintained as needed based on the required treatments within the three fuel treatment zone descriptions.

A fifty foot setback zone will be created on the western side of The Project along Hurkey Creek to reduce the impact of development to Hurkey Creek. This setback zone will preclude the construction of any structure and within the zone. No fuel treatments will be allowed within the Hurkey Creek flood plane. Another 50-foot setback zone will be created on the east side of The Project site to reduce the impact to Forest Service lands along the eastern boundary. The planned access road and undeveloped area will provide a buffer to the 100-foot Forest Service Treatment Zone. Fuel treatments together with the required ignition resistant construction for proposed structures should provide for sufficient protection from radiant heat and direct flame impingement on the western and eastern boundaries.

The property owner shall be responsible for maintaining Fuel Modification Zones throughtout the planned guest ranch facility. In the event the facility is sold, repossessed or other method of ownership changes, the person, company, unit, or, agency holding title to the facility will be responsible for the maintenance on the site.

6.1 Fuel Treatment Zone 1 - Owner Maintained *(Shown as Clear on the Fuel Treatment Map)*

Defined:

Zone 1, the Immediate Zone, is the area from the exterior wall surface of the building extending 5-feet on a horizontal plane. The intent of Zone 1 is to create a landscape absent of all combustible materials. This zone includes the level graded area under and around all decks and requires the most stringent wildland fire fuel reduction and maintenance. This area shall be kept clear of combustibles, plant-based landscaping mulch, and all large shrubs and trees. It may have a few nonwoody plants, generally confined to pots or containers, that are low growing. Plants that grow in water are also a good choice. No plants shall be grown beneath windows or adjacent to doorways.

The soil surface may be bare ground or covered with hardscape features such as pavers, gravel, concrete, rock, or other non-combustible material. Water features and statuary developed from non-combustible materials are also a good choice for this zone.

Required Landscaping:

- Zone 1 will be composed of hardscaping, either concrete, gravel, rock, or pavers surrounding the perimeter of each structure.
- Each plant shall be properly irrigated and maintained and may include species such as sedges, agaves, jade plants, and succulents.
- Plants are limited to a maximum of 12 inches in height with a spread of not more than 1 foot.

- All plants listed in Appendix A shall be prohibited in this zone.
- Limited fire-resistant plantings may be permitted within the zone, these plantings must be approved by the RCFD (the FAHJ).
- Approved plantings in Zone 1 must not be located underneath widows and other exterior wall openings.

Required Maintenance:

- The property identified as a part of this FPP shall be maintained year-round by the property owner, or any subsequent owner(s) as required by this FPP or the FAHJ.
- Firewood and combustible materials such as flammable mulch, shall not be allowed within the zone.
- Any low-growing plant material in Zone 1 must be trimmed to 6' to 12" in height.

6.2 Fuel Treatment Zone 2 – Owner Maintained (*Shown as Green on the Fuel Treatment Map)*

Defined:

Zone 2, the Intermediate Zone, is commonly called the defensible space zone for fire suppression forces and protects structures from radiant and convective heat. Zone 2 consists of the area from 5'-50' from the exterior wall surface extending out in a horizontal plane. Within the zone, flammable native vegetation shall be removed and replanted with drought tolerant, fire resistive, irrigated, plantings as approved by the Riverside County FD. (see Appendix A). Firewood shall not be stacked under tree canopy and stored at least 10 feet from property lines.

Zone 2 fuel treatments are measured from the exterior walls of the structure or from the most distal point of a combustible projection, an attached accessory structure, or an accessory structure within 10 feet of a habitable structure. It provides the best protection against the high radiant heat produced by a wildfire and a generally cleared area in which fire suppression forces can operate during wildfire events.

Required Landscaping:

- Landscaping shall be primarily consisting of fire resistant, maintained native or ornamental plantings usually less than 18inches in height.
- The height of plants shall not be taller than 6" adjacent to Zone 1 to a maximum of 18" at the intersection of Zone 3.
- This zone may contain occasional single well-spaced ornamental shrubs up to 48 inches in height, intermixed with ground covers
- Non-flammable concrete patios, driveways, swimming pools, walkways, boulders, rock, and gravel can be used to break up fuel continuity within Zone 2.
- Shrubs and groundcovers may be located no closer than 5 feet from the structure provided these plants will not carry fire to the structure. Newly planted trees shall not exceed 30' in height and should not include any pyrophytes that are high in oils and resins. Planted trees must be approved by the FAHJ.
- Newly planted materials in this Zone need to be fire resistant, tree such as pines, eucalyptus, cedar, cypress, or juniper species are highly flammable and are not recommended. Thick, succulent, or leathery leaf species with high moisture content are the most "fire resistant".

- Existing Jeffrey and Ponderosa pine trees must be maintained according to Zone 2 standards. Refer to APPENDIX 'A' for prohibited plants for plant selection.
- All newly planted trees must be sited so that when they reach maturity the tips of their branches are at least 10 feet away from any structure, 20 feet from the crown of an adjacent tree, and must have a minimum of 6 feet of vertical separation from low growing irrigated vegetation beneath the canopy of the tree.

Required Maintenance:

- All newly planted trees must be sited so that when they reach maturity the tips of their branches are at least 10 feet away from any structure.
- The crowns of planted trees shall be maintained with a minimum of 20 feet from the crown of an adjacent tree.
- Shrubs and trees are to be maintained free of dead material.
- Trees will be maintained so that their crown cover will be more than ten (10) feet from any structure.
- Tree crowns will be maintained to keep a separation of 6 feet between the ground fuels (shrubs and groundcovers) and the lower limbs.
- Any trees within Zone 2 shall be pruned of dead wood, grass understory weed-whipped, and leaf drop removed to prevent large accumulations of dead material under the trees. Any newly planted trees should be irrigated until established.
- All trees must be maintained to the current ANSI A300 standards [Tree, Shrub, and Other Woody Plant Maintenance —Standard Practices (Pruning)] (www.treecareindustry.org/public/gov_standards_a300.htm).

6.3 Fuel Treatment Zone 3A – Owner Maintained (*Shown as Blue on the Fuel Treatment Map)*

Defined:

Zone 3A, the Extended Zone, is the area beyond Zone 2, from 50'-100' in a horizontal plane. All highly combustible native vegetation is excluded within the zone. Zone 3A may be partially, or non-irrigated, depending upon the plant species selected for planting. Irrigation shall not be required for natural slopes when there is a danger of slope failure. The goal within Zone 3A is the reduction or selective clearing of existing native vegetation and dense chaparral by 50% and the planting and maintenance of only approved species.

Required Landscaping:

- Plantings shall be from plant palette allowed by the FAHJ following approval of the Landscape Plan. Irrigation will maintain high moisture content in the tree and shrub plantings.
- Existing trees that are to be retained that have well established root systems do not need to be irrigated. Newly planted trees may have irrigation discontinued once root growth is sufficient to continue tree growth and health.
- Allowances for the needs of protected species and habitats will be considered in this zone.
- No combustible construction or materials are allowed in Zone 3A.

Required Maintenance:

- Selective clearing of exotic and flammable native plants (see Riverside County prohibited plant list in APPENDIX 'A') shall be required resulting 50 percent reduction in fuel load such as dead limbs, twigs, fallen branches and accumulations of leaves and pine needles.

- Trees shall be limbed 6-feet off the ground.
- Plants and brush shall be limbed up off the ground, so that the lowest branches are 1/3 of their height.
- Removal of all dead, woody debris, and exotic flammable vegetation.
- Existing trees shall be pruned 10-feet away from roof, eave or building exterior siding.
- All tree branches shall be removed from within 10-feet of a fireplace chimney or outdoor barbeque.
- Low growing plants and shrubs will be maintained to a height of 18" or less. This action is necessary to make sure that any wildland fire pushed by high winds toward The Project through any trees and shrubs in Zone 3A will unlikely become a crown fire. The removal of understory vegetation will reduce the potential for a ground fire to move from the ground to the shrubs into the tops of trees like a ladder, which will also reduce fire intensity and ember production.
- Maintenance will be ongoing throughout the year as needed. Native annual and perennial grasses will be allowed to grow and produce seeds during the winter and spring. As grass begins to cure (dry out), they will be cut to 4 inches or less in height.

6.4 Fuel Treatment Zone 3B – Bio-retention Basin - Owner Maintained *(Shown as Brown on the Fuel Treatment Map)*

Defined:

A bio-retention basin, designated as Zone 3B, is located on the southeastern corner of the property, west of the planned solar farm and planter areas. This area, as part of the Water Quality Management Plan, has been designed to reduce storm water and soil runoff from the site. The basin will be planted with native plants materials and maintained to the required maintenance and landscaping standards listed for Zone 3A. Within Zone 3B will be thinning zones beginning at the edge of Zone 2 and including all natural and manufactured slopes. The specified intent is to achieve and maintain an overall 50% reduction in the canopy and removal of 100% of the dead and dying plant material following the growth cycle of the vegetation. Removal of prohibited and invasive species is permitted. The Project owner(s) is responsible for the maintenance of the area to Zone 3B standards as needed.

Required Landscaping:

All exotic and flammable native plants shall be removed. The area may be replanted with low growing (maximum 12 inches in height) and low fuel volume ground cover vegetation or native grasses. (see APPENDIX 'A').

Required Maintenance:

- Non-native species will be removed resulting in a 100% removal of the dead and down material.
- Surface vegetation shall not exceed 8 inches in height. Low growing plants and shrubs will be maintained to a height of 18" or less.
- Maintenance will be ongoing throughout the year as needed. Native annual and perennial grasses will be allowed to grow and produce seeds during the winter and spring. As grass begins to cure (dry out), they will be cut to 4 inches or less in height.

6.5 Access Road Fuel Treatment Zone - Owner Maintained *(Shown as Yellow on the Fuel Treatment Map)*

Required Maintenance:

Twenty feet along each side of all access roads shall be cleared or maintained to Zone 2 standards by the facility owner as outlined in Section 6.2. Fuel treatments include the southern boundary along Apple Canyon Rd. and all other access roads within The Project site. Any trees planted along any access road will require a vertical clearance of 13 feet 6 inches.

6.6 Planned USFS Fuel Treatment Zone - Owner Maintained *(Shown as*  *on the Fuel Treatment Map)*

Currently, onsite defensible space along the eastern boundary does not provide for 100-feet of defensible space. The owner of The Project has provided funding for 100-feet of off-site fuel treatments on US Forest Service land, negotiations with the Forest Service have been completed and The Project has been approved and recently completed. Forest Service personnel or private contract workers may be hired to complete the fuel treatments. One hundred feet of defensible space on Forest Service property will be maintained by the owner(s), the first 50-feet will be disked or otherwise removed annually or as needed. The remaining 50-feet will be maintained to Zone 3 standards.

**6.7 Hurkey Creek Setback Zone– Non-treatable Zone (*Shown as* 

on the Fuel Treatment Map)** A 50-foot setback area from the jurisdictional boundary of Hurkey Creek regulated by State and Federal agencies such as the US Fish and Wildlife Service and California State Fish and Wildlife agencies. No building or fuel treatments will be constructed within the setback zone. Zone boundary markers will be placed along the outside perimeter of the Jurisdictional Boundary to reduce the possibility of fuel treatments encroaching the 50-foot setback boundary. (See Appendix "E" and Section 6.8 for further information on Zone Markers)

6.8 Hurkey Creek Setback – Limited Treatment Area (*Shown* as  ***on the Fuel Treatment Map*)** A 50-foot setback area from the jurisdictional boundary of Hurkey Creek. Fuel treatments will be limited to the removal of dead and dying material, the limbing of trees, removal of exotic vegetation and trash from the area. No mechanical activity will be allowed providing for limited impact on the land and vegetation.

6.9 Zone Markers

The exterior boundary of Fuel Treatment Zone 3A shall be marked on the ground for the purpose of guiding annual fuel treatment maintenance and inspection. The most reliable markers are steel fence posts with a baked on painted finish. The upper half of the above ground portion of the fence post is then painted a bright "day glow" orange to improve visibility (see Appendix E). These Fuel Treatment Zone markers must be spaced so that the markers on each side of an installed marker can be seen from the next marker.

6.10 Shelter-in-Place (SIP) Location – (Shown as Lite blue on the Fuel Treatment Map)

Shetlering in Place of guests, employees and visitors has been considered as an alternative to evacuation or relocation, which are the preferred methods for life safety. SIP provides an option to evacuating all visitors and employees of The Project in the event that the single egress off of Highway 74 has been compromised due to an approaching wildfire. The designated SIP is located within the Guest Cabin

area will contain 13,375 square feet, more than sufficient for the expected maximum number of guests and employees to the site. Access to the SIP location will be well marked, lighted pathways and constructed for limited acceessibility guests and employees. Appendix G has been added which fully explains the procedures to be followed in the event that SIP has been advised by Riverside County Fire Officials or other government officials.

7.0 Construction Requirements

All structures within The Project shall meet all wildland/interface standards to the satisfaction of the RCFD and be designed and constructed to meet current ignition resistant construction standards. All construction and ignition resistant requirements shall meet the 2022 California Fire Code, the 2022 California Building Codes, in particular Chapter 7A-California Building Code; and all current codes in force at the time of permit application. For a summary of the current construction requirements as of the date of this report, see APPENDIX 'D'. The fire protection features described herein shall be maintained to equivilent or greater ignition resistance.

The proposed tent material is "Sunforger", a canvas tent material manufactured by MFH Industries. Sunforger or any other proposed tent material, shall meet California State Fire Marshal fire retardant specifications. (see Appendix "J" for current certification letter).

All non-habitable accessory structures such as bleachers, decks, balconies, patio covers, gazebos and fences shall be built from non-combustible materials. The owners are not restricted from having concrete patios, concrete, gravel or brick walkways within Fuel Treatment Zones 1 and 2. Refer to APPENDIX 'C' for photos and descriptions of non-combustible decks, patio covers, and railings for these non-habitable accessory structures.

Construction or building permits shall not be issued until the fire code official inspects and approves required fire apparatus access, setbacks and water supply for the construction site. Prior to the delivery of combustible building construction materials to The Project site the following conditions shall be completed to the satisifaction of the RCFD:

- Water and power utilities shall be approved by the appropriate inspecting department or agency.
- Approved Zone 2 fuel treatment shall be provided prior to combustible material arriving on the site and shall be maintained throughout the duration of construction. Zones 1 shall be cleared of all vegetation prior to construction and subsequently planted to the requirements stated in Sections 6.1 after construction is completed.

7.1 Additional Construction Requirements

In the event of a wildfire in the adjacent wildlands the structures in The Project will be showered with embers. To mitigate this hazard the following additional construction requirements shall be implemented on all buildings.

1. All new construction will be fully sprinklered to improve fire resistance and safety.
2. Fire sprinklers shall be installed in all covered walkways between buildings.
3. Road maintenance on the private access road off of Apple Valley Rd. within the site will become the responsibility of the facility owner. Improvements to the access road will include:

- Widening
- Grading
- Construction of turnouts
- Construction of an additional access route to Apple Valley Rd.
- Installation of an all-weather, standard road base capable of suporting a 75,000 pound load.

4. An improved domestic and firefighting water storage system will be developed to NFPA, State and Riverside County requirements, including the construction of a private water storage system with an emergency power supply. The standby generator will supply power to the onsite well and pressure booster pump to provide a continuous water supply for firefighting useage in the event of a SCE power shutoff.
5. All sprinklered buildings will have a separate Fire Department Connection (FDC) that is located in clear view and labled to indicate the correct building that each FDC supplies. Signs marking the FDCs shall comply with RCFD specifications including color and size.

7.2 Use of Wood and Flame Retardants. Regarding the use of wood products on the exterior of the structures or trellises within Fuel Modification Zones 1 or 2, some wood species naturally meet the criteria for fire-resistive construction due to their density, chemical makeup, etc. For a species of wood to classify as being fire resistive, it needs to have a flame spread rating of class A or less than 25 as determined by the ASTM E-84 testing method. Any product that scores 0 is noncombustible as brick, fiber-cement exterior materials, inorganic reinforced cement board, and certain plywood that have been fire treated. Such wood products tend to char but do not contribute to combustion and flame spread. A few examples of natural wood species that fall into this classification are Brazilian Walnut/IPE and Azobe/Bongossi.

Firewise2000 does not recommend the treatment of exterior wood products with flame retardant materials for exterior exposures. These materials required reapplication every 3-5 years as they degrade over time. It is not possible to know if the products were properly applied as they typically are clear and therefore invisible. According to the National Institute of Environmental Health Sciences, some flame-retardant paints tend not to break down in the environment for years and can also bioaccumulate or build up in people and animals over time.

8.0 Infrastructure

8.1 Water Supply

The Project area is not served by a municiple water district and the water system will be a fully private system. The current water system includes an existing well, pump house and a small 5,000 gallon plastic water tank located in the floodplain. The water tank will be relocated during construction of The Ridge and the pumphouse will be modified to provide greater flood protection. A new well, storage tanks, pressure pump and 8-inch water main will be constructed providing a domestic water supply and water for firefighting purposes. The existing system will also provide water in emergency situations for fire suppression needs.

A new well will be located along the south side of Apple Canyon Road which will provide water for domestic use and firefighting purposes. A new steel water tank meeting the requirements of the 2023

edition of NFPA 22, Standard for Water Tanks for Private Fire Protection will be installed along side of the new well. The tank will meet the design, construction, installation, inspection, testing and maintenance requirements of NFPA 22. Maintenance of the water system including the booster pump, alternative power supply and pressure tanks will be the responsibility of the owner(s) of The Project. The entire area surrounding the fire pump, emergency generator and propane tank will be located within fuel treatment zones to help protect the emergency standby resources from direct flame impingement and radiant heat.

The fire hydrants, water mains and required static water pressures shall be designed to comply with RCFD requirements. The private water system will include the following items that that have been engineered to meet the water delivery rate and storage requirements for the facility. The water delivery rate will be calculated using the NFPA 1142 Standard on Water Supplies for Suburban and Rural Firefighting:

- Two Wells,
- Three Water Storage Tanks,
- 8-inch Water Mains,
- Fire Hydrants
- Sprinkler Systems, (Note: all new construction will be equipped with fire sprinkler systems).
- Fire Department Sprinkler Connections
- Swimming Pool Water Fire Department Connection (FDC)
- Fire Pressure Pump
- Riverside County approved Signs for FDCs and Water Supply Locations.

The Project designers will work with the Riverside County Fire Marshal's office in determining the exact layout and components required to meet the water delivery needs of the facility. Based on the developer's construction plans and Riverside County Fire Marshal specifications, the water storage and delivery systems may be phased in as the buildings are constructed. The overall storage capacity for the facility is based on the calculated needs of the each building using the following factors:

1. Building construction type
2. Occupancy type
3. Volume required to suppress a fire in each building
4. Distance to the nearest exposure

According to NFPA 20, a Fire Pump with a backup power supply is required to be installed in the water system. The Fire Pump must be capable of providing 100% of the required flow rate. An automatic refill will be installed in the water delivery system to insure the water tank is kept full. The backup power supply will be owned and maintained by the owners(s) of the Ridge or any subsequent owner.

The developer shall provide an approved permanent water supply, including fire hydrants and sprinkler system connections, capable of supplying the required water delivery rate for fire protection prior to any combustible material placed on the site or the commencement of construction. For increased water supply, the swimming pool will have a 2-½" direct line to the pool for drafting water by firefighting resources.

8.2 Access Roads/Driveways and Gates

Access to The Project facility will be from State Highway 74 to Apple Valley Road. Entrance to The Project site will be off of Apple Valley Rd. onto a private access road. Two separate entrance/egress routes will be provided to improve access and reduce delays should emergency egress be required. The circular fire access road shall extend within 150-feet of all portions of the facility and all portions of the exterior walls of all buildings by an approved route around the exterior of the facility. (See Appendix 'G')

The Project facility will be a non-gated facility. However, should gates be installed in the future, the gate(s) shall meet RCFD Codes and Standards and shall be approved by the RCFD prior to fabrication and installation. A Knox override key switch, or similar device, must be installed outside each gate in an approved, readily visible, and unobstructed location at or near the gate to provide emergency access. The entrance gate(s) will also have an "Opticom" or similar strobe light to automatically open the gate(s). All gates will be constructed to allow free egress with electronic "sensor strips" in the roadbeds. A battery backup shall be provided for all gates within the facility to allow for egress in case of power being shut-off to the facility.

All roads within the property shall be termed "Fire Access Roads" within this document.

- All fire access roads shall meet the requirements of the RCFD, and shall be constructed as an all weather surface.
- All access roads shall be capable of supporting loads of 75,000 lbs gross vehicle weight and shall have an unobstructed width of not less than 24 feet.
- A minimum verticle clearance of 13'6" will be required along all access roads.
- Access to all portions of the buildings must be within 150 feet of the available fire deparment access.

9.0 Owner Education and Requirements

A copy of this Fire Protection Plan will be provided to the owner following certification by the Riverside County Fire Marshal. In all subsequent sales of the property, the new property owner(s) shall be provided with a copy of this FPP by the escrow company to insure continued compliance with all Fuel Treatment maintenance and construction requirements.

The owner shall be aware of the herein described fire protection measures, the types of non-combustible construction, and the plant materials that are allowed within the facility's boundaries. Of particular importance are APPENDICES 'A', 'C', and 'D' of this plan which provides guidance in the types of plants that are allowed to be established in landscaped areas and appropriate construction within Fuel Treatment Zones. Plant selection is critical as embers often travel over a mile during Santa Ana wind events. In addition, firewood and similar combustible materials shall not be stored within 30-feet of any structure.

Ready, Set, Go:

Ready, Set, Go is the evacuation strategy proposed for this project as described on the Cal Fire website. Should a wildfire exist that threatens the property or safety of people at the site, the following actions shall be implemented:

1. Ready – Preparing for the Fire Threat: *Take personal responsibility and prepare long before the threat of a wildfire so the structures are ready in case of a fire. Maintain a defensible space by clearing brush away from all structures. Use fire-resistant landscaping and harden structures with fire-safe construction measures. Assemble emergency supplies and belongings in a safe spot. Make sure all individuals within the area are 'on the same page' in commitment to advance preparation. Plan escape routes and have them posted at all structures and throughout the facility. Designated the primary evacuation route and post permanent signs in locations for public visibility.*

2. Set – Situational Awareness When a Fire Starts: *Pack vehicle(s) with emergency items. Stay aware of the latest news from local media and the local fire department for updated information on the fire and perform the following:*

- ✓ *Close all windows and doors that lead outside to prevent sparks from entering the structures.*
- ✓ *Close all doors within all structures in case a structure does catch on fire; this will slow down the spread of the fire from room to room.*
- ✓ *Move all combustible materials in the structure away from windows to prevent the possibility of heat from a fire radiating through windows and glass doors and catching flammable materials inside the home on fire. This includes drapes, curtains and furniture.*
- ✓ *Close windows and all noncombustible window coverings.*
- ✓ *Turn on the lights in each room, porch, and yard. This aids in visibility when the smoke gets thick and darkens the sky.*
- ✓ *Shut off any gas valves within the house or outside.*

3. Go – Leave early! *Following an Action Plan makes one prepared and firefighters are now able to best maneuver the wildfire and ensure everyone's safety. Follow instructions given by the Fire Department official on site.*

10.0 Evacuation/Shelter-in-Place Considerations

Access to The Project Facility will be made by only a single road, Apple Valley Road off of Highway 74. Based on the potential for a wildland fire to impact the area and with only the two egress routes on Highway 74, (north and south only), a contingency plan for the possible impacts to the egress route has led to the development of a Shelter-in-Place (SIP) plan. Shelter-in-Place is the "use of a structure or area to temporarily separate individuals from a hazard or threat". The plan would only be activated in the case of extreme fire activity impacting the egress routes and at the direction of the local authorities or Incident Commander. The decision by the local Incident Commander to SIP rather than immediately evacuate the site would be based on the nature of the emergency, impacts to the evacuation using Hwy. 74 and the time needed to safely evacuate all visitors and employees during emergency conditions.

The primary goal during any emergecny would be to evacuate the site which is the "movement of as few people as needed the shortest distance safely. Evacuation, therefore would be the primary safety plan for the facility, SIP would be a secondary option only used in critical situations. Recognizing that

the greatest impacts to The Project Facility would be from an approaching wildland fire, options for sheltering in place include remaining inside structures and evacuating the structures to a pre-determined location(s) within the site until the arrival of emergency workers.

Shelter-in-Place would be accomplished by sheltering visitors and employees in the pre-designated sheltering area which will be located in the central portion of the site, southwest of the Wellness Cabins and west of the Guest Cabins Zone "C". The SIP location will provide over 13,375 square feet, more than sufficient for the maximum anticipated 120 people on site at any given time. The SIP location will be surrounded by well maintained fuel modification zones as described in Section 6.0 and provide a significant barrier to any approaching fire and increase the safety and viability of any evacuated people. (See Appendix 'H' for location of SIP).

When all of the construction has been completed, the Guest Cabin "A" building could be utilized for in-door sheltering of visitors and employees. The Guest Cabin "A" building will be surrounded with limited flammable vegetation access roads and fuel treatments on all four sides.

10.1 Specific Mitigation for Single Egress From The Ridge

The Project facility provides unique safety characteristics due to the nature of the facility's design and location in a fire prone area. Native, flammable vegetation will be removed from a portion of the 36 acres of the site in creating the proposed wellness center. The remaining area will have native vegetation that is maintained to the standards listed in this FPP. A privately owned and maintained water supply and storage system with it's own backup power supply capable of providing water to firefighting resources will improve the overall fire safety in the area. The backup power supply will also provide consistent power to emergency lighting and other essential electrical circuits. For emergency purposes, the swimming pool will be designed with a fire department connection where water from the pool may be used to fill fire apparatus.

Limited native wildland fuels will remain on site following the treatment of fuels according to the FPP. Native pine trees will be limbed and provide improved clearance for structures on the site. On the east boundary, a 100-foot off-site fuel treatment zone maintained by The Project owner will provide increased safety to visitors and guests. A 50-foot setback from the Hurkey Creek jurisdictional boundary is required, fuel treatments along the boundary will improve the safety of visitors, employees and structures from an approaching west wind driven fire.

The creation of a SIP location which will consist of over 13,375 square feet of space of cleared space for sheltering both guests and employees will be developed withinthe site (See Appendix 'F'). The Safety Zone requirements from the National Wildfire Coordinating Group (NWCG) and the Incident Response Pocket Guide, PMS 461 produced by NWCG, indicate that the standard area per person required for each individual's safety is just over 50 square feet/person. Further requirements include a separation distance of at least 100 feet from structures and hazardous areas, the nearest structures will be built with fire safe materials and method further increasing the safety of individuals. Locating the SIP in the central area near the Guest Cabins will provide well in excess of the required separation distance and allow for the sheltering of more than the daily anticipated number of guests and employees.

The anticipated maximum number of guests and employees is based on two factors; 60 parking spaces and 36 guest rooms and 6 tent quarters. Sixty parking spaces with an occupancy of two persons per vehicle would provide 120 total people. 36 guest and employee lodging space with an occupancy of two

people per room would provide for 72 people on site. Additional employees who commute to work would equal approximately 100 people on site daily. For purposes of calculating safe sheltering space and providing for an unusual number of people on site, an occupancy of 150 people was used to calculate the required safe sheltering space. The 13.375 square feet of sheltering space would provide sheltering for over 260 people, well in excess of the space required for the highest possible number of people using the facility.

11.0 Mandated Requirements for the Owner(s) of The Ridge

The Owner(s):

1. shall be responsible for all required fuel treatment and fire protection measures mentioned in this Fire Protection Plan.
2. shall coordinate the annual fuel treatment on Forest Service land with the San Jacinto Ranger District, District Ranger.
3. is responsible for on-going maintenance which will be performed on an as needed basis. If maintenance is not performed in a manner consistent with this Fire Protection Plan, the Riverside County Fire Department shall have the right to abate any treatment zone they deem a threat to the facility or adjoining properties. In doing so, all costs incurred will be billed to the facility owner.
4. shall develop Shelter-in-Place plans and require semi-annual training for all employees in the activation and employment of the plan. The SIP shall be approved by the fire department prior to occupancy.
5. will only activate the Shelter-in-Place Plan upon the direction of appropriate government officials when the egress is impeded by an approaching wildfire. The SIP plan will be displayed in each building in conspicuous locations for employees. Employees shall be trained at least two time a year on the SIP. Should the SIP be implemented, notification of guests and employees shall be made either face-to-face or by means of the public address system.
6. shall refrain from burning in fireplaces, outdoor fire rings or other locations during "Red Flag Warning/Watch" fire weather conditions.
7. shall locate all Liquefied Petroleum (LP) Gas tanks a minimum of 10-feet from all buildings, exterior ignition sources and property lines.
8. shall locate all LP tanks a minimum of 6-feet from all overhead wires.
9. shall provide a 10-feet clearance around all LP tanks to include the removal of all combustibles, weeds, grass and brush.

12.0 Fuel Treatment Map

The Project Fuel Treatment Map (See Appendix 'F'), depicting the location of all proposed fuel treatments, as well as fire access roads, fuel treatment zone boundaries and proposed locations for fire hydrants or similar connections.

APPENDIX ‘A’

Prohibited Plant List

APPENDIX 'A'
Prohibited (& Fire Prone) Plant Species List
For Fuel Modification Zones in High & Very High Hazard Areas

The following species are highly flammable and are more susceptible to burning, due to rough or peeling bark, production of large amounts of litter, vegetation that contains oils, resin, wax, or pitch, large amounts of dead material in the plant, or plantings with a high dead to live fuel ratio.

Botanical Name	Common Name	Plant Form
Acacia species	Acacia	Shrub/Tree
Adenostema fasciculatum	Chamise	Shrub
Adenostema sparsifolium	Red Shank	Shrub/Tree
Artemisia californica	California Sagebrush	Shrub
Anthemis cotula	Mayweed	Weed
Arundo donax	Giant reed	Grass/weed
Bambusa species	Bamboo	Shrub
Brassica nigra	Black Mustard	Weed
Brassica ropa	Yellow Mustard	Weed
Cedrus species	Cedar	Tree
Cirsim vugare	Wild Artichoke	Weed
Conyza canadensis	Horseweed	Weed
Cortaderia selloana	Pampas Grass	Tall Grass
Cupressus species	Cypress	Tree
Cytisus species	Broom	Shrub
Eriogonum fasciculatum	Common Buckwheat	Shrub
Eucalyptus species	Eucalyptus	Shrub/Tree
Gensita species	Broom	Shrub
Heterotheca grandiflora	Telegraph plant	Weed/shrub
Juniperus species	Junipers	Shrub
Lactuca serriola	Prickly lettuce	Weed
Nicotiana bigelevil	Indian tobacco	Shrub
Nicotiana glauca	Tree tobacco	Shrub
Palmae species	Palms	Tree
Pennisetum species	Fountain Grass	Ground cover
Picea species	Spruce	Tree
Pinus species	Pines	Tree
Rosmarinus species	Rosemary	Shrub
Retama monosperma	Broom	Shrub
Salvia species *	Sage	Shrub
Silybum marianum	Milk thistle	Weed
Spartium junceum	Spanish Broom	Shrub
Urtica urens	Burning nettle	Weed
Washingtonia species	Palms	Tree
* Except -Salvia columbariae (chia), Salvia sonomensis (Creeping Sage)		

APPENDIX ‘B’

Literature References

Literature References

1. *Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model,* General Technical Report RMRS-GTR-153. June 2005. Joe H. Scott, Robert E. Burgan, United States Department of Agriculture - Forest Service, Rocky Mountain Research Station, Missoula, Montana.

2. *BehavePlus: Fire Modeling System, version 5.0: Variables.* General Technical Report RMRS-GTR-213WWW Revised. September 2009. Patricia L. Andrews, United States Department of Agriculture - Forest Service, Rocky Mountain Research Station, Missoula, Montana.

3. *Behave Plus Fire Modeling System, Version 5.0.4,* General Technical Report RMRS-GRT-106WWW Revised. July 2008. Patricia L. Andrews, Collin D. Bevins, Robert Seli. United States Department of Agriculture - Forest Service, Rocky Mountain Research Station, Missoula, Montana.

4. California Code of Regulations Title 14 section 1280 and Title 24 Part 9

5. California Public Resources Code Sections 4201 through 4204

6. California Government Code, sections 51175 through 51189

7. 2022 California Fire Code, including appendices to Chapters 1 & 4 and Appendices B, F & H and Local Amendments

8. 2021 International Fire Code published by the International Code Council.

9. National Fire Protection Association - NFPA 13 Standard for the Installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes, 13-R &13-D, 2022 Editions

10. National Fire Protection Association - NFPA 1140 *Standard for Wildland Fire Protection, 2022*

11. National Fire Protection Association – NFPA 22 *Standard for Water Tanks for Private Fire Protection, 2023*

12. 2022 California Building Code- Chapter 7A- *Materials and Construction Methods for Exterior Fire Exposure.*

13. 2022 California Residential Code (CRC) R337

14. *The California State and Local Responsibility Area Fire Hazard Severity Zone Map – Fire and Resource Assessment Program of CAL FIRE*

15. Western Region Climate Center. *Historic Climate Data from Remote Automated Weather Stations.* RAWS USA Climate Archive. Reno, NV. Data for all Remote Automated Weather Stations is available at: http://www.raws.dri.edu/index.html

16. https://www.nwcg-gov/publications/pms437/fuels/surface-fuel-model-descriptions

APPENDIX ‘C’

Non-Combustible & Fire Resistant Building Materials

Appendix 'C'

Non-Combustible & Fire-Resistant Building Materials
For Balconies, Carports, Decks, Patio Covers and Floors

Note: The Office of the State Fire Marshal (SFM) Fire Engineering Division administers licensing programs and performs engineering functions affecting consumer services and product evaluation, approval and listing. The following link is to the State Fire Marshal's office for more information on the Building Material List for non-combustible and fire resistant building materials: https://osfm.fire.ca.gov/divisions/fire-engineering-and-investigations/building-materials-listing/bml-search-building-materials-listing.

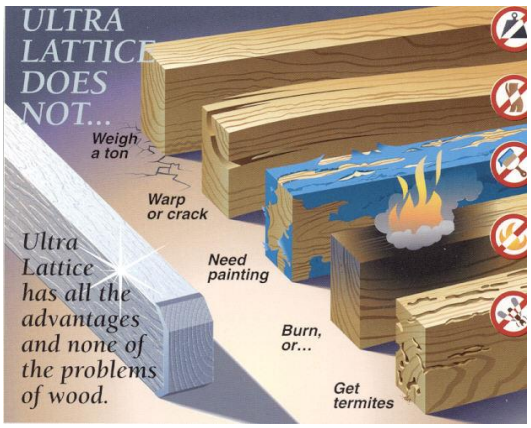
Examples of non-combustible & fire-resistant building materials for balconies, carports, decks, patio covers, and floors are listed below. These are only examples, and materials listed here must meet local fire and building codes and are not an endorsement of any particular brand or manufacturer.

I. NON-COMBUSTIBLE HEAVY GAGE ALUMINUM MATERIALS - *Metals USA Building Products Group - Ultra-Lattice*

Ultra-Lattice Stand Alone Patio Cover

Ultra-Lattice Attached Patio Cover

Ultra-Lattice Solid Patio Cover



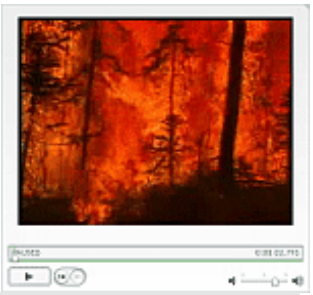
Ultra-Lattice Vs. Wood

II. FRX EXTERIOR FIRE-RETARDANT TREATED WOOD

FRX® fire retardant treated wood may be used in exterior applications permitted by the codes where: public safety is critical, other materials would transfer heat or allow fires to spread, sprinkler systems cannot easily be installed, corrosive atmospheres necessitate excessive maintenance of other materials, or fire protection is inadequate or not readily available. The International Building, Residential and Urban-Wildland Interface Codes and regulations, permit the use of fire-retardant treated wood in specific instances. See below for typical exterior uses and typical residential uses.

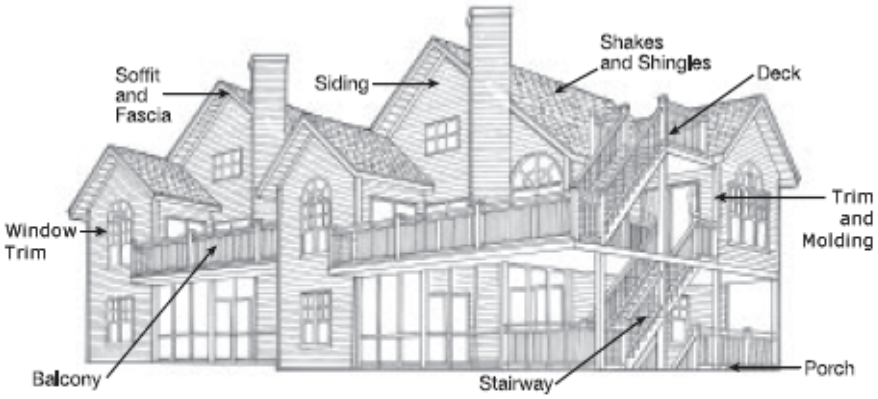
Typical Exterior Uses

- Wall coverings
- Balconies
- Decks
- Stairways
- Fences
- Sheds
- Gazebos
- Roof coverings
- Open-air roof systems
- Canopies and awnings
- Storefronts and facades
- Eaves, soffits and fascia
- Agricultural buildings and horse stalls
- Scaffolding and scaffold planks
- Construction staging
- Various other residential and commercial uses



Property owners and Architects: See this 2-minute video and the illustration below.

Typical Residential Uses



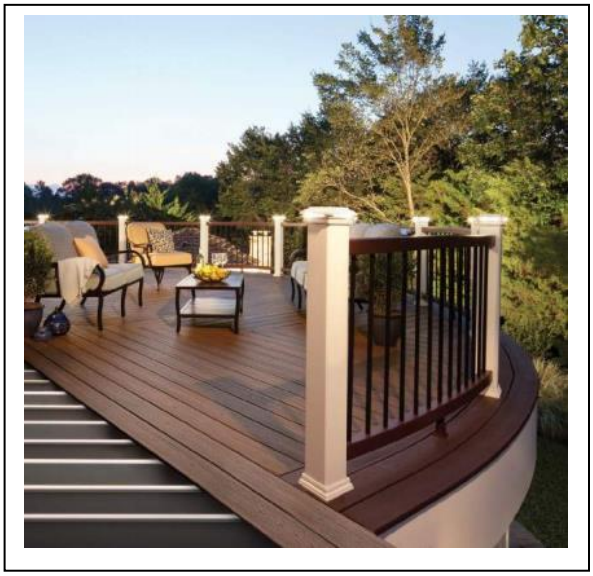
Rising concerns over fire damage and the adoption of urban-wildland interface codes have increased the use of FRT wood in residential structures.

For information on fire retardant treated wood for exterior uses, visit www.frxwood.com.

III. DECKING MATERIALS

Trex Company, Inc. – "Trex Transcend®, Trex Select® and Trex Enhance® wood and polyethylene composite deck board, nominal ranging in size from 1" x 5-1/2" to 1-3/8" x 5-1/2" installed per manufacturer maximum edge-to-edge gap of 3/16". All Trex decking products meet or exceed the SFM 12-7A-4A testing protocol.

Trex combines both beauty and fire defense. A few examples of installations are shown below:



IV.

SOLID "WOOD" DECKING

Company Name: Various Manufacturers
Product Description: Solid "Wood" decking, when installed over minimum 2" x 6" solid "Douglas Fire" or better joists, space 24" or less on center, and decking and joints comply with American Softwood Lumber Standard PS2o as follows:

Minimum nominal 5/4"thick and nominal 6" wide decking boards with a maximum 3/8" radius edges made of solid wood species "Redwood", "Western Red Cedar", "Incense Cedar", "Port Orford Cedar", or "Alaska Yellow Cedar" having a Class B Flame Spread rating when tested in accordance with ASTM E84. Lumber grades; construction common, commercial or better grade for Redwood; 3 common, commercial or better grades for Cedars.

V. Vents

Examples of Ember Resistant Approved Vents

Brandguard

O'Hagin Fire & Ice® Line – Flame and Ember Resistant
An available option for all O'Hagin attic ventilation products, this attic vent not only features all the same design, construction elements and color choices as the O'Hagin Standard Line, but also features an interior stainless-steel matrix that resists the intrusion of flames and embers. This patent-pending attic vent is accepted for use by many local fire officials for installation in Wildland Urban Interface (WUI) zones.

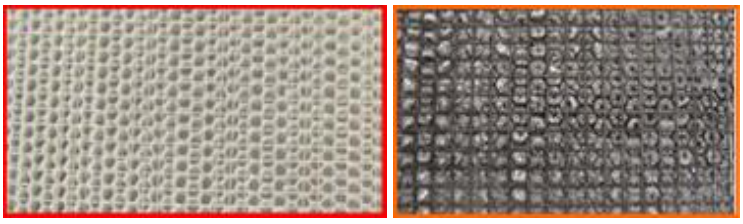
Vulcan Vents

The founders of Gunter Manufacturing have been working closely over the last two years, with the scientists and inventors of Vulcan Technologies to bring to market this incredible product.

Combining our quality vent products with the fire-stopping honeycomb matrix core designed by Vulcan has produced unique and remarkable results.

Gunter manufacturing has over 50 years of combined sheet metal manufacturing experience. Special orders are not a problem. Their vent frames are industry standard frames so there is little or no learning curve for installers and contractors. Their stated goal is to provide people with the vents they need to secure their homes with additional safety against wildfires and give them piece of mind from knowing that their home or structure is protected by a product that works!

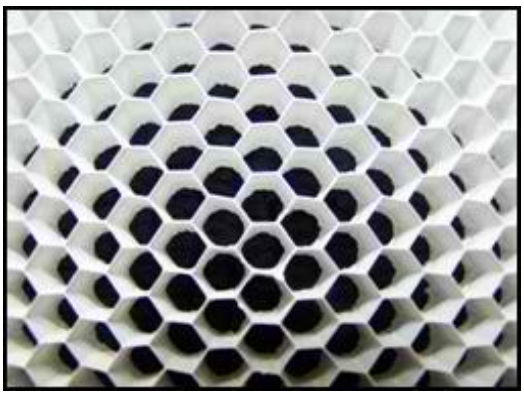
The core of their fire and ember safe vents are manufactured out of hi-grade aluminum honeycomb and coated with an intumescent coating made by FireFree Coatings. The intumescent coating is designed to quickly swell up and close off when exposed to high heat. The expanded material acts as an insulator to heat, fire, and embers



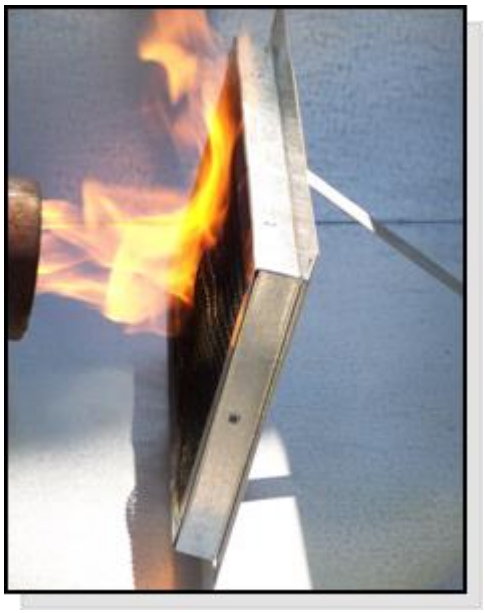
Before **After**

After the cells close off, they are extremely well insulated, and fire or embers cannot penetrate.

Even before the cells close off, the vent is designed to protect against flying embers. In many cases embers will attack a structure before fire ever comes near, so this feature is very important.



Close-up of the coated honeycomb matrix.



Fire easily passes through a standard vent, on the left, but stops cold when it comes up against a Vulcan Vent shown on right.

APPENDIX ‘D’

Ignition Resistant Construction Requirements

APPENDIX 'D'

Ignition Resistant Construction Requirements

The following is a summary of the current requirements for ignition resistant construction for high fire hazard areas under Chapter 7A of the California Building Code (CBC) 2019 edition. However the requirements listed below are not all inclusive and all exterior building construction including roofs, eaves, exterior walls, doors, windows, decks, and other attachments must meet the current CBC Chapter 7A ignition resistance requirements, the California Fire Code, and any additional County and/or City codes in effect at the time of building permit application. See the currrent applicable codes for a detailed description of these requirements and any exceptions.

1. All structures will be built with a Class A Roof Assembly and shall comply with the requirements of Chapter 7A and Chapter 15 of the California Fire Code. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions.

2. Roof valley flashings shall be not less than 0.019-inch (0.48 mm) No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72-pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909, at least 36-inch-wide (914 mm) running the full length of the valley.

3. Attic or foundation ventilation louvers or ventilation openings in vertical walls shall be covered with a minimum of 1/16-inch and shall not exceed 1/8-inch mesh corrosion-resistant metal screening or other approved material that offers equivalent protection.

4. Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to resist the intrusion of flames and embers, be fire stopped with approved materials or have one layer of a minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

5. Enclosed roof eaves and roof eave soffits with a horizontal underside, sloping rafter tails with an exterior covering applied to the under-side of the rafter tails, shall be protected by one of the following:
    - noncombustible material
    - Ignition-resistant material
    - One layer of $^{5}/_{8}$-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the rafter tails or soffit
    - The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the rafter tails or soffit including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
    - Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.

- Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.
  Exceptions: The following materials do not require protection:
  1. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails.
  2. Fascia and other architectural trim boards.

6. The exposed roof deck on the underside of unenclosed roof eaves shall consist of one of the following:
   - Noncombustible material, or
   - Ignition-resistant material, or
   - One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside exterior of the roof deck, or
   - The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the roof deck designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association fire Resistance Design Manual.
     Exceptions: The following materials do not require protection:
     1. Solid wood rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm).
     2. Solid wood blocking installed between rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm).
     3. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails.
     4. Fascia and other architectural trim boards.

7. Vents - ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation openings shall be fully covered with metal wire mesh, vents, other materials or other devices that meet one of the following requirements:
   A. Vents listed to ASTM E2886 and complying with all the following:
      i. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
      ii. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
      iii. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).
   B. Vents shall comply with all of the following:
      i. The dimensions of the openings therein shall be a minimum of $^{1}/_{16}$-inch (1.6 mm) and shall not exceed $^{1}/_{8}$-inch (3.2 mm).
      ii. The materials used shall be noncombustible.
      Exception: Vents located under the roof covering, along The Project of roofs, with the exposed surface of the vent covered by noncombustible wire mesh, may be of combustible materials.
      iii. The materials used shall be corrosion resistant.

8. Vents shall not be installed on the underside of eaves and cornices.
   Exceptions:
   1. Vents listed to ASTM E2886 and complying with all the following:
      - There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
      - There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
      - The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).
   2. The enforcing agency shall be permitted to accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.
   3. Vents complying with the requirements of Section 706A.2 shall be permitted to be installed on the underside of eaves and cornices in accordance with either one of the following conditions:
      3.1. The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or,
      3.2. The exterior wall covering, and exposed underside of the eave are of noncombustible materials, or ignition-resistant materials, as determined in accordance with SFM Standard 12-7A-5 Ignition-Resistant Material and the requirements

9. All chimney, flue or stovepipe openings that will burn solid wood will have an approved spark arrester. An approved spark arrester is defined as a device constructed of nonflammable materials, having a heat and corrosion resistance equivalent to 12-gauge wire, 19-game galvanized steel or 24-gage stainless steel. or other material found satisfactory by the Fire Protection District, having ½-inch perforations for arresting burning carbon or sparks nor block spheres having a diameter less than 3/8 inch (9.55 mm). It shall be installed to be visible for the purposes of inspection and maintenance and removeable to allow for cleaning of the chimney flue.

10. All residential structures will have automatic interior fire sprinklers installed according to the National Fire Protection Association (NFPA) 13D 2019 edition - *Standard for the Installation of Sprinkler Systems in One and Two-family Dwellings and Manufactured Homes*. Fire sprinklers are not required in unattached non-habitable structures greater than 50 feet from the residence.

11. The exterior wall covering, or wall assembly shall comply with one of the following requirements:
    - Noncombustible material, or
    - Ignition resistant material, or
    - Heavy timber exterior wall assembly, or
    - Log wall construction assembly, or
    - Wall assemblies that have been tested in accordance with the test procedures for a 10-minute direct flame contact expose test set forth in ASTM E2707 with the conditions of acceptance shown in Section 707A.3.1 of the California Building Code, or
    - Wall assemblies that meet the performance criteria in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in SFM Standard 12-7A-1.

Exception: Any of the following shall be deemed to meet the assembly performance criteria and intent of this section including;

- One layer of 5/8-inch Type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing, or
- The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure includes assemblies using the gypsum panel and sheathing products listed in the Gypsum Associate Fire Resistance Design Manual.

12. Exterior walls shall extend from the top of the foundation to the roof and terminate at 2-inch nominal solid blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure.

13. Gutters shall be provided with the means to prevent the accumulation of leaf litter and debris within the gutter that contribute to roof edge ignition.

14. No attic ventilation openings or ventilation louvers shall be permitted in soffits, in eave overhangs, between rafters at eaves, or in other overhanging areas.

15. All projections (exterior balconies, decks, patio covers, unenclosed roofs and floors, and similar architectural appendages and projections) or structures less than five feet from a building shall be of non-combustible material, one-hour fire resistive construction on the underside, heavy timber construction or pressure-treated exterior fire-retardant wood. When such appendages and projections are attached to exterior fire-resistive walls, they shall be constructed to maintain the same fire-resistant standards as the exterior walls of the structure.

16. Deck Surfaces shall be constructed with one of the following materials:
    - Material that complies with the performance requirements of Section 709A.4 when tested in accordance with both ASTM E2632 and ASTM E2726, or
    - Ignition-resistant material that complies with the performance requirements of 704A.3 when tested in accordance with ASTM E84 or UL 723, or
    - Material that complies with the performance requirements of both SFM Standard 12-7A-4 and SFM Standard 12-7A-5, or
    - Exterior fire retardant treated wood, or
    - Noncombustible material, or
    - Any material that complies with the performance requirements of SFM Standard 12-7A-4A when the attached exterior wall covering is also composed of noncombustible or ignition-resistant material.

17. Accessory structures attached to buildings with habitable spaces and projections shall be in accordance with the Building Code. When the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas and exterior wall construction in accordance with Chapter 7A of the Building Code.

18. Exterior windows, skylights and exterior glazed door assemblies shall comply with one of the following requirements:

- Be constructed of multiplane glazing with a minimum of one tempered pane meeting the requirements of Section 2406 Safety Glazing, or
- Be constructed of glass block units, or
- Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or
- Be tested to meet the performance requirements of SFM Standard 12-7A-2.

19. All eaves, fascia and soffits will be enclosed (boxed) with non-combustible materials. This shall apply to the entire perimeter of each structure. Eaves of heavy timber construction are not required to be enclosed as long as attic venting is not installed in the eaves. For the purposes of this section, heavy timber construction shall consist of a minimum of 4x6 rafter ties and 2x decking.

20. Detached accessory buildings that are less than 120 square feet in floor area and are located more than 30 feet but less than 50 feet from an applicable building shall be constructed of noncombustible materials or of ignition-resistant materials as described in Section 704A.2 of the California Building Code.
    Exception: Accessory structures less than 120 square feet in floor area located at least 30 feet from a building containing a habitable space.

21. All rain gutters, down spouts and gutter hardware shall be constructed from metal or other noncombustible material to prevent wildfire ignition along eave assemblies.

22. All side yard fence and gate assemblies (fences, gate and gate posts) when attached to the home shall be of non-combustable material. The first five feet of fences and other items attached to a structure shall be of non-combustible material.

23. Exterior garage doors shall resist the intrusion of embers from entering by preventing gaps between doors and door openings, at the bottom, sides and tops of doors, from exceeding 1/8 inch. Gaps between doors and door openings shall be controlled by one of the methods listed in this section.
    - Weather-stripping products made of materials that:
      (a) have been tested for tensile strength in accordance with ASTM D636 (Standard Test Method for Tensile Properties of Plastics) after exposure to ASTM G155 (Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials) for a period of 2,000 hours, where the maximum allowable difference in tensile strength values between exposed and non-exposed samples does not exceed 10%; and (b) exhibit a V-2 or better flammability rating when tested to UL 94, Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances.
    - Door overlaps onto jambs and headers.
    - Garage door jambs and headers covered with metal flashing.

24. Exterior doors shall comply with one of the following:
    1. The exterior surface or cladding shall be of noncombustible material or,
    2. The exterior surface or cladding shall be of ignition-resistant material or,
    3. The exterior door shall be constructed of solid core wood that complies with the following requirements:

3.1. Stiles and rails shall not be less than 1-3/8 inches thick.

3.2. Panels shall not be less than 1-1/4 inches thick, except for the exterior perimeter of the panel that shall be permitted to taper to a tongue not less than 3/8 inch thick.

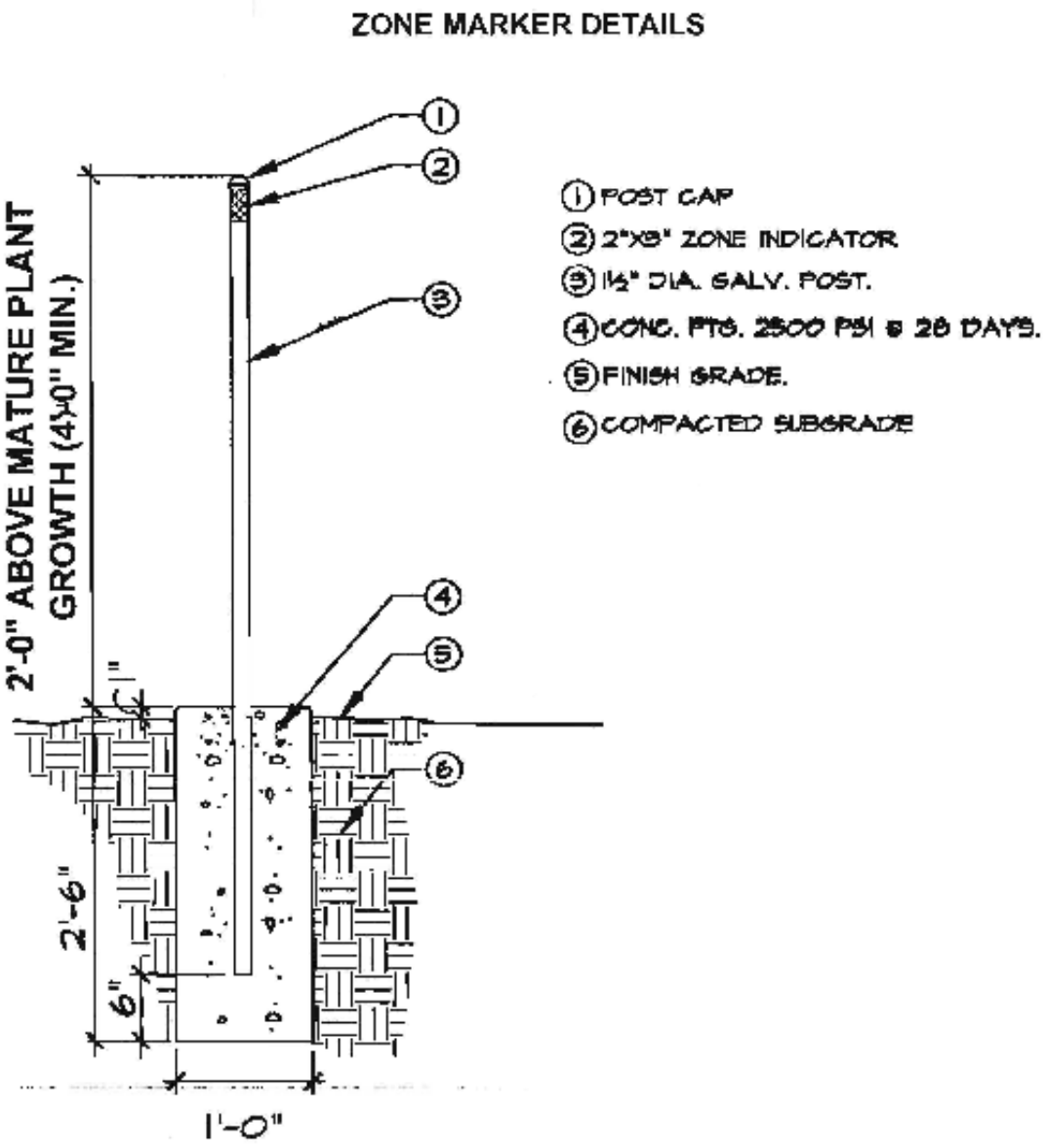
4. The exterior door assembly shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252 or,

5. The exterior surface or cladding shall be tested to meet the performance requirements of Section 707A.3.1 when tested in accordance with ASTM E2707 or,

6. The exterior surface or cladding shall be tested to meet the performance requirements of SFM Standard 12-7A-1.

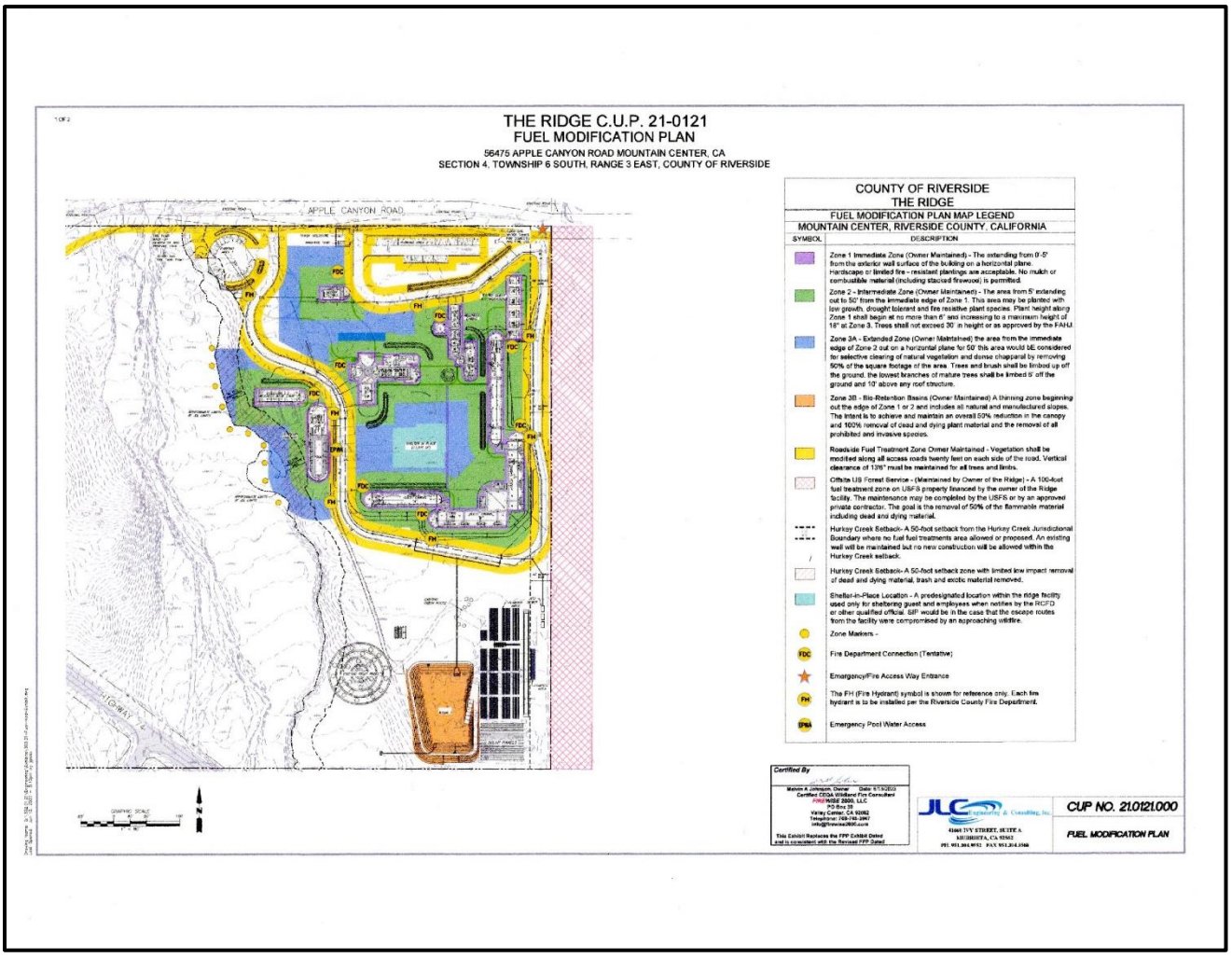
APPENDIX ‘E’

Zone Marker Detail



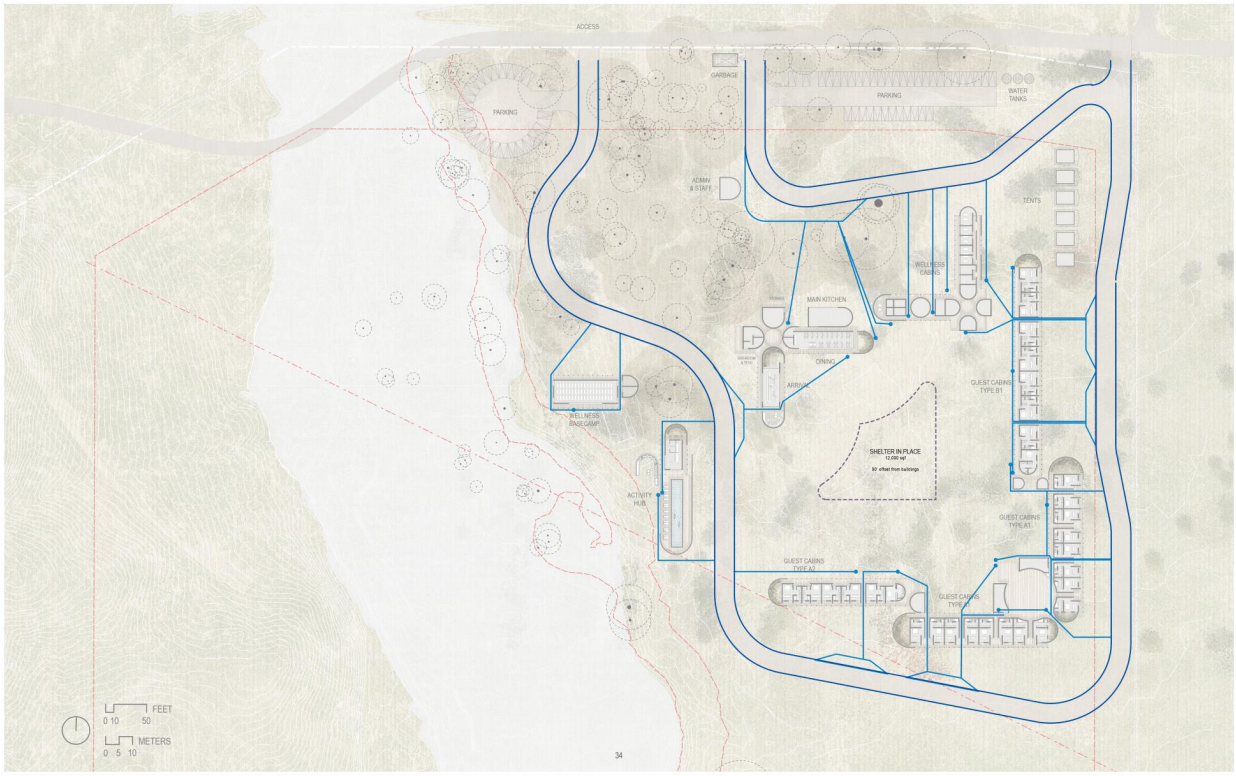
APPENDIX ‘F’

Fuel Modification Plan Map



APPENDIX ‘G’

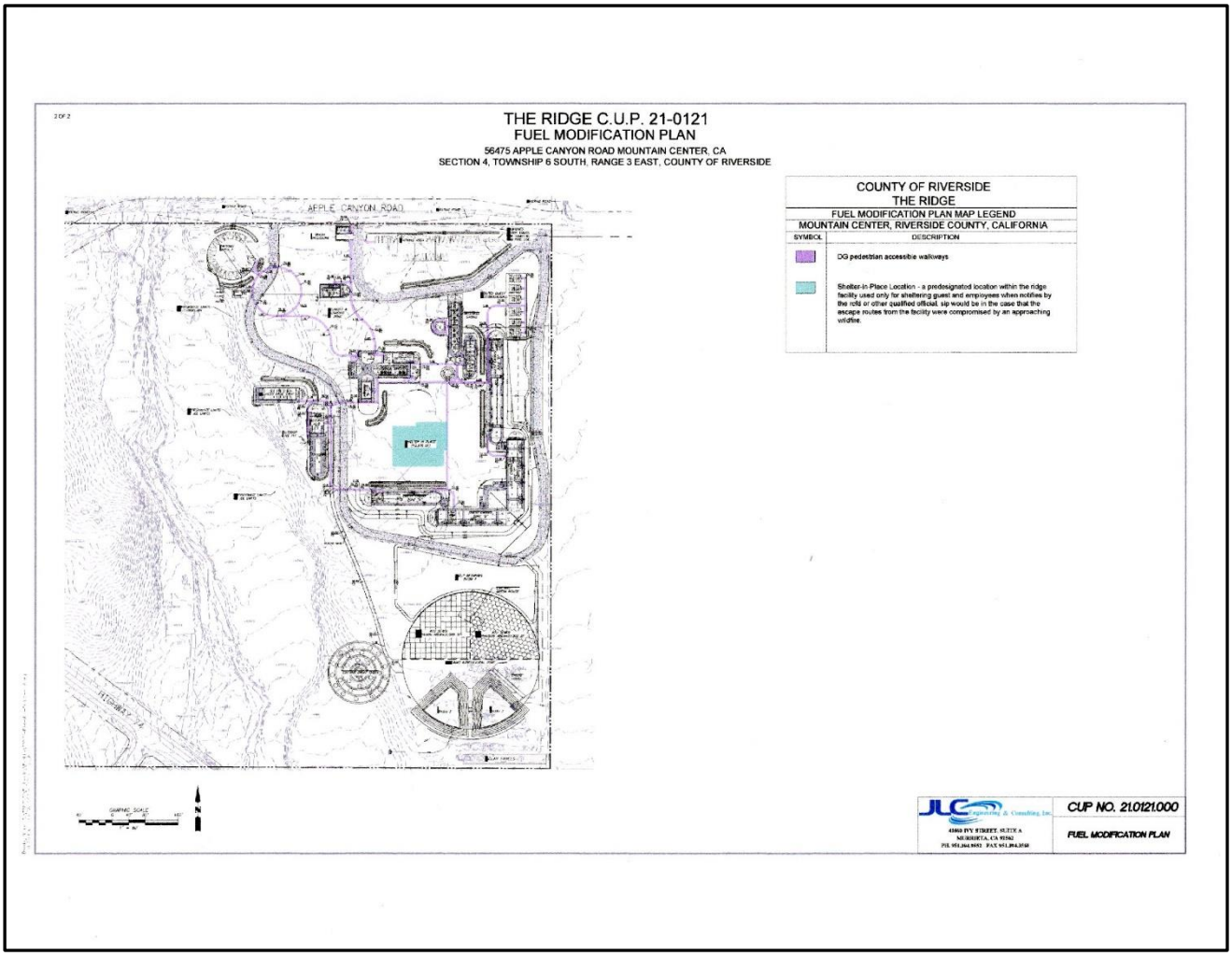
Hose-Pull Lengths for The Ridge



APPENDIX ‘H’

Shelter-in-Place Plan

and SIP Pathway Map



Appendix H

Emergency Relocation/Shelter-In-Place Plan

Part 1

Visitors to The Project will be provided with information at the time of arrival which will inform them of risks associated with large vegetation fires which may occur in the immediate area during their visit. Visitors will be informed that The Project staff will escort them to a designated open space area to be utilized as a safe refuge from such a fire.

This initial information will not be detailed. Rather, it will be a brief notice of the potential for such an event and a confidence building device. Maps will be posted in all structures including each guest room, common facilities and employee work areas. Should the unlikely event occur: the visitors will be directed to the Shelter-In-Place (SIP) location; and there receive a detailed explanation of the circumstances; and an opportunity to participate in an analysis of relevant information, in real time, and the resulting decision-making process. Staff members will review the fuel treatment features designed in the area.

Visitors will be instructed that they have an influence on the relocation or shelter option, individually, but that it is subject to direction provided by the Riverside County Fire Department or other public safety entities. If an individual visitor defies the direction of staff, no physical force will be used to induce compliance.

The pathway to the safe refuge area will be lighted and appropriate for people with mobility issues. The pathway lights will be connected to the backup power supply for use during power shutoffs. Additional lighting will be provided to illuminate the SIP locations, these lights will also be connected to the emergency power supply. Two-way radios will be utilized by all staff to coordinate active protection efforts outside of the area, such as fire hose use, and any escorting of visitors during relocation. Contact information such as telephone numbers, including cellular, fax numbers, e-mail addresses, radio frequencies and staff descriptors, shall be maintained and updated as needed, and reviewed at least annually.

Staff training will be required a minimum of twice a year and at the time of hire. Records of such training shall be maintained for the period of employment of each individual. Training exercises will be performed on site in order to ensure the effectiveness of these procedures and efficiency of staff. These provisions are an obligation that transfers to subsequent purchasers and will be made a narrative deed encumbrance in order to provide actual and constructive notice to same.

Part 2

What is Shelter-in-Place?

Why Not Evacuate?

FACT: *Most wildfire-related deaths occur during evacuation efforts.*
Factors contributing to the high number of evacuation injuries and deaths include: heavy smoke, flying embers, panicked drivers and the sheer volume of cars and horse trailers on the road. During past wildfires, dark smoke and last-minute evacuations have caused panicked evacuees to drive off roads and crash, trapping them in the fire's path.

Traffic collisions are also common during evacuation efforts. These incidents compromise the evacuation of other residents, as well as delay firefighters from protecting property threatened by flames. For these reasons, it is safer for visitors and staff at The Project to stay within the designated Shelter in Place area located within the open area bounded by the four Guest Cabin buildings and the Common Area facility rather than risk evacuating on dangerous roadways. (See Appendix "G" for SIP location)

What elements of a successful Shelter-in-Place facility are provided?

1. Optimum Communication systems including radio, and cell phone.
2. The shelter area will have adequate water supply via fire hydrant.
3. Adequate access for emergency vehicles.
4. Backup power supply for facility lights in case of power outage.
5. Safe and efficient relocation from the buildings, farm and parking lots areas to the Shelter location will be assured through the use of:
    a. A designated pathway for pedestrian traffic to the Shelter comprised of either cement, decomposed granite or similar material to create a hardened surface for wheelchair access. Areas where erosion is a problem will be paved or hardened so that there is no possibility of rutting which could pose a risk during the walk to the Shelter.
    b. Adequate lighting on the pathway leading to the Shelter.
    c. Two-Way Radios will be used by all staff to coordinate escorting of visitors during relocation.
    d. Signs will be posted throughout the facility leading visitors to the shelter in place location.
    e. Evacuation plans will be posted in each building visible to the public. Each plan will include a diagram leading from the building to the shelter in place location.

How are Visitors notified of The Project to Shelter in Place?

1. Visitors attending The Project facility will make their first stop after being led to the Reception/Check-in building after parking their car in one of two parking areas. Visitors will then be shuttled through the facility with cars remaining in the parking lots. When a

visitor enters the reception building, a notice is given to each visitor which alerts them to important safety information in the event of a wildfire.

2. If special event handouts are being distributed, shelter in place information will be posted on the back of each handout to further educate all visitors.
3. SIP notices and instructions will be posted on the back of the door to each guest room. Notices will also be posted inside each of the proposed tent structures. In these locations, guests and employees of The Project will be able to see and review the SIP instructions daily.

Procedures for Relocating Visitors and Staff from Facility to the Shelter in Place

When notified of a potential fire threat, management staff will direct people to move to the shelter in place location. Staff members will check all rooms and facilities to ensure that all visitors and employees have been relocated to the SIP location. All employees will be present at this time along with all visitors.

Write down the names of everyone in the SIP location, and if possible, call the facility's designated emergency contact to report who is on site and their affiliation, i.e.: employee, visitor, neighbor, contractor, etc. Designated emergency contact will be Owner or the General Manager. The list may be oral, texted, faxed or emailed depending on capability at the time.

Emergency Supplies to be housed in The Project Shelter

1. Batteries for all battery powered appliances
2. Tool kit, duct tape, misc. fasteners, cord, wire, etc.
3. Battery operated AM/FM radio.
4. Emergency First Aid Kit
5. Cell phone chargers

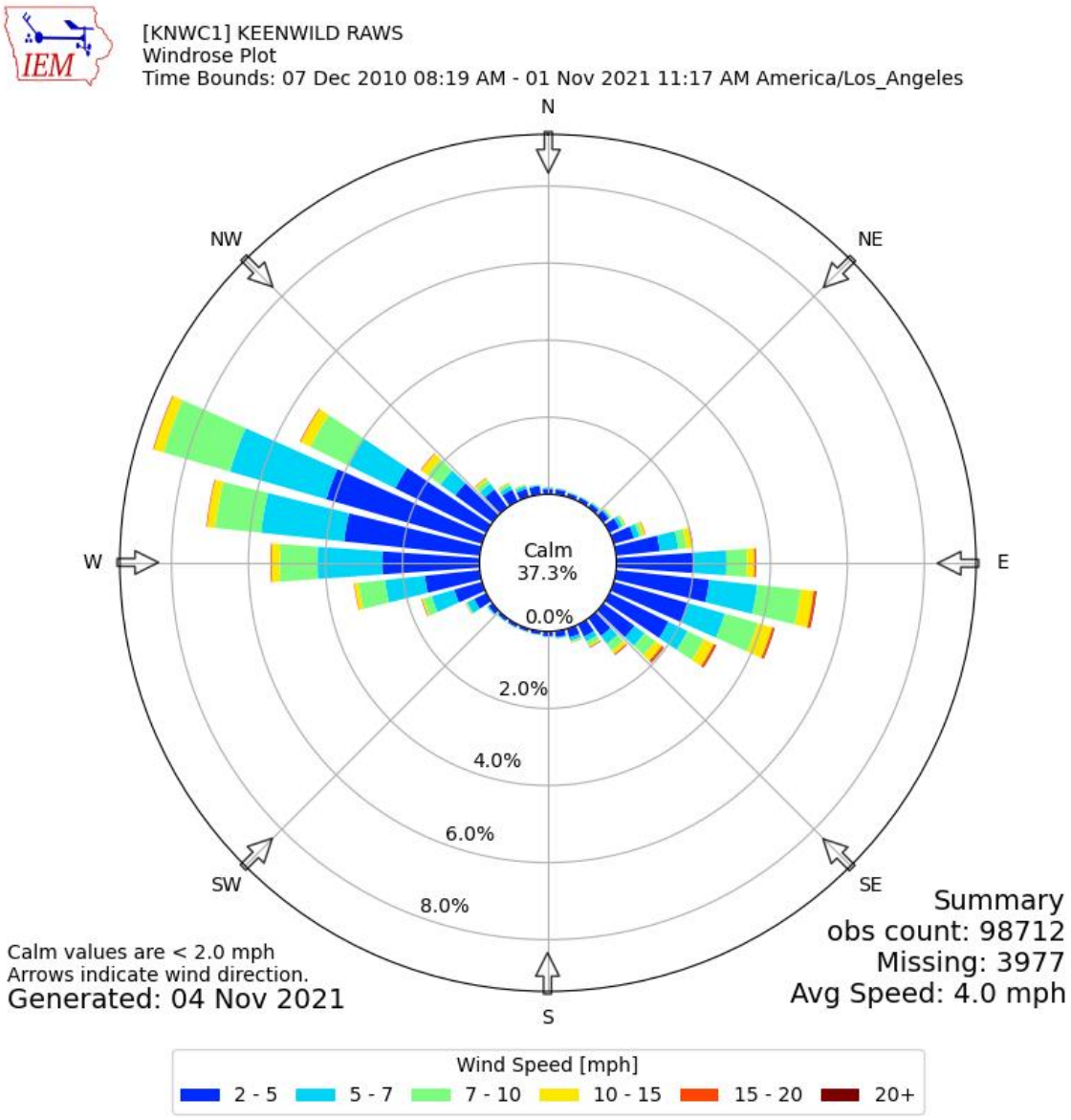
Fire Drills

The Project will provide at least two shelter-in-place drills annually. These drills will focus on the specific duties of staff members to ensure that safety procedures are carried out as outlined in the fire protection plan.

APPENDIX 'I'
Keenwild RAWS Wind Data

Appendix ‘I’

Keenwild RAWS Wind Data



APPENDIX ‘J’

Flame Resistance Certification Data

Tent Material

MF&H Textiles, Inc.

SUNFORGER
Flame Resistance Certification

Date: 2/3/2020

Specification: CPAI-84 (1995 Revision)
FAR 25.853 (A) (B)

Customer: SCHOTT TEXTILES INC.

Lot: M 23616

Cust. Lot: 51827

Yards: 22,227

We certify this lot has been tested according to section 7 (wall & top) of CPAI-84 and meets all the requirements. section 3.2.

Tina L. Warren

MF&H TEXTILES

Form: Lab CPAI - 84

P.O. BOX 1970 • BUTLER, GA 31006 • (478) 862-5423

Rev.3
3/24/2014

QLL #12500

MF&H TEXTILES, INC.
BUTLER, GA

SCHOTT TEXTILES INC
59/60" 10.10 OZ 100% CTN. ARMY DUCK
SUNFORGER MARINE BOATSHRUNK CPAI-84
TESTING COMPLETED: 1/6/2020

LOT # : M 23616
C/LOT #: 51827
COLOR : MINERAL COLORLESS
YARDS : 22,227

TEST & UNIT MEASUREMENT	RESULTS		REQUIREMENTS	
SAMPLE #	1	AVG		
YARN	COTTON	COTTON		
WIDTH	59 50	59 50	59	IN. MIN.
WEIGHT. OZ/SQ YD	12 88	12 88	10.1	OZ/SQ/YD MIN
BREAKING STRENGTH				
WARP	228			
	230			
	220			
	222			
	220			
	224	224	120	MIN.
FILLING	156			
	151			
	154			
	152			
	150			
	153	153	80	MIN.
TEAR STRENGTH				
WARP	5.29			
	5.07			
	5.29			
	5 29			
	5.07			
	5 20	5 20	3	MIN.
FILLING	4 19			
	4 19			
	4 19			
	3 97			
	4 19			
	4.15	4 15	3	MIN.
pH	8 04	8 04	6 5	MIN.

QLL #12500

MF&H TEXTILES, INC.
BUTLER, GA

SCHOTT TEXTILES INC
59/60" 10.10 OZ 100% CTN. ARMY DUCK
SUNFORGER MARINE BOATSHRUNK CPAI-84
TESTING COMPLETED: 1/6/2020

LOT # : M 23616
C/LOT #: 51827
COLOR : MINERAL COLORLESS
YARDS : 22,227

TEST & UNIT MEASUREMENT / SAMPLE #	1	AVG	REQUIREMENTS
FLAME RETARDANT CPAI - 84 (1995)	RESULTS		
INITIAL CHAR LENGTH WARP	2.12		
	2.00		
	2.37		
	2 75		
	2 25		
	2 30	2 30	4 IN MAX
FILLING	2 00		
	3 00		
	2.75		
	2 75		
	2 87		
	2.67	2.67	4 IN MAX
AFTER FLAME INITIAL WARP, SECONDS	0		
	0		
	0		
	0		
	0		
	0	0	2 SEC MAX
AFTER FLAME, INITIAL FLG., SECONDS	0		
	0		
	0		
	0		
	0		
	0	0	2 SEC MAX
HYDROSTATRATING.	36		
	36		
	36		
	36	36	25 MIN.
SPRAY RATING.	80		
	80		
	80		
	80	80	80 MIN
SHRINKAGE:	-2.08	-2.08	-3 00 MAX.
	0.00	0 00	-3 00 MAX

I CERTIFY THAT THE ABOVE TESTS WERE PERFORMED UNDER MY SUPERVISION IN ACCORDANCE WITH THE SPECIFICATION TEST REQUIREMENTS AND THAT THE REPORTED TEST RESULTS ARE TRUE, VALID AND APPLICABLE TO THE SAMPLES TESTED. I FURTHER CERTIFY THAT THESE SAMPLES WERE THE ONLY SAMPLES TESTED FROM THE LOT OF END ITEMS IDENTIFIED ABOVE.

DATE 1-6-20

SIGNED: Tina L Warren
MF&H TEXTILES, INC.

FORM LAB 10.10 OZ
CPAI 84

REV 4
10/31/2018