

# DUDEK

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**Subject: 14915 Shannon Road Preliminary Fire Protection Plan, APN 537-27-047, Plan Review No. 22-1881, in the Town of Los Gatos**

Dear Kenny Ip:

This Preliminary Fire Protection Plan (FPP) is written to identify the specific wildfire risks at the 14915 Shannon Road project (Project) site and address these specific wildfire risks by describing the access, property identification, water supply, and fuel reduction measures that the Project will incorporate. This Letter Report demonstrates that the proposed Project will be in compliance with all applicable sections of the Public Resources Code, Section 4290, the defensible space requirements in accordance with Government Code Section 51182, and the applicable sections of the current versions of the California Building Code (CBC) and California Fire Code (CFC). The information contained within this report complies with the contents required by Section 2903.2 of the CFC for a fire protection plan. Finally, this plan incorporates the relevant local requirements found in Chapter 09 of the Town of Los Gatos Code of Ordinances.

This report was prepared following an extensive review of available digital site information, including topography, vegetation types, fire history, and the Project's site plan. Dudek Fire Protection planners conducted a field assessment of the Proposed Project on March 14, 2025, which included a walk-through of the site and the access roads to the Project site.

## 1 Project Description

### 1.1 Project Site

14915 Shannon Road is a housing development project in the foothills south of Los Gatos and the southwestern portion of Santa Clara County. Specifically, the Project is in the northeastern and northwestern portions of Sections 23 and 24, respectively, of Township 8 South, Range 1 West, Mount Diablo Base and Meridian. Figure 1, Project Location, contains a map of the project vicinity showing the relation of the Project site to nearby highways and urban areas. This area is flat, surrounded by grasslands, and features oak woodlands within the Project site and on the slightly uphill slope adjacent to the Project site. A house, workshop, and three barns are present in the residential area in the southern-central portion of the Project site. The Project includes the division of one approximately 28-acre parcel (APN 537-27-047) into nine lots. One dwelling unit is planned for each lot. Approximately 7.5 acres of

this parcel would be converted to active residential use, while 20.4 acres would remain as open space. Seven of these lots would be located off Shannon Road, while the remaining two would be situated off Sierra Azule, a public road. Figure 2, Project Layout, contains an abbreviated Project plan set showing the overall layout of the Project. Figure 3, Project Access Road Map, highlights these access roads for their respective lots. The San Jose Water Company would supply water to the residences. Electricity would be supplied by Pacific Gas and Electric (PG&E).

## 1.2 Adjoining Properties

An unincorporated County area borders the Project site. To the north, atop the sloped area, a mix of extremely high fuel loads, consisting of dense oak woodlands and 1950s-era wood-frame houses without hardening, is present within the Sky Lane Neighborhood. The terrain east and west of the Project site is similar, characterized by grasslands, oak woodlands, and relatively flat topography. The adjoining property to the west of the Project site is fallow (former) agricultural property similar to the Project site, and the adjoining property to the east of the southeastern portion of the Project site is in an undeveloped and natural state. To the north and south are sloped areas with developed, low-density, single-family residential properties on the top of these slopes. The south-facing slopes are predominantly grasslands with scattered trees, while the north-facing slopes have a higher tree density.

## 1.3 Fire Hazard Severity Zones

In February 2025, CAL FIRE released updated Fire Hazard Severity Zone maps for the Project area. In these updated maps, the project site and the surrounding parcels are in a designated High Fire Hazard Severity Zone. At the time of this report's preparation, these updated fire hazard severity zone maps had not been officially adopted by the City of Los Gatos. This report assumes that the City of Los Gatos will adopt these maps as recommended by CAL FIRE. It is worth noting that the Project site and the surrounding parcels were previously designated as a Very High Fire Hazard Severity Zone on the older version of these maps.

(Figure 4, CAL FIRE Fire Hazard Severity Zone Maps). The site is also situated within a locally designated Wildland-Urban Interface (WUI) Area.

## 2 Environmental Setting

### 2.1 Project Site Characteristics and Fire Environment

The Project site is located within an area designated by CAL FIRE and the Santa Clara County Fire Department as having a high wildfire risk. The Project site and the surrounding area contain vegetation and terrain that are capable of sustaining the spread of a wildfire when weather conditions permit, as well as structures that can potentially be ignited by a wildfire if not sufficiently prepared.

The following sections discuss the project site's characteristics and the surrounding region, including the local climate and fire history, at a regional scale. The 14915 Shannon Road Project is similar in terms of topography, vegetative cover, proximity to adjacent residential areas, available access, and planned use. The Alta Vista Subdivision comprises 72 lots, developed in 1978 and bounded by Santa Rosa Drive. A 15-lot subdivision, Sierra Azule, was developed in 2001, coinciding with the extension of Sierra Azule Road to Santa Rosa Drive. The intent of evaluating conditions at a macro-scale provides a better understanding of the regional fire environment, which is not constrained by property boundary delineations.

### 2.2 Project Location

The Project site is located within the Town of Los Gatos, California. It is situated on the southwestern flank of the northwest-southeast-trending Blossom Hill. This ridge is the lowest-elevation expression of the Sierra Azule, the northeastern most portion of the Santa Cruz Mountains. The Project Site is generally located north of Shannon Road, east and south of Sky Lane, and west of Santa Rosa Drive. The Project site is bounded on the north, west, and south by unincorporated County area. Privately owned semi-rural residential buildings are present on the Project site, south of Shannon Road, and along Sky Lane (private). Open space areas exist immediately west, north, and east of the Project site. The Project site and the surrounding area can be generally described as semi-rural, with dispersed single-family homes surrounded by natural hillside vegetation and open space areas.

The Santa Clara County Fire Department is responsible for the initial emergency response to all fires, medical emergencies, and associated incidents. The nearest fire station is the Shannon Fire Station. The Project's wildland-urban interface (WUI) location is entirely in an area currently designated within the local responsibility area (LRA) Very High Fire Hazard Severity Zone (VHFHSZ)<sup>1</sup> by the County and California Department of Forestry and Fire Protection (CAL FIRE) (See Figure 4, CAL FIRE Fire Hazard Severity Zone Map).

### 2.3 Topography

The Project site sits on the southern side of a ridge that runs east-west. The Project site has a mostly southern aspect. The lower elevation part of the property is at Shannon Road, which is at an elevation of 670 Ft AMSL, while the highest point of the property is at 875 Ft AMSL. This represents an elevation difference of 205 ft. The average north-south slope within the developed areas of the project site is 30%, with a maximum slope of 60% within the

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<sup>1</sup> The updated LRA maps for the Project area released in March 2025 reclassified the Project area as 'High'. These maps had not been adopted by the town of Los Gatos at the time this report was prepared.

project site. The Project site's terrain contains features, including steep slopes, that would exacerbate the intensity and spread of wildfire, particularly for a fire originating on the lower portions of the slope. Steep Slopes pre-heat uphill and increase direct flame impingement of uphill fuels. Steep slopes also increase the risk of burning material rolling down the slope and igniting spot fires outside of the main fire perimeter.

## 2.4 Climate

The Project site is in the San Francisco Bay Area in Northern California. Like the rest of the Bay Area, it is influenced by the Pacific Ocean and a seasonal, migratory subtropical high-pressure system known as the "Pacific High." The site is characterized by moderate seasonal change, with dry summers and wet winters. The moderate climate is interrupted by periods of extremely dry and hot weather, winter rainstorms, and dry, high winds from the east, known as the "Diablo winds."

The project site's fire season runs from June through November, peaking in late summer and fall. The total precipitation during the six-month fire season is just over 3 inches, with the majority of precipitation occurring in November. The monthly average temperatures for June- 68°, July- 73°, August- 72°, September- 69°, October- 65°, and November- 55°. The monthly average relative humidity for June was 52%, July was 48%, August was 52%, September was 51%, October was 49%, and November was 62%. Relative Humidity ranges from the single digits to 100% due to periodic fog every month. The average monthly low relative humidity for June is 9%, July is 6%, August is 7%, September is 7%, October is 9%, and November is 15%. The monthly average wind speed across all months during the fire season ranges between 4 and 6 mph. The monthly high gust speeds are as follows: June- 31 MPH, July - 28 MPH, August - 28 MPH, September - 31 MPH, October- 38 MPH, and November- 51 MPH. The prevailing wind direction at the site is predictable throughout the fire season. During the daytime, the wind direction comes from the northeast. During nighttime, the prevailing wind direction comes from the southwest. During the height of the fire season, the National Weather Service (NWS) may issue fire weather watches or Red Flag Warnings during times when weather conditions are conducive to rapid fire growth. Fire Weather Watches and Red Flag Warnings occur most frequently in the Project area in September and October.

## 2.5 Vegetation/Fuels

Multiple vegetation types occupy the project site.

Based on information from the Biological Evaluation Report prepared by Live Oak Associates, Inc. and the Pacific Veg map-Enhanced Lifeform map, and verified by in-person field visits, California Annual Grasslands are the most prevalent vegetation cover type on the Project site. Other vegetation cover types include fallow Walnut Orchards, which are present in the center of the project site, and mixed woodlands that occupy a narrow strip along the southeastern boundary of the project site.

The annual grasslands form a continuous fuel layer across the project site and connect with other vegetation cover types on the Project site, unless there is a break in vegetation continuity, such as a road. Surface fuels in the walnut orchards are also primarily grass. The only transition of surface fuels on the project site occurs in the woodlands along the southeast boundary, where the surface fuel composition transitions from grasslands to a mixture of leaf litter and shrubs. These grasslands are anticipated to be the primary carrier of any wildfire that spreads on the Project site.

The composition of fuels on adjacent properties is as follows: To the north is a row of single-family homes with fuels transitioning from California Annual Grasslands on the southern portion of the properties to mixed woodland and landscaping on the northern portion of the properties. The level of maintenance varies between properties, with some adhering to the SCCFD defensible space standards within 100 feet, while others appear not to comply with these standards. A mixture of California Annual Grasslands and Mixed Woodland continues onto the adjacent properties to the east. To the south, Mixed Woodlands continue on the hillside of the properties south of Shannon Road. Atop this small hillside is a row of single-family homes surrounded by Mixed Woodland and landscaping. The fuels within 100 feet of these structures generally appear to meet the SCCFD defensible space standards. Finally, to the west, California Annual Grasslands form a continuous area of fuel on the hillside. Fuel continuity between the Project site and the adjacent properties is interrupted by Shannon Road to the south and a portion of Sky Lane, north of Lots 1 and 2, to the east. Uninterrupted fuel is present along the remaining boundaries. Overall, fuel volumes are lower on the Project site than on the adjacent properties because of the prevalence of annual grasslands and the presence of heavier fuels on the adjacent properties. The majority of the Project site lacks tree canopy or dense shrubs, which are anticipated to create extreme fire behavior, such as torching or long-range spotting.

Following development, the existing vegetation types within the development footprint would be significantly altered. The project proposes significant grading of the existing slopes within the development footprint, and it is anticipated that the existing vegetation cover will be removed down to bare soil. Vegetation within the development footprint post-development will be composed entirely of installed landscaping laid out to minimize fire risk by breaking up vertical continuity and reducing fuel loads near structures and access roads.

## 2.6 Fire History

According to available data from CAL FIRE in the FRAP database and the National Interagency Fire Center (NIFC) in the interagency wildland fire history database, three fires have burned within a 5-mile radius of the Project site since the beginning of the historical fire data record (Figure 4, Fire History Map). Recorded wildfires within 5 miles of the project site range in size from approximately 128 acres up to approximately 9,071 acres. The recorded fires occurred generally south of the Project site. The terrain and vegetation where these fires occurred are similar to those at the Project site; however, the overall volume of vegetation is significantly greater, and the terrain is steeper. No fire perimeters have been recorded that have spread within one mile of the Project site. These fires were started by unknown causes and arson.

It is worth noting that this history may represent an incomplete record of the wildfires that have occurred in the Project area. SCCFD may have records of additional fires that have occurred in the Project area and were not submitted to the national wildfire history database.

## 3 Project Specific Fire Protection Features

This FPP demonstrates that the Project would comply with applicable portions of the 2022 CFC and the amendments to this code adopted by the Town of Los Gatos in Article III of their municipal code as well as the sections of the Los Gatos Hillside Specific Plan related to fire protection (Attachment C). The homes proposed by the Project will include ignition-resistant features and be constructed in accordance with applicable sections of the 2022 California Building Code (CBC), California Code of Regulations, Title 24, Part 2, Chapter 7A.

While these standards will provide a high level of protection to structures within the Project, compliance with these standards does not guarantee that structures will not be damaged or destroyed by fire in all cases. The following summaries highlight the fire protection features identified by SCCFD as important to address wildfire risk at the site and comply with the adopted codes.

### 3.1 Fire Department Access

Shannon Road provides the primary access to the Project area from the east and west. Shannon Road provides direct access to Lots 1-7 on the Project site. Lots 8 and 9 are accessible from the end of Sierra Azule. Additional access to the project site, including the rear of Lots 1-4 and the open space hillside north of Lots 1-7, is possible from Sky Lane, which intersects Shannon Road and extends north on the west side of the Project site. Both Sky Lane and Sierra Azule wrap around the north side of the project site outside of the Project boundaries, but they currently do not connect. The project proposes to construct an emergency access road that connects the west end of Sierra Azule near the San Jose Water Company Tank to the east end of Sky Lane. The Project contains less than 30 one or two-family dwellings. These access roads comply with the SCCFD standards and specifications for access roads (Specification A-1 Fire Department Apparatus Access). According to the SCCFD standards and specifications, only one access road is required for the 14915 Shannon Road project.

Site access, including fire lane, driveway, and entrance road widths, primary access, turnarounds, dead-end lengths, signage, surface, and other requirements, would comply with applicable sections applicable sections of the 2022 CFC, CBC, including Chapter 7A, and Section 503.2 of the town of Los Gatos municipal code. Fire access would be reviewed and approved by the SCCFD prior to the commencement of construction. The developer would submit a plan set that describes the fire department access roads and features within the Project boundaries and demonstrates how the project will comply with the code requirements.

#### 3.1.1 Gates

The project would install a gate at the entrance to the emergency access road, which connects Sierra Azule to Sky Lane, at the northwest corner of Lot 8. This gate would comply with Section 503.6 of the California Fire Code and the Los Gatos amendments; it will have approved means of emergency operation and would meet the minimum width of 12 feet. Emergency access will be provided by a key box (Knox Box) that would be located on a gate post and would contain keys to the locks securing the gate.

### 3.1.2 Dead-ends

**There would be no dead-end roads within the Project.** Lots 1-7 are accessed from Shannon Road, which is not a dead-end road. Lots 8 and 9 are accessed from Sierra Azule, which is currently a dead-end road approximately 1,100 feet long and is fire code compliant cul de sac turnaround. The project proposes to connect the end of Sierra Azule near the water tank to Sky Lane and eliminate this dead end road.

### 3.1.3 Grade, Surface, Width, and Clearance

All proposed fire access roadways would satisfy the SCCFD requirements for fire apparatus access roads and conform to the requirements in Section 503.2 of the town of Los Gatos municipal code.

Grades on the Project's fire apparatus access roads vary from less than 2% up to 20%. Project roads with a grade of less than 15% meet the SCCFD and 2022 CFC requirements for fire apparatus access road grade. SCCFD prohibits access roads exceeding 15%, while this mainly occurs as short sections interspersed with road sections with less than 15% grade (Pers Comm. SCCFD 2024). For road grades that exceed 15% but are less than 20%, the project will need to provide a road surface design that is able to support a 75,000-lb fire apparatus and provide a stamped civil engineer letter to justify the traction details.

All roads and driveways within the Project would be composed of asphaltic concrete or alternate material subject to SCCFD's prior approval and maintained to support the imposed loads of fire apparatus (not less than 75,000 pounds) that may respond, including engines and aerial fire apparatus as well as an ambulance. Road surfaces would be paved with an SCCFD-approved material that supports all-weather driving capabilities.

On-site fire apparatus access roads would have a minimum paved width of 20 feet for engines. They would also have an unobstructed vertical clearance of 13 feet 6 inches.

All fire apparatus access roads within the Project site extend to within 150 feet of a Project structure, except for the single-family dwellings, which are fully sprinklered, are located within 300 feet of a fire apparatus access road, and would conform to the exception stated in Section 503.1.1 Town of Los Gatos municipal code (SCCFD 2021).

### 3.1.4 Driveways

SCCFD defines a driveway as "A vehicular access roadway less than 20 feet in width and serving no more than two single-family dwellings." SCCFD has specific requirements regarding the dimensions of roadways that meet the definition of a driveway and are located more than 200 feet from the centerline of a public roadway (SCCFD 2021). **There are no structures at the Project site that are located within 200 feet of the centerline of a public roadway.**

## 3.2 Premise Identification

Identification of roads and structures will comply with the Town of Los Gatos fire code, Section 505.1, and other applicable codes as follows:

- All residential structures would have address identification consisting of Arabic numbers or alphabetical letters (numbers would not be spelled out) that contrast with their background and have a minimum height of 6 inches and stroke of  $\frac{1}{2}$  inch.
- Homes with an address not viewable from the fire access road would have a monument, pole, or other sign or means of identifying the structure. Address identification would be maintained.
- All streets within the development would be named, with the proper signage installed at intersections to the satisfaction of the Department of Parks and Public Works.
- Street names would be posted on non-combustible street signposts. Letters/numbers would be according to Department of Parks and Public Works standards.
- Temporary street signs would be installed on all street corners within the proposed Project before combustible materials are placed on-site, and permanent signs would be installed before buildings are occupied.

### 3.3 Fire Apparatus Roadway Marking

Where required by SCCFD, fire apparatus access roads would be designated and marked as a fire lane as described in Section 22500.1 of the California Vehicle Code. SCCFD allows several methods for marking fire lanes, including:

1. **Red Curb Marking:** The curb top and side shall be painted red, and the words “FIRE LANE,” in white, shall be stenciled on the top and side of all red curbs at a maximum interval of 30 feet. Letters shall be 3 inches in height with a minimum of  $\frac{3}{4}$ -inch stroke.
2. **Roadway Surface Marking:** Outlining or painting the fire lane area in red with the words “FIRE LANE” in white, at intervals of not more than 50 feet or as otherwise directed by the fire department. The size of lettering shall be not less than 24 inches in height and a 3-inch stroke.
3. **Fire Lane Signs**
  - a. Signs shall be of metal construction, measuring 12 inches wide and 18 inches high, and of a reflective type. Plastic or wooden signs are not acceptable.
  - b. Signs shall read: “NO STOPPING – FIRE LANE 22500.1 CVC.” Lettering shall be not less than 1 inch in height and clearly visible from a vehicle.
  - c. Signs shall be in visible locations and mounted on galvanized metal poles at a height of 80 inches. Signs shall be maintained and unobstructed by foliage at all times.
  - d. The distance between signs posted along the fire lane shall not exceed 50 feet. No less than two signs shall be posted on each block. If traffic flows in two directions, signs must be posted and readable from either direction.

It is anticipated that SCCFD would require the designation of fire lanes along Sky Lane and the extension of Sierra Azule to Lots 8 and 9.

## 3.4 Infrastructure and Fire Protection Systems

### 3.4.1 Water Supply

The municipal water system would provide a Water Supply for firefighting. There is an existing 10 inch water main under Shannon Road that would be extended from the Project's east boundary to its west boundary at Lot 1. Water mains would be installed beneath Sky Lane within the Project boundaries to extend the water supply to the northwest corner of the Project for Lots 1-7. For Lots 8 and 9, a short section of the water main will be installed within the extension of Sierra Azule next to the water tank.

### 3.4.2 Fire Hydrants

Four new fire hydrants will be installed to complement the three existing hydrants within the project area. Two of the new hydrants would be installed along Shannon Road, one would be installed on Sky Lane, and one would be installed at the end of the extension to Sierra Azule. These new hydrants, combined with the existing ones, would provide a ready supply of water for firefighting purposes. Hydrants would be located so that the centerline of the hydrant is at least two feet but no more than 8 feet from the curb. Hydrants would be installed so that the center of the largest hose outlet is at least 18 inches and no more than 30 inches above the final grade. Hydrants would be installed at a minimum of 40 feet from a structure. Assuming a minimum fire flow rate of 1500 gallons per minute, fire hydrants within the Project site could have a maximum spacing of 500 feet between the hydrants, provided that no Project structures are more than 400 feet from a structure. According to SCCFD guidelines, fire hydrants installed within the Project must be painted 'Safety Yellow,' and a blue reflective marker would be installed on the roadway to identify the hydrant location. Hydrants would be consistent with SCCFD Standards and 2022 CFC section 507 and Appendix C.

### 3.4.3 Automatic Fire Sprinkler Systems

The installation of an automatic, residential interior fire sprinkler system would protect all structures. Automatic internal sprinkler systems shall be in accordance with the National Fire Protection Association (NFPA) 13-D per 2023 SCCFD Fire Sprinkler System in One- and Two-Family Dwellings Requirements, Town of Los Gatos Section 903.2 and CRC Section R313, meeting Item 1 of CRC Section R302.2.2. According to the Town of Los Gatos Municipal Code 903.2, Amendments to Chapter 9 of the Fire Code, Fire Protection and Life Safety Systems, an automatic sprinkler system shall be provided throughout all new buildings and structures. Exceptions are outlined within the code; however, the existing site plans do not meet any of these exceptions. Applicable SCCFD Fire Sprinkler System in One-and Two-Family Dwellings Requirements Design Criteria is outlined below.

A. These are the relevant requirements pertaining to water control.

- The water from the fire sprinkler system shall be from the same source as the domestic water supply.
- Where a single water source connection serves sprinklers in more than one dwelling or structure where both have domestic water, the piping shall be configured as shown in Figure 1.
- Where a single water source connection serves sprinklers in more than one dwelling or structure where only the main house has domestic water, the piping shall be configured as shown in Figure 2.

- Where a water supply serves both the domestic and fire sprinkler system, five gallons per minute shall be added to the sprinkler system demand (*per system, regardless of the number of dwelling units*) at the point where the systems are connected to determine the size of common piping and the size of total water supply requirements where no provision is made to prevent flow into the domestic water system upon operation of the sprinkler.
- Water meters serving residential fire sprinkler systems shall be capable of supplying the maximum calculated fire sprinkler demand. The plan submittal shall include water meter hydraulic data sufficient to validate that the continuous flow capacity is sufficient to supply the combined demand.
- The San Jose Water Company requires back-flow prevention devices. If such devices are installed, the system demand calculations shall account for pressure loss from the proposed device. The manufacturer's data sheets for the device shall be included with the plan submission.
- Whole-house water treatment or filtration systems installed to condition the domestic water supply shall be positioned downstream of the domestic water isolation valve, ensuring that fire sprinkler water does not pass through the treatment system. Where a tank supply and pump are installed, water treatment may occur within the tank.
- Underground supply piping shall be thoroughly flushed until clear of sediment and debris prior to connection to the sprinkler system piping.

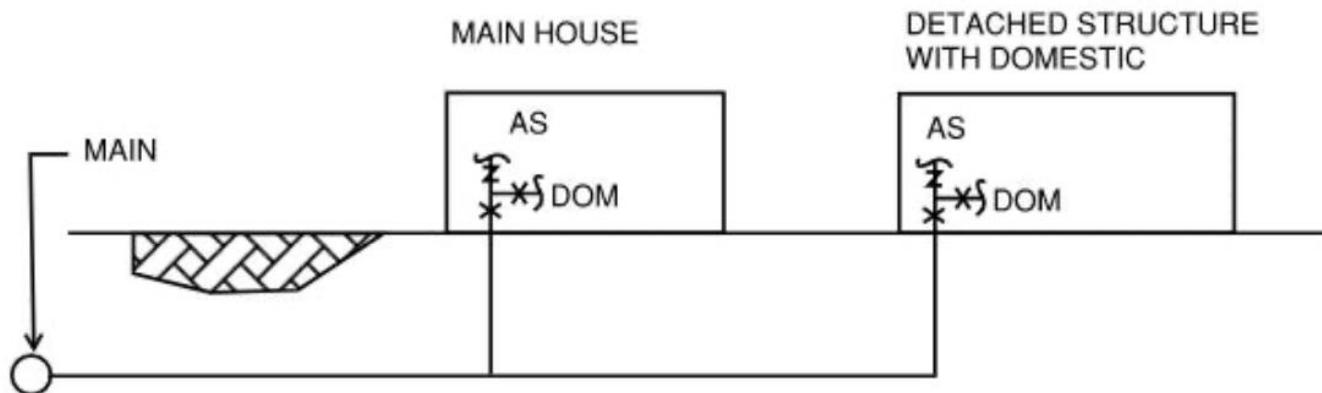


Figure 1

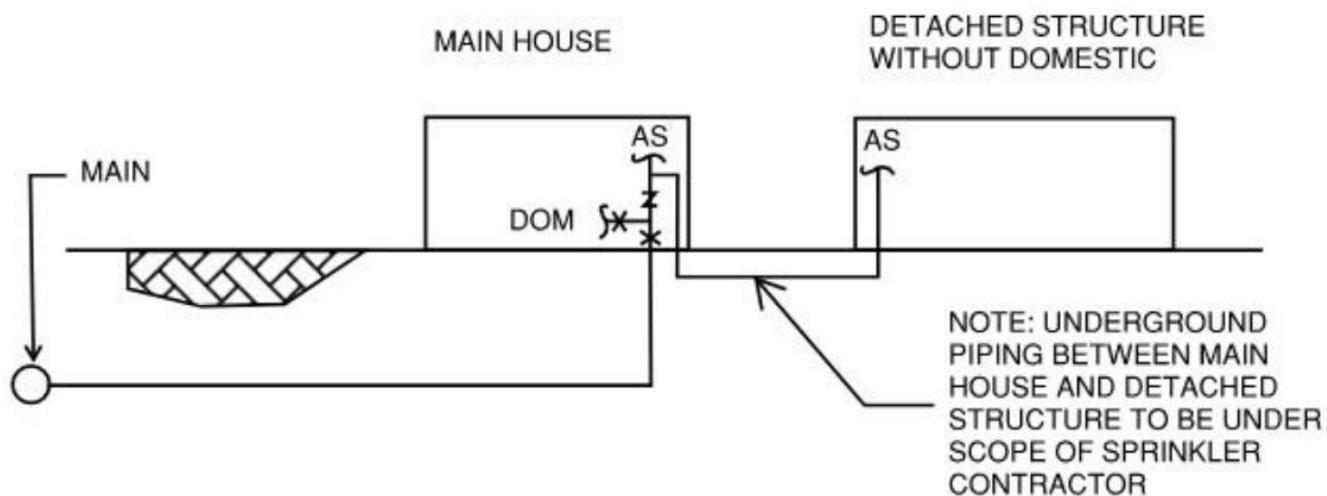


Figure 2

B. These are the relevant requirements pertaining to above-ground piping.

- All sprinkler system piping shall be installed according to the manufacturer's listing requirements, including methods of joining, supporting, insulating, and protecting from damage.
- All metallic piping installed in the system shall be approved for use in potable water systems (e.g., copper, galvanized steel, stainless, etc.) unless building department-approved backflow prevention is installed. All exterior, above-ground (supply, riser, etc.) piping shall be metallic and approved for installation in potable water systems.
- Where engineered wood joists are used in the building construction, support of piping from such construction shall be in accordance with the joist manufacturer's published guidelines. The manufacturer's details shall be replicated on system design drawings.
- Insulation installed above concealed sprinklers shall be installed so that it does not adversely affect the sprinkler's operation by blocking the airflow opening around it.
- Where spray polyurethane foam is used for building insulation, installation practices shall be followed to prevent damage to nonmetallic system piping.
- When nonmetallic piping is installed and exposed in attics, insulation shall be provided on the attic side of the piping sufficient to maintain pipe temperature below the manufacturer's specified maximum temperature.

C. The relevant requirements for sprinkler location are specified by NFPA 13D, the California Fire Code, and the California Residential Code and are outlined below.

- Fire sprinklers shall be installed in all attached garages, carports, basements, and areas accessible for storage or other habitable use. Fire sprinklers shall be installed to protect all open, exterior, covered living areas (patio, covered deck, outside kitchen, etc.) with habitable space above them. Attics, crawl spaces, and normally unoccupied, concealed spaces containing fuel-fired equipment shall have a pilot sprinkler installed above the equipment. Unconditioned garages are assumed to have a maximum ceiling temperature between 101 °F and 150 °F; therefore, provide intermediate temperature heads in the garage.

D. These are the relevant requirements pertaining to alarms.

- An interior and exterior audible water flow alarm shall be provided. The interior bell/horn shall be audible throughout all sleeping rooms. The exterior alarm bell/horn shall be located on the street side of the house or in an approved location that will be audible from the street or access driveway. A sign shall be provided at the exterior alarm to indicate sprinkler water flow. All alarm devices shall be installed in accordance with the manufacturer's listing and installation instructions. A minimum of one interior horn shall be installed in the attached ADUs.

E. These are the relevant requirements pertaining to Valves. Figure 3 is a diagram outlining the location of valves within the system.

- Control Valve: Valves controlling the water supply to residential fire sprinkler systems shall be installed in accordance with NFPA 13D. The main control valve shall be distinguishable, readily accessible, and located adjacent to and on the exterior of the structure (Figure 3). The main supply control valve shall be distinguishable from the domestic valve by means of a permanently attached tag and be of a contrasting color (e.g., red handle for the main system versus black handle for the domestic supply).
- Test Valve: The sprinkler test connection shall have an orifice with a K-factor equal to the smallest K-factor sprinkler installed in the system. A combination test/drain valve may be used if both criteria are met.
- Drain Valve: Each sprinkler system riser shall be equipped with a minimum ½" drain valve. The valve shall be piped to the building exterior or to a drain capable of discharging full system flow for a minimum of 90 seconds. A combination test/drain valve may be used if both criteria are met.
- Main Shut-Off Valve: The main shutoff valve shall include a sign or valve tag stating the following: "Warning: the water system for this home supplies fire sprinklers that require certain flows and pressures to fight a fire. Devices that restrict the flow or decrease the pressure or automatically shut off the water to the fire sprinkler system, such as water softeners, filtration systems, and automatic shutoff valves, shall not be added to this system without a review of the fire sprinkler system by the Fire Code Authority. Do not remove this sign."

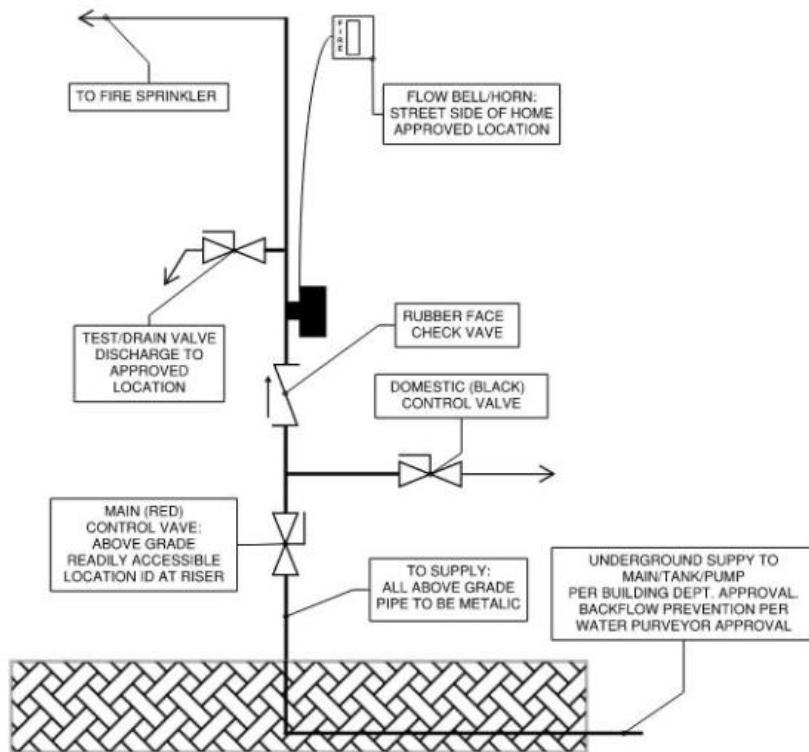


Figure 3

### 3.4.4 Fire Alarm Systems and Residential Hazard Detectors

A fire alarm system is not required for residential structures. All residences would have electric-powered, hard-wired residential smoke detectors and carbon monoxide detectors and comply with current California Building Code and California Residential Code standards. In addition, as described above, all structures would be equipped with an audio and visual alarm on the interior and exterior that activates when water flows in the automatic sprinkler system.

## 3.5 Fire Response

The project site is located in the Town of Los Gatos. The Santa Clara County Fire Department provides emergency and fire response services for the town, including the project site.

SCCFD has four fire stations within 5 miles of the Project site, while San Jose Fire Department has two fire stations within 5 miles of the project site. Table 1 presents a summary of the location, equipment, staffing levels, maximum travel distance, and estimated travel time for SCCFD and SJFD Fire Stations. Travel distances are derived from Google road data while travel times are calculated using response speeds of 35 mph, consistent with the nationally recognized National Fire Protection Association (NFPA) 1710 and Insurance Services Office (ISO) Public Protection Classification Program's Response Time Standard formula ( $Time=0.65 + 1.7(Distance)$ ). The ISO response travel time formula discounts speed for intersections, vehicle deceleration, and acceleration and does not include turnout time.

Table 1 Closest Fire Station Travel Time

Station Name		Maximum Travel Distance*	Maximum Travel Time**
Shannon Fire Station	16565 Shannon Road	1.8 mi.	3 minutes, 45 seconds
Los Gatos Fire Station	306 University Avenue	3.4 mi.	6 minutes, 26 seconds
Quito Fire Station	18870 Saratoga- Los Gatos Road	4.9 mi.	8 minutes, 59 seconds
Winchester Fire Station	14850 Winchester Boulevard	4.0 mi.	7 minutes, 27 seconds
San José Fire Department Station 22	6461 Bose Lane	4.3 mi.	7 minutes, 58 seconds
San José Fire Department Station 17	5170 Coniston Way	4.2 mi.	7 minutes, 47 seconds

**Notes:**

\* Distance measured to Lot 4 on the Project site on Shannon Drive

\*\* Assumes travel at 35 mph travel speed and does not include donning turnout gear and fire dispatch time. Actual travel speeds are likely to be closer to 25-30 mph speed limits.

It is worth noting that the posted speed limit along a portion of the travel routes from the two closest fire stations (Shannon and Los Gatos Fire Station) is 25 to 30 mph. If the fire apparatus traveled closer to the posted speed limit, emergency response times would be slower than the ISO response time formula.

The Santa Clara County Fire Department's response time goal is "Arrive at the scene of emergencies within five minutes of receipt of the alarm, at least 90 percent of the time" (SCCFD 2024). However, neither the county nor city general plan includes a response time or travel time standard. The 5 minutes is for travel time and is based on the time typically involved in a room fire reaching the point of "flashover," where control is very difficult, and the critical time following a heart attack or stroke for medical intervention. Travel time does not represent total response time, which is calculated by adding the travel time to the call processing time and to the turnout/reflex time. Generally, the call processing and turnout/reflex time would add between two to three minutes to the travel time. The closest fire station is the Shannon Fire Station, located at 16565 Shannon Road in Los Gatos, California, approximately 1.8 miles from the entrance to the Project site on Shannon Road. The second closest station is the Los Gatos Fire Station, located at 306 University Avenue, Los Gatos, California, approximately 3.4 miles from the entrance to the Project site on Shannon Road.

Based on the Project site location in relation to the nearest SCCFD fire stations, travel time to the site for the first responding engine is not expected to exceed 5 minutes to the lots (Lots 1-7) on Shannon Road. Lots 8 and 9 are accessed from Sierra Azule and are further (approximately 2.6 miles) from the nearest fire station than Lots 1-7. The estimated travel time to Lots 8 and 9 would be longer than the estimated time to Lots 1-7 on Shannon Road. As it is currently configured, the Lots 1-7 Project will meet the SCCFD's travel time goal for arriving at the scene of emergencies within 5 minutes of receiving the alarm. Estimated travel times for Lots 8 and 9 are approximately 7 minutes and would exceed the 5-minute time goal.

## 3.6 Defensible Space and Vegetation Management

### 3.6.1 SCCFD Defensible Space Overview

The purpose of this section is to document SCCFD standards and make them available for reference. The SCCFD defensible space standards are consistent with the 2022 California Fire Code (Section 4907 – Defensible Space), Government Code 51175 – 51189, Public Resources Code 4291, California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Article 3, Section 1299.03 and California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07. These regulations, along with the Town of Los Gatos municipal code (Chapter 49), require that hazardous vegetation and fuels be managed to reduce the risk of structure ignition, provide safe access for emergency fire equipment, and facilitate civilian evacuation.

Defensible Space consists of a 100-foot wide area around all structures where hazardous vegetation, debris, and other types of combustible materials are treated, cleared, or reduced to slow the rate and intensity of an approaching wildfire. Los Gatos divides the 100-foot defensible space area into two zones. The first zone is nearest to the structure and covers the area from the exterior of the structure (or an attached accessory structure such as a deck) out to 30 feet from the structure. The second zone extends from 30 feet to 100 feet from the structure. New construction within the Town of Los Gatos must also create a five-foot wide noncombustible area that begins at the structure's exterior. In addition to the defensible space area around the structure, a 10-foot wide strip of defensible space must be maintained along access roads and driveways. Finally, defensible space must be maintained around liquified petroleum gas tanks and containers, as well as water tanks and water pump structures. Figure 5 shows the Project site layout with the defensible space and fuel modification Zones outlined.

Vegetation cover on the Project site is predominantly annual grasslands with heavier fuels limited to several rows of walnut trees. Post-development, the majority of the trees would be gone, and the portion of the project within the development footprint (building + hardscape) would be converted from annual grasslands to either non-combustible surfaces, maintained landscaping, or a structure. The hillside behind the homes on lots 1 through 7 will remain undeveloped and will continue to be covered with annual grasslands post-development.

### 3.6.2 SCCFD Defensible Space Requirements by Zone

#### Immediate Zone (0 to 5 feet from the structure)

The Immediate Zone reduces the likelihood of structure ignition by reducing the potential for direct ignition of the structure from flame contact, embers that accumulate at the base of a wall, and/or indirect ignitions when embers ignite vegetation, vegetation debris, or other combustible materials located close to the structure, resulting in either radiant heat and/or direct flame contact exposure to the structure.

The Immediate Zone is the horizontal area within the first five feet around the structure, garage, any outbuildings, attached decks, and stairs. Zone 0 is measured from the edge of a structure, attached decks, patio covers, balconies, and floor projections above grade. The zone also includes the area under attached decks and stair landings.

The Immediate Zone is the most vulnerable and should be the most aggressively maintained for fire resistance through the following practices:

- Clean roofs and gutters of dead leaves, debris, and pine needles that could catch embers.
- Replace or repair any loose or missing shingles or roof tiles to prevent ember penetration.
- Clean debris from exterior attic vents and install 1/8 inch metal mesh screening to block embers.
- Repair or replace damaged or loose window screens and any broken windows.
- Remove combustible materials from beneath decks or porches. Screen or box-in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating.
- Move any flammable material away from wall exteriors – lumber, cardboard, and combustible debris.
- Leaf litter should be cleaned up and disposed of regularly. Dead plants should be removed promptly.
- Trim back tree and large shrub branches that grow into the Immediate Zone to a minimum of 5 feet from the structure and 10 feet from a chimney.
- No vegetation is permitted in this zone.

**Note:** As required by State Law, regulations for the Immediate Zone are under development by the State Board of Forestry and were initially scheduled to take effect January 1, 2023, for all new buildings and January 1, 2024, for all existing buildings, however, as stated, these regulations are still under development with no set date of enforcement. Any State regulation more restrictive than this standard will apply.

### **Intermediate Zone (5 to 30 feet from the structure)**

Intermediate Zone reduces the likelihood of fire burning directly to the structure. This is accomplished by modifying fuels and creating a discontinuity between planting groups that limits the pathways for fire to burn to the structure and reduces the potential for near-to-building ember generation and radiant heat exposures. This zone shall consist of planting low-growth, drought-tolerant, and fire-resistant plant species. An additional purpose of this zone is to provide a defendable area for fire personnel to stage and take direct action.

Intermediate Zone is an area within 5 to 30 feet of structures. The vegetation within the Intermediate Zone will be maintained to break up fuel pathways to structure and to minimize fire behavior through the following practices:

- Remove all dead plants, grass, and weeds (vegetation).
- Remove dead or dry leaves and pine needles from your yard, roof, and rain gutters.
- Trees and shrubs will be maintained to create 10 feet of horizontal space between tree or shrub crowns.
- Lower branches will be removed from trees to create a minimum of 6 feet of clearance between the lowest branches and the surface vegetation (or 1/3 of the tree height for trees less than 10 feet in height).
- Do not install woody shrubs beneath trees. Remove existing shrubs and small trees growing beneath mature trees.

- Remove branches that hang over your roof and keep dead branches 10 feet away from your chimney.
- Irrigate and maintain landscaping in this Zone to keep plants healthy with minimal dead material.
- Landscaping installed in this zone will be based on the characteristics of the plants found on the fire-resistant plant species in the Project landscape plans

### Extended Zone (30 to 100 feet from the structure)

The Extended Zone is designed to interrupt the fire's path to the structures and minimize fire behavior by reducing fuel volumes and separating surface vegetation from tree crowns. This keeps flame heights low and minimizing the risk of extreme fire behavior. The vegetation within the Extended Zone will be maintained to minimize fire behavior through the following practices:

- Cut or mow annual grass down to a maximum height of 4 inches.
- Remove all dead plants, grass, and weeds.
- Landscaping installed in this zone will be based on the characteristics of the plants found on the fire-resistant plant species in the Project landscape plans.
- Trees and shrubs will be maintained to create 15 feet of horizontal space between tree or shrub crowns.
- Lower branches will be removed from trees to create a minimum of 6 feet of clearance between the lowest branches and the surface vegetation (or 1/3 of the tree height for trees less than 10 feet in height).
- Do not install woody shrubs beneath trees. Remove existing shrubs and small trees growing beneath mature trees.

### 3.6.3 Roadside Vegetation Maintenance

Maintenance of the vegetation within the Project boundaries along Project access road ensures the Project site is accessible to emergency equipment and that extreme fire behavior near the road won't block egress from the site. The vegetation within 10 feet of both sides of Project access roads should be maintained according to the following recommendations:

- Ground cover and annual grass and plants will be maintained to a height of four inches or less.
- Dead vegetation, including shrubs and trees, will be promptly removed.
- Lower branches will be removed from trees to create a minimum of 6 feet of clearance between the lowest branches and the surface vegetation (or 1/3 of the tree height for trees less than 10 feet in height).
- Trim tree branches overhanging the roadway to maintain fourteen feet of vertical clearance.
- Maintain vegetation within 3 feet of a fire hydrant:

- Cut grass and groundcover to 4 inches in height or less
- Trim back tree and shrub branches growing into the 3 feet area around the hydrant.
- Remove shrubs growing in the 3 foot area around the hydrant.

### 3.6.4 Hillside Open Space Vegetation Maintenance

The project would maintain a 50-foot wide strip of managed vegetation that runs along the perimeter of the Project. This strip of vegetation would begin on the north side of the developed area of Lot 1 and extend northwest along Sky Lane to the north property line. At the north property line, the strip would extend east across the hillside to the east property line in lot 7. Then, the strip would extend south to connect to Shannon Road. Vegetation within this strip, which is predominantly annual grasslands, would be maintained according to the following recommendations.

- Annual grass and plants will be maintained to a height of four inches or less.
- Dead vegetation, including shrubs and trees, will be promptly removed.
- Lower branches will be removed from trees to create a minimum of 6 feet of clearance between the lowest branches and the surface vegetation (or 1/3 of the tree height for trees less than 10 feet in height).
- Cut material will be removed and safely disposed of off-site.

This 50 foot wide strip would reduce the intensity and spread of fire moving up the open space hillside and minimize the risk of a high intensity fire spreading onto adjacent properties.

### 3.6.5 Fire Resistant Landscaping

Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. The Project will install landscaping that minimizes the flammability of the vegetation by carefully arranging the installed plants and selecting species with fire-resistant characteristics. Appendix B contains a list of plant species from the Fire Safe Marin Fire Resistant Plants Common to Marin County, CA list. (Fire Safe Marin 2019)

The area within 5 feet of the exterior of a structure is a non-combustible zone; no landscaping will be installed in this area per Section 4907.1 c of the Los Gatos Municipal Code.

#### Layout

Plant arrangement and location on the Project landscape plans will consider fire spread and fire behavior in the layout of landscaping around Project structures and roadways. Layout considerations will include minimizing the creation of vertical fuel continuity by avoiding the placement of large shrubs (those over 18 inches in height) beneath trees. Woody shrubs and trees will be arranged as discrete islands, separated by non-combustible hardscape or fire-resistant ground cover, rather than in large, continuous areas of tree or shrub cover. Near structures (within 30 feet), trees, and large shrubs, installations will be limited to single specimens or small groups. No woody shrubs or trees will be located within 5 feet of a structure.

### Spacing

Trees and shrubs will be located so that there is adequate horizontal and vertical space between adjacent tree crowns (minimum of 10 horizontal feet), tree crowns and nearby structures (5 to 10 horizontal feet), and tree crowns and surface vegetation (6 vertical feet). Trees will not be installed within 5 feet of a structure, and low-growing woody shrubs will be installed with a minimum of 10 horizontal feet of separation. Tables 2 and 3 describe the recommended distances between tree canopies (Table 2) and distances between shrubs (Table 3) based on slope.

Table 2. Distance Between Tree Canopies by Percent Slope

Percent of Slope	Required Distances Between Edge of Mature Tree Canopies <sup>1</sup>
0 to 20	10 feet
21 to 40	20 feet
41+	30 feet

<sup>1</sup> Determined from canopy dimensions as described in Sunset Western Garden Book (Current Edition)

Table 3. Distance Between Shrubs by Percent Slope

Percent of Slope	Required Distances Between Edge of Mature Tree Canopies <sup>1</sup>
0 to 20	2 X Shrub Height
21 to 40	4 X Shrub Height
41+	6 X Shrub Height

<sup>1</sup> Based on guidance from SCCFD Ready, Set, GO Website)

### Species

The Project landscape plans will include plant species with fire-resistant characteristics, including high moisture content in leaf and stem tissues, low leaf litter and deadwood production, and shrubs and trees that 'self-prune' dead branches. The plant palette will consider the mature size of the selected plant species and only include species appropriate for the size of the landscaping areas at the Project site.

## 3.6.6 Long Term Maintenance Practices

When the 14915 Shannon Road project is completed, the majority of the vegetation present within 30 feet of the structures will be newly installed landscaping consisting of young plants, shrubs, and trees. This new vegetation presents a very low fire risk due to its overall low fuel volume and generally small size, as evidenced by adequate spacing, small crowns, minimal deadwood, and other characteristics. However, as the landscaping in the project ages, the plants will grow to fill the planting areas; ground cover will expand along the surface, shrubs will grow taller and denser, and trees will grow taller with larger crowns and a greater canopy volume. All plants, even those listed on the Fire Safe Marin Fire Resistant Plants Native to Marin County, CA, will develop undesirable characteristics for fire prevention, including accumulating leaf litter and deadwood. The annual grasslands on the hillsides will continue to present a high fire risk after the grass has cured and weather conditions permit the growth of fires.

Regular maintenance can minimize the risk that the vegetation within the Project, both the installed landscaping and existing hillside vegetation, develops undesirable characteristics. The timing of this regular maintenance throughout the project's life will vary based on the Home Ignition Zone. The list below contains recommended maintenance intervals based on the zone in which it is located.

As a final note, state and local defensible space codes do not require vegetation maintenance beyond a property owner's property lines. Therefore, the owners of the 9 Lots that compose this Project are not required to manage the vegetation beyond their property lines.

## Immediate Zone

### As needed

- Move stored combustible materials (e.g., debris, lumber, firewood, cardboard, etc.) to 30 feet from the structure.
- Clean up accumulated leaf litter, particularly accumulations in contact with the structure.

### Annually

- Check and clean out gutters, roof valleys, and other portions of the roof where needle cast or leaf litter has accumulated.

### Periodic (3 to 7 years)

- Trim back tree and large shrub branches that grow into the Immediate Zone to a minimum of 10 feet from the structure and 10 feet from a chimney.

## Intermediate Zone

### As needed

- Remove dead vegetation promptly.

### Annually

- Clean up accumulated leaf litter.
- Check the irrigation system to ensure proper functioning and that landscaping is receiving adequate water to maintain healthy, high-moisture-content, fire-resistant vegetation.
- Maintain shrubs to 3 feet in height or less and with 10 feet of horizontal separation between shrubs. Shrubs growing beneath trees should be maintained at 18 inches in height or less.
- Replace dead and removed landscaping with the fire-resistant plant species in the Project landscape plans or the Fire Scaping With Native Plants list from the Fire Safe Marin Fire-Resistant Plants Common to Marin County, CA list.
- Remove combustible materials and debris.

- Cut, mow, or treat annual grasses and weeds to maintain at 4 inches in height or less. This should be done from late spring to early summer (May to June) after the annual vegetation has cured.
- Remove weeds and unwanted vegetation growing in landscaping areas and along roads.

#### **Periodic (3 to 7 years)**

- Trim lower branches from trees to maintain six feet of vertical space (or 1/3 of the tree height for trees less than 10 feet tall) between the surface vegetation and the lowest branches.
- Trim trees to maintain a minimum of 10 feet of horizontal space between tree crowns, at least 10 feet of horizontal space from a structure exterior wall, and 10 feet of space from a chimney.
- Trim trees and shrubs to remove deadwood.

#### **Extended Zone**

#### **As needed**

- Remove dead vegetation promptly.

#### **Annually**

- Clean up accumulated leaf litter within the developed areas on the two terraces. Remove accumulations of leaf litter greater than 4 inches in depth from the hillside areas.
- Check the irrigation system to ensure proper functioning and that landscaping is receiving adequate water to maintain healthy, high-moisture-content, fire-resistant vegetation.
- Maintain shrubs to 6 feet in height or less and with 10 feet of horizontal separation between shrubs. Shrubs growing beneath trees should be maintained at 18 inches in height or less.
- Replace dead and removed landscaping with the fire-resistant plant species in the Project landscape plans or the Fire Safe Marin Fire-Resistant Plants Common to Marin County, CA list.
- Remove combustible materials and debris.
- Cut, mow, or treat annual grasses and weeds to maintain at 4 inches in height or less. This should be done from late spring to early summer (May to June) after the annual vegetation has cured.

#### **Periodic (3 to 7 years)**

- Trim lower branches from trees to maintain six feet of vertical space (or 1/3 of the tree height for trees less than 10 feet tall) between the surface vegetation and the lowest branches.
- Trim trees to maintain a minimum of 10 feet of horizontal space between tree crowns.
- Trim trees and shrubs to remove deadwood.

## Roadside Areas

### As needed

- Remove dead vegetation promptly.

### Annually

- Check the irrigation system to ensure proper functioning and that landscaping is receiving adequate water to maintain healthy, high-moisture-content, fire-resistant vegetation.
- Mow or cut vegetation within three feet of a fire hydrant to four inches in height or less.
- Remove weeds growing in landscaped areas.
- Cut, mow, or treat annual grasses and weeds to maintain at 4 inches in height or less. This should be done from late spring to early summer (May to June) after the annual vegetation has cured.
- Trim shrubs to a height of 18 inches or less.

### Periodic (3 to 7 years)

- Trim lower branches from trees to maintain a minimum of six feet of vertical space (or 1/3 of the tree height for trees less than 10 feet tall) between the surface vegetation and the lowest branches. Trim lower branches off trees that obscure road signs.
- Trim tree crowns overhanging the roadway to maintain a minimum of 14 feet of vertical clearance above the road surface.
- Trim trees and shrubs to remove deadwood.

## Open Space Hillside

### As needed

- Remove dead woody vegetation promptly.

### Annually

- Cut, mow, or treat annual grasses and weeds to maintain at 4 inches in height or less. This should be done from late spring to early summer (May to June) after the annual vegetation has cured.

### Periodic (3 to 7 years)

- Trim lower branches from trees to maintain a minimum of six feet of vertical space (or 1/3 of the tree height for trees less than 10 feet tall) between the surface vegetation and the lowest branches. Trim lower branches off trees that obscure road signs.
- Trim tree crowns overhanging the roadway to maintain a minimum of 14 feet of vertical clearance above the road surface.
- Trim trees and shrubs to remove deadwood

### 3.6.7 Fire Prevention During Construction

Construction presents wildfire risks at the site that would generally not be present once the Project is complete and inhabited. These include the use of heavy equipment, storage of large amounts of combustible materials and debris, and hot work or work involving open flames or sparks. Fire prevention during the construction of the Project includes the fire protection features described in this FPP, including fire department access and water supply, and several additional measures intended to mitigate specific construction risks, such as ignition from equipment use.

This section's recommendations are based on the requirements in Chapter 33 of the CFC and the standards described in the SI-7 Construction Site Safety document published by the SCCFD.

#### Owner's Responsibilities

1. The Project owner will designate a person to be the fire prevention program superintendent. This person will be responsible for the fire prevention program and ensure that the measures in the program are carried out through the completion of the project.

#### Fire Safety Requirements

1. Fire Department Access Roads
  - a. All the Project construction sites will be accessible to the fire department by a roadway with an all-weather driving service of at least 20 feet of unobstructed width. Access roads will be completed prior to the delivery of combustible materials to the Project site.
2. Key Boxes
  - a. Key boxes and approved padlocks will be required when access is necessary through locked gates or structures.
3. Fire Hydrants
  - a. The underground water mains and hydrants required for the Project structures will be installed, completed, and in service, before combustible construction materials accumulate on site.
4. Fire Reporting
  - a. The construction site will have provisions for emergency notification of the fire department by telephone or cellular phone. The street address of the construction site, along with the number for the public safety answering point, will be posted adjacent to the telephones at the job trailer.
5. Premises Identification
  - a. The address numbers of the property or project location will be plainly visible and legible from the Shannon Road access points.
6. Combustible Debris

- a. Wood, cardboard, packing material, form lumber, and similar combustible debris will not accumulate within buildings. Such debris, rubbish, and waste will be removed from buildings daily.
- b. Oily rags and similar material will be stored in metal or other approved containers equipped with self-closing and tight-fitting covers

7. Temporary Heating Equipment

8. Temporary heaters, such as those fueled by Liquefied Petroleum Gas (LPG), shall be listed/labeled in accordance with the California Mechanical Code and installed, used, and maintained according to the manufacturer's instructions. Heating devices will be secured properly and kept clear of combustible materials.

9. Smoking

- a. Smoking is prohibited anywhere inside or on the roof of a new structure under construction or in the project work area of structures undergoing alteration. A suitable number of "No Smoking" signs shall be posted to ensure that smoking is controlled. Smoking is prohibited within 10 feet of combustible vegetation.

10. Vehicle Parking

- a. All vehicle parking areas will be located at least 20 feet from structures under construction and areas with unmaintained vegetation.

11. Combustible Material Storage

- a. Combustible construction materials will be stored at least 20 feet from structures under construction.

12. Fire Protection Systems

- a. Automatic fire sprinkler systems in the new structures will be placed in service as soon as possible.
- b. Fire extinguishers will be provided in each structure and mounted on a wall or post at each usable stairway. The travel distance to an extinguisher will not exceed 75 feet.

13. Vegetation Management

- a. A 30-foot wide area of maintained vegetation (or bare soil) around each structure and within 10 feet of both sides of an access road should be maintained throughout construction.

14. Hot Work and other activities capable of initiating fires

- a. Prior to the start of hot work, the work area will be inspected to ensure that it is clear of combustibles and that combustibles are protected.
- b. Fire extinguishers will be available at the location where the hot work is being performed.
- c. A Fire Watch will be available to monitor the work area for at least 30 minutes after the conclusion of the hot work.

## Construction Work during Red Flag Warnings

A Red Flag Warning (RFW) is a term used by fire-weather forecasters to call attention to limited weather conditions of particular importance that may result in extreme burning conditions. It is issued when there is a high degree of confidence that Red Flag criteria will occur within 24 hours of issuance. Red Flag criteria occur whenever a geographical area has been in a dry spell for a week or two or for a shorter period after annual vegetation has cured. The National Fire Danger Rating System (NFDRS) is high to extreme. The following forecast weather parameters are forecasted to be met (NWS 2024): The following weather conditions constitute Red Flag Warning criteria.

- 1) a sustained wind average of 15 mph or greater
- 2) relative humidity less than or equal to 25 percent and
- 3) a temperature of greater than 75 degrees F.

Dry lightning and unstable air are also criteria for the project area. A Fire Weather Watch may be issued prior to the Red Flag Warning. Project construction personnel can view current weather conditions, including any alerts or warnings for the Project area National Weather Service (NWS), at <https://www.weather.gov/mtr/>.

When an RFW has been issued for the Project area, which most frequently occurs in September and October, extra care should be taken during construction, particularly when performing activities involving motorized equipment or open flames. The following measures are recommended during an RFW.

- Vehicles should not be parked on top of dry, combustible vegetation.
- Hot work should be performed in the morning when the weather is cooler and the humidity is higher.
- Outdoor smoking is prohibited.
- Stationary motorized equipment such as generators should be located 30 feet or more from any combustible materials.

## 4 Conclusion

This Preliminary Fire Protection Plan for the 14915 Shannon Road Project, provides guidance for vegetation maintenance for the proposed defensible space areas on the site. The requirements and recommendations outlined in this Preliminary Fire Protection Plan have been specifically designed for the 14915 Shannon Road Project. This analysis and its fire protection justifications are supported by fire science research, results from previous wildfire incidents, and fire agencies that have approved these concepts.

Ultimately, this Preliminary Fire Protection Plan aims to provide comprehensive guidance for the fire protection efforts associated with the Project. Implementation of the measures detailed in this Preliminary Fire Protection Plan will reduce the risk of wildfire at this site and enhance firefighters' ability to fight fires on the properties, protecting property and neighboring resources, regardless of the cause or location of ignition.

It is essential to note that during extreme fire conditions, there are no guarantees that a given structure will not be affected by fire. Precautions and minimizing actions identified in this report are designed to reduce the likelihood that fire will impinge upon Project assets or threaten its visitors. Additionally, there are no guarantees that fire will not occur in the area or that fire will not damage property or cause harm to persons or their property. Implementation of the required enhanced construction features specified in the applicable codes, along with the fuel modification requirements outlined in this Preliminary Fire Protection Plan, will reduce the site's vulnerability to wildfire. It will also help achieve the goal of this Preliminary Fire Protection Plan, which is to support firefighters in their efforts to protect structures.

In summary, the mitigating measures implemented within the Project, listed below, accomplish two complementary primary objectives. These measures simultaneously protect the buildings within the development from potential ember showers while reducing the present wildfire risk to the community, as observed today, by removing a large quantity of fuels and reducing potential ignition points that exist at the project location. This means the project does not substantially contribute to a more significant risk to the existing community. Implementation of the Letter FPP's detailed wildfire project enhancement measures will result in a less than significant impact with regard to fire hazards. Among the measures are:

- Project buildings will be constructed of ignition-resistant<sup>2</sup> Construction materials and automatic fire sprinkler systems, based on the latest adopted Building and Fire Codes for various occupancy types, are also included.
- A minimum of 100 feet of on-site Fuel Modification will be provided around each of the proposed building structures, as required by SCCFD. Areas of development that do not achieve a full 100 feet of on-site defensible space will be demonstrated to meet code requirements and codes that exceed alternative methods of design.
- Landscape plantings will not utilize prohibited plants that have been found to be highly flammable and more prone to ignition.
- Water supply and delivery ensure a reliable water source for operations and during emergencies that require extended fire flow.

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<sup>2</sup> A type of building material that resists ignition or sustained flaming combustion sufficiently to reduce losses from wildland-urban interface conflagrations under worst-case weather and fuel conditions with wildfire exposure of burning embers and small flames, as prescribed in CBC, Chapter 7A and State Fire Marshal Standard 12-7A-5, Ignition-Resistant Materials.

- Access roads that provide two separate entrance and exit points to the Project to accommodate both incoming emergency traffic and outgoing residents.

The goal of the fire protection features provided for the Project is to provide the structures with the ability to survive a wildland fire with little intervention from firefighting forces. Preventing ignition to structures results in a reduction of the exposure of firefighters and residents to hazards that threaten personal safety. It will also reduce property damage and losses. Mitigating ignition hazards and reducing the potential for fire spread can help protect structures and enable the fire department to optimize the deployment of personnel and apparatus during a wildfire. The analysis in this Preliminary Fire Protection Plan provides support and justification for the acceptance of the proposed fuel modification zones for the proposed Project, based on the site-specific fire environment.

## 5 Limitations

This is a Preliminary Fire Protection Plan based on a preliminary plan set. It is anticipated that some elements of the Project may change as it progresses throughout the planning and approval process, and some of these changes will impact the recommendations in this Preliminary Fire Protection Plan, rendering them less effective or no longer in compliance with SCCFD requirements. When these changes to the Project occur, this Preliminary Fire Protection Plan will need to be updated.

Inasmuch as fire is a dynamic and often unpredictable occurrence, it cannot be guaranteed that, despite precautionary measures, a fire will not occur or that it will not result in injury, loss of life, or damage to or loss of property. No warranties expressed or implied are made herein, notwithstanding that, the goal remains to identify a suite of appropriate measures calculated, to the extent feasible under the circumstances, that would mitigate the potential for such injury or damage.

### Limitation On Reliance Or Dependence Upon Report.

*Any person or entity furnished with this report and who reviews it agrees that the advance written consent of Dudek is sought and furnished to such person or entity prior to the review, reliance, or authorization as to any matters that are the subject of the reports by any person or entity (whether through act or omission as set forth in the report), other than Dudek's direct client. In such case, obtaining Dudek's consent shall not be subject to any fee or charge (other than reasonable copy costs, where applicable).*

*Dudek expressly disavows, does not assume any responsibility for, nor will be liable for any claims, losses, or damages associated with any matters that are the subject of this or other reports it prepares or contributes to respecting this project, however, characterized (including without limitation as sounding in tort, breach of contract, misrepresentation by act or omission, failure to adhere to applicable standards of professionalism, statutory liability, etc.), whether in law or equity, whether known or unknown, and whether actual or contingent, excepting only Dudek's direct client, as to which the limitation of liability provisions in the contract between Dudek and its client shall govern.*

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SCCFD (Santa Clara County Fire Department. 2021. D-1-Specification-for-Driveways-Turanrounds-and-Turn-Outs. Santa Clara County Fire Department. Cambell, CA.

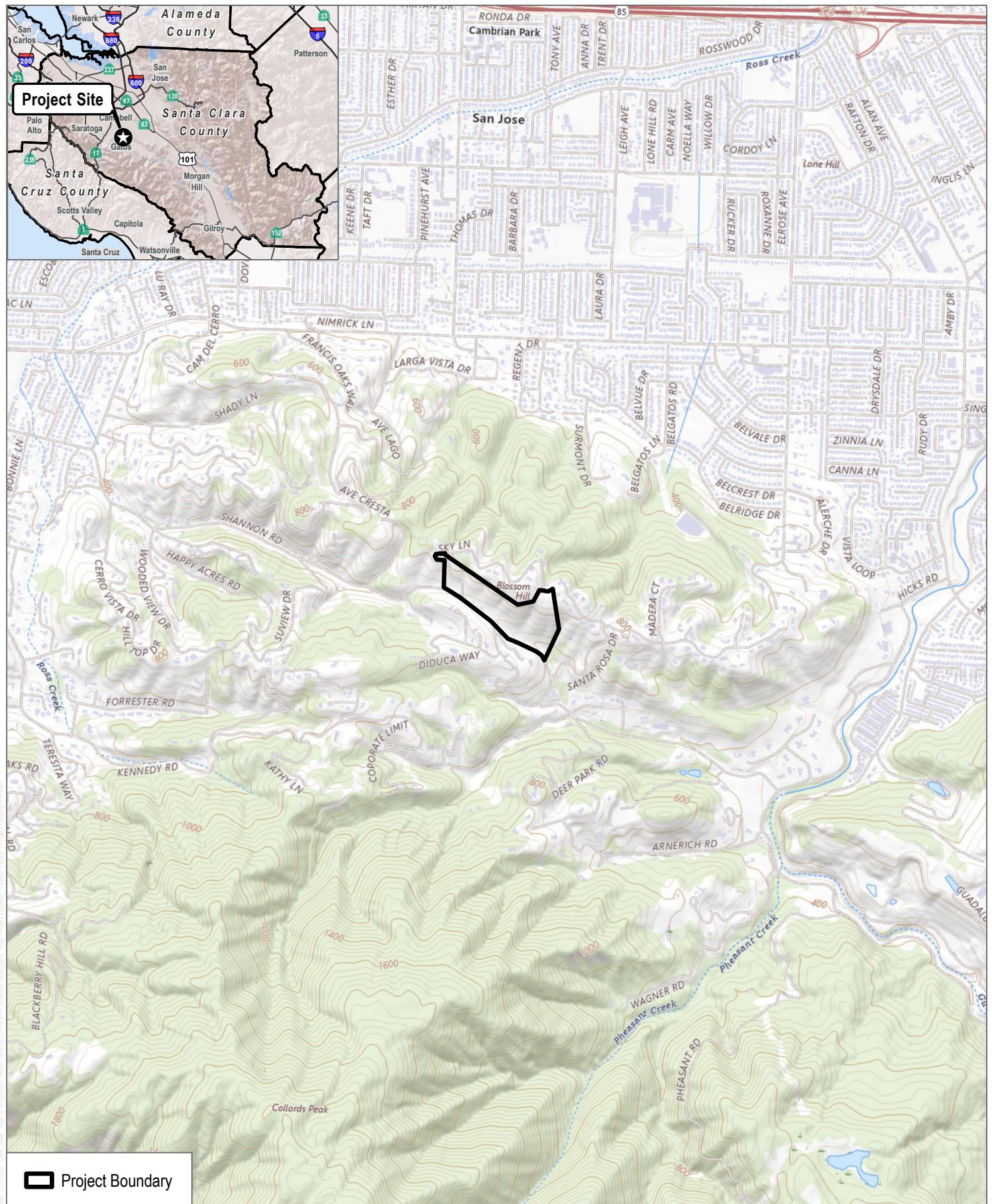
SCCFD (Santa Clara County Fire Department. 2023. SP-6-Sprinkler-in-One-and-Two-Family-Dwellings-. Santa Clara County Fire Department. Cambell, CA.

SCCFD (Santa Clara County Fire Department. 2021. SI-7-Construction-Site-Safety-. Santa Clara County Fire Department. Cambell, CA.

TO: SANTA CLARA COUNTY FIRE DEPARTMENT  
SUBJECT: PRELIMINARY FIRE PROTECTION PLAN FOR 14915 SHANNON DRIVE

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Figure 1- Project Location Map



## FIGURE 1

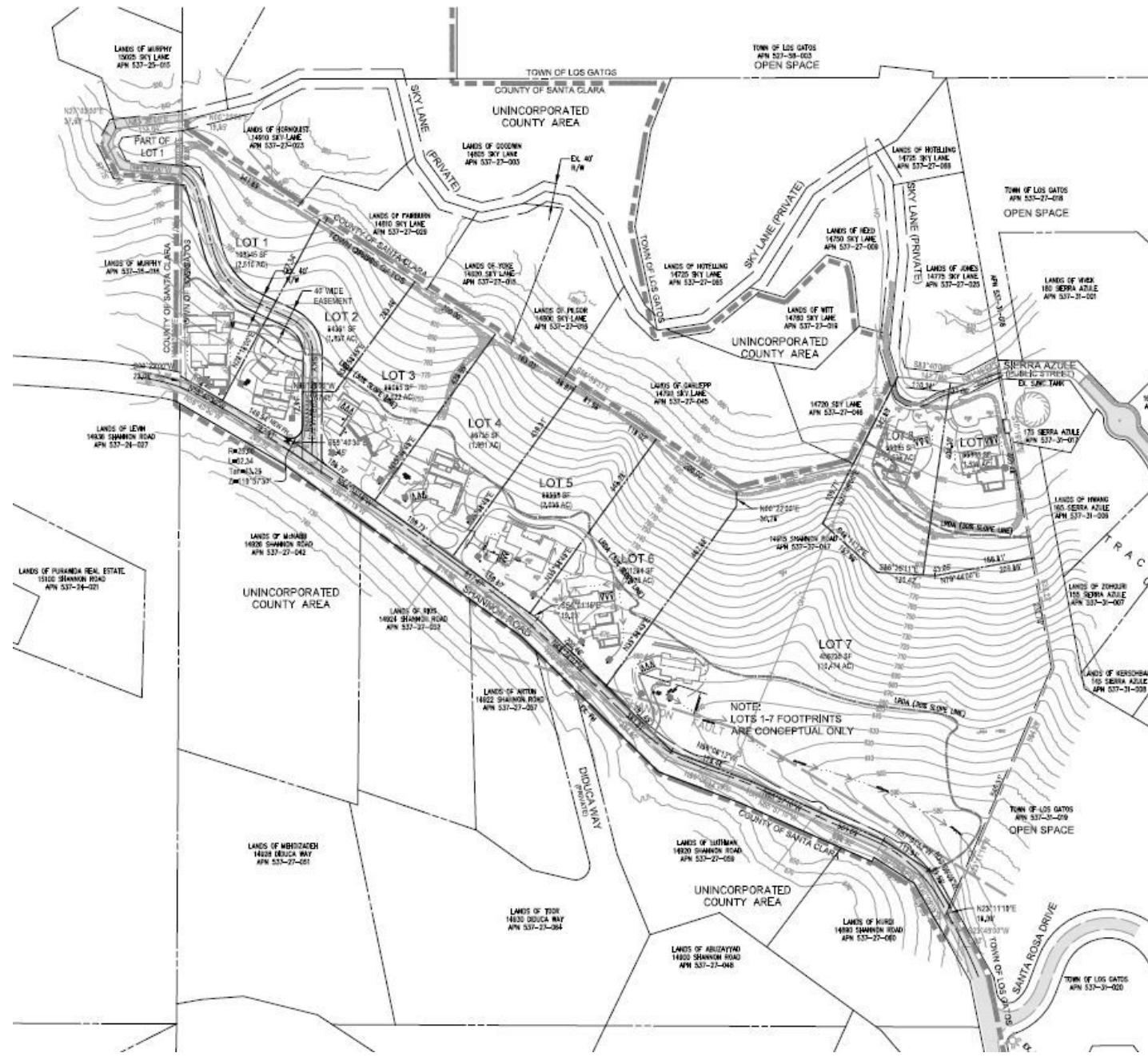
## Project Location

14915 Shannon Road Fire Protection Plan

TO: SANTA CLARA COUNTY FIRE DEPARTMENT  
SUBJECT: PRELIMINARY FIRE PROTECTION PLAN FOR 14915 SHANNON DRIVE

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Figure 2- Project Architectural Site Plan



SOURCE: TSCivil Engineering (2025)

**DUDEK**

## FIGURE 2

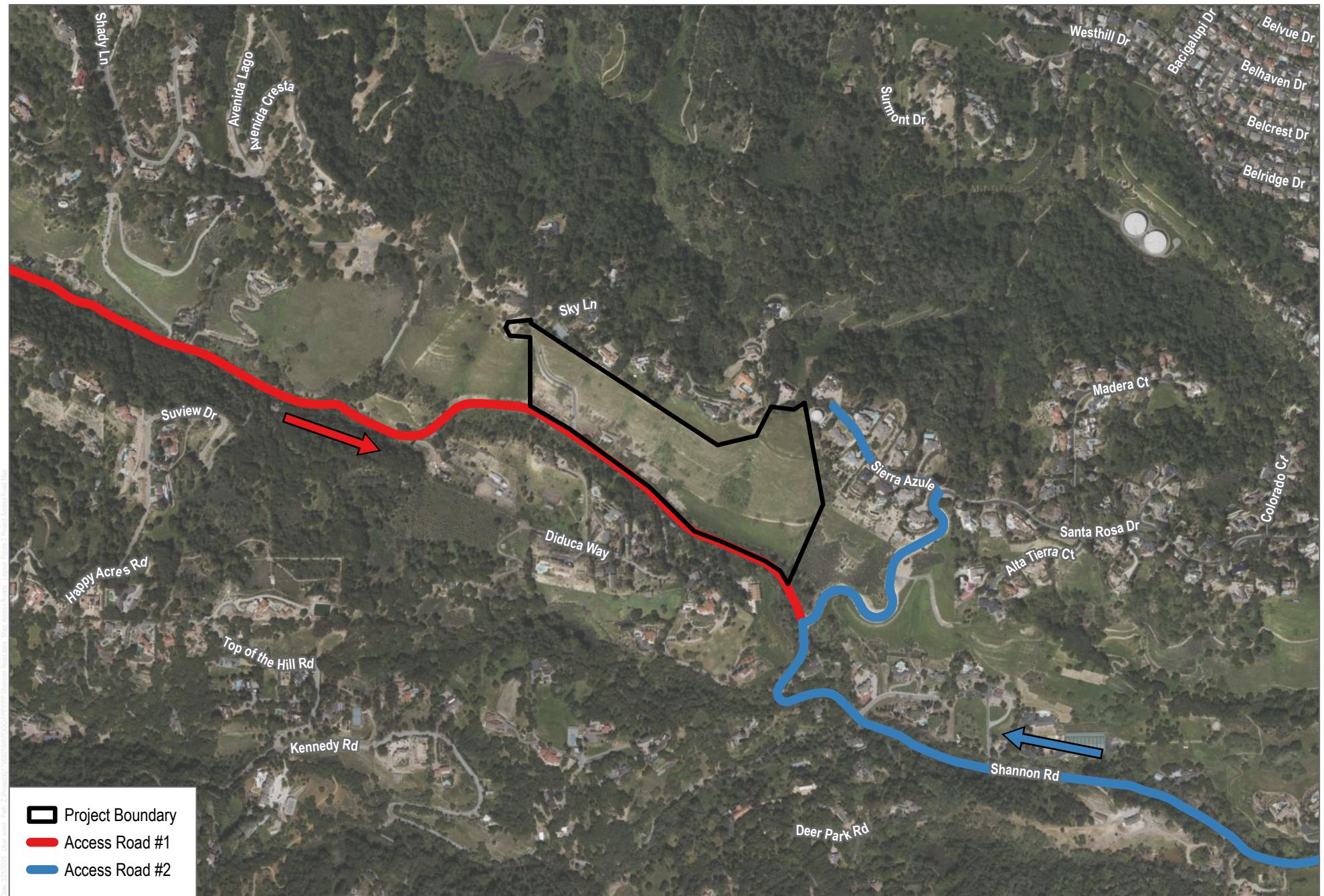
## Project Layout

14915 Shannon Road Fire Protection Plan

TO: SANTA CLARA COUNTY FIRE DEPARTMENT  
SUBJECT: PRELIMINARY FIRE PROTECTION PLAN FOR 14915 SHANNON DRIVE

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Figure 3 Project Access Road Map



SOURCE: Bing Maps 2024; Open Street Maps 2019; Santa Clara County Roads 2016

**DUDEK**

0 400 800  
Feet

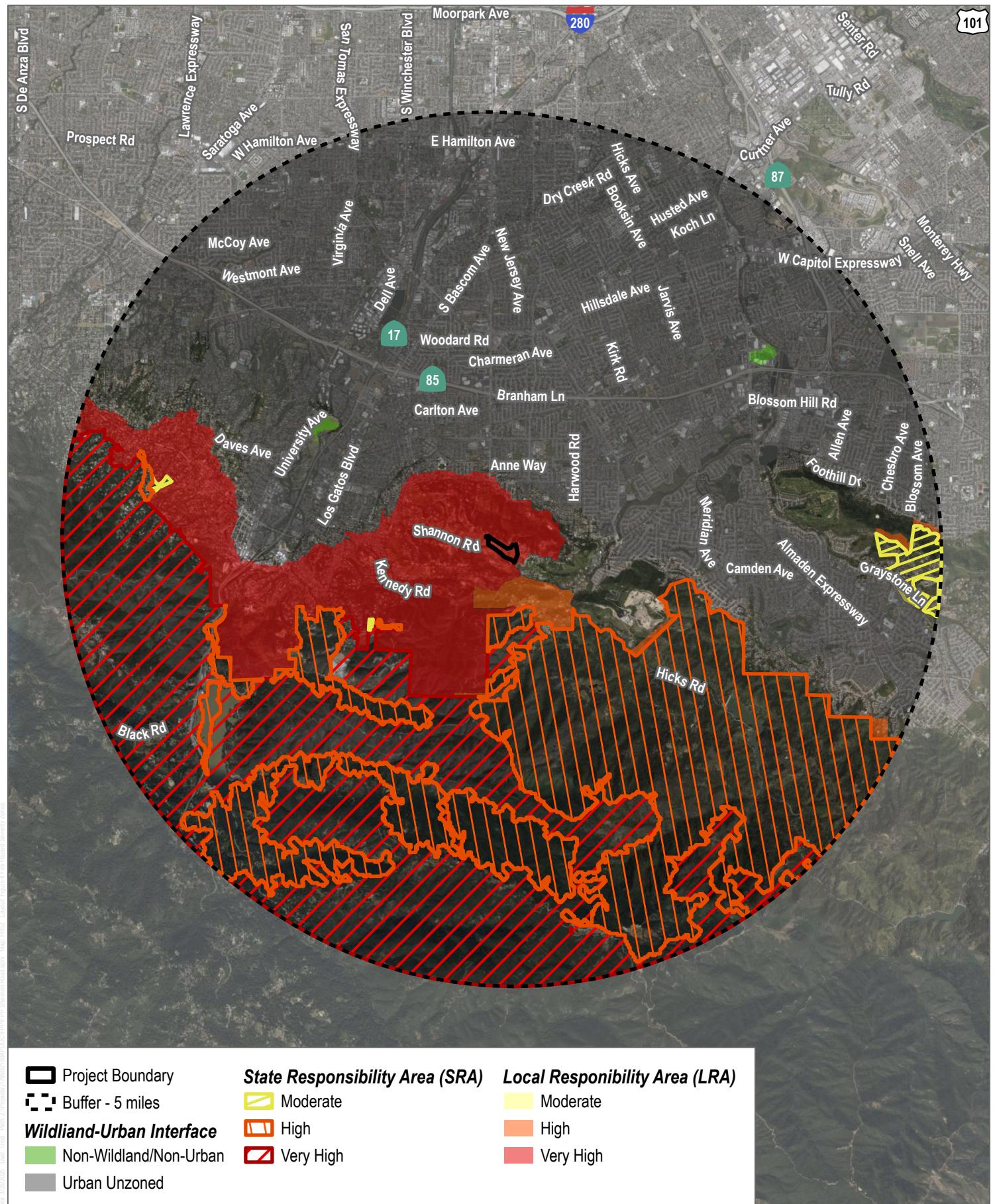
**FIGURE 3**

**Project Access Road Map**  
14915 Shannon Road Fire Protection Plan

TO: SANTA CLARA COUNTY FIRE DEPARTMENT  
SUBJECT: PRELIMINARY FIRE PROTECTION PLAN FOR 14915 SHANNON DRIVE

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Figure 4 CAL FIRE Fire Hazard Severity Zone Map



SOURCE: Bing Maps 2024; CalFire 2024; OpenStreetMaps 2019

**DUDEK**



0 0.75 1.5 Miles

**FIGURE 4**

Fire Hazard Severity Zones  
14915 Shannon Road Fire Protection Plan

TO: SANTA CLARA COUNTY FIRE DEPARTMENT  
SUBJECT: PRELIMINARY FIRE PROTECTION PLAN FOR 14915 SHANNON DRIVE

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Figure 4 Fire History Map

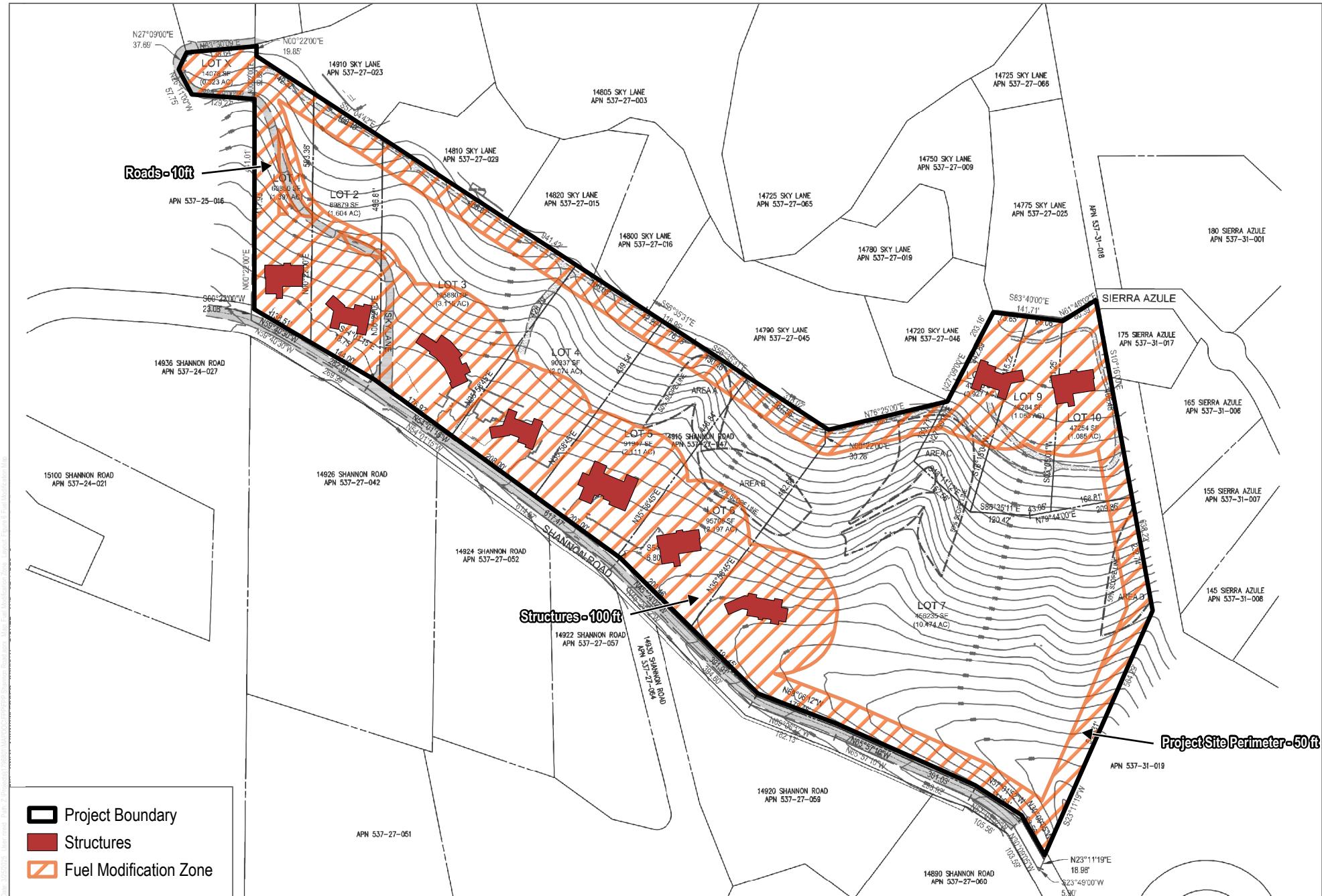


SOURCE: Bing Maps 2024; CalFire 2024; OpenStreetMaps 2019; CalFire 2025

**FIGURE 5**

**Fire History**

Figure 5 Defensible Space and Fuel Modification Zones



SOURCE: Bing Imagery 2024; OpenStreetMaps 2019

FIGURE 6

## Fuel Modification Map

14915 Shannon Road Fire Protection Plan

## **Attachment A**

### Representative Photographs

ATTACHMENT A SITE PHOTOS

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**Photo Number.1:** NW extension of Lot 1



**Photo Number 2:** Lots 1 & 2



**Photo Number.3:** Sky Ln and Lot 3



**Photo Number.4:** Shannon Rd. near Lots 4 & 5

ATTACHMENT A SITE PHOTOS

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**Photo Number.5:** Lots 8 & 9 looking north



**Photo Number.6:** Open space hillside above Lots 5-7



**Photo Number 7.** Sky Ln n looking east

**Photo Number.8:** Sierra Azule near Lots 8 & 9

## **Attachment B**

### Fire Safe Marin Fire Resistant Plants Native to Marin County, CA list

# Fire-Resistant Plants Common to Marin County, CA



Fire-resistant landscaping requires careful plant selection, placement, spacing, and maintenance to help resist the spread of fire to your home. Fire-resistant plants are usually easier to maintain and more naturally resistant to igniting from flames and embers. These plants are NOT "fireproof" and all require irrigation and frequent maintenance to resist ignition.

## FIRE-RESISTANT PLANT CHARACTERISTICS

- Tend to have leaves, not needles.
- Leaves tend to be supple, moist and easily crushed.
- Trees tend to be clean, not bushy, and have little deadwood.
- Shrubs are low-growing (2' or lower) with minimal buildup of dead material.
- Taller shrubs are clean, not bushy or twiggy.
- Sap is water-like and typically does not have a strong odor.
- Most fire-resistant trees are broad-leaf deciduous (lose their leaves), but some thick-leaf evergreens may also be fire-resistant.
- Most have low surface-area to volume ratios.
- Learn more at [www.firesafemarin.org/plants](http://www.firesafemarin.org/plants)

**FORM:** **C** - Cover (groundcovers) **G** - Grass **H** - Hedge or Screen **P** - Perennial **S** - Shrub **T** - Tree **V** - Vine

Species	Common Name(s)	Form	Species	Common Name(s)	Form
<i>Acer</i> spp.	Maple	T,H	<i>Fragaria vesca</i>	Wood Strawberry	C
<i>Achillea millefolium</i>	Yarrow	P	<i>Fraxinus</i> spp.	Ash	T
<i>Achillea tomentosa</i>	Woolly Yarrow	P, C	<i>Grindelia stricta, camporum</i>	Coastal Wild Gum	P
<i>Aeonium</i> spp.	Aeonium	P	<i>Hemerocallis</i> hybrids	Daylily	P
<i>Agapanthus</i> spp.	Lily-of-the-Nile	P	<i>Hesperaloe parviflora</i>	Red Yucca	P
<i>Agave</i> spp.	Agave	P	<i>Heuchera maxima</i>	Island Alum Root	P
<i>Ajuga reptans</i>	Carpet Bugle	C	<i>Heuchera micrantha</i>	Coral Bells	P
<i>Aloe</i> spp.	Aloe	P	<i>Iris douglasiana</i>	Douglas Iris	P
<i>Aquilegia formosa</i>	Western Columbine	P	<i>Iris macrosiphon</i>	Ground Iris	P
<i>Arbutus unedo</i>	Strawberry Tree	T	<i>Iris</i> spp.	Iris	P
<i>Armeria maritima</i>	Common Thrift	C	<i>Kniphofia uvaria</i>	Red Hot Poker (Torch Lily)	P
<i>Asarum caudatum</i>	Wild Ginger	P	<i>Lampranthus</i> spp.	Bush Ice Plant	C
<i>Berberis aquifolium</i> var. <i>repens</i>	Creeping Mahonia	S	<i>Lantana montevidensis</i>	Lantana	S
<i>Bergenia</i> spp.	Bergenia	P	<i>Lavandula</i> spp.	Lavender	S
<i>Brugmansia</i> spp.	Angel's Trumpet	S	<i>Lavatera assurgentiflora</i>	Malva Rose (Tree Mallow)	S
<i>Carpenteria californica</i>	Bush Anemone	S	<i>Iberis sempervirens</i>	Evergreen Candytuft	C
<i>Centaurea cineraria</i>	Dusty Miller	P	<i>Liriope gigantea</i>	Giant Turf Lily	C
<i>Cerastium tomentosum</i>	Snow-in-Summer	C	<i>Lonicera hispidula</i>	Pink Honeysuckle	V
<i>Ceratonia siliqua</i>	Carob	T	<i>Lupinus</i> spp.	Lupine	P
<i>Cercis occidentalis</i>	Western Redbud	T	<i>Macadamia</i> hybrids	Macadamia Nut	T
<i>Cercocarpus betuloides</i>	Mountain Ironwood	T	<i>Metrosideros excelsus</i>	New ZInd Christmas Tree	T
Citrus species	Citrus	T	<i>Mimulus</i> spp.	Monkey Flower	P, S
<i>Clinopodium [Satureja] douglasii</i>	Yerba Buena	P	<i>Monardella villosa</i>	Coyote Mint	P
Coleonema aka "Diosma"	Breath of Heaven	S	<i>Nolina</i> spp.	Nolina (related to Yucca)	S
<i>Convolvulus cneorum</i>	Bush Morning Glory	S	<i>Oenothera berlandieri</i>	Mexican Evening Primrose	P
<i>Coprosma kirkii</i>	Creeping Coprosma	C	<i>Pelargonium peltatum</i>	Ivy Geranium	C
<i>Coreopsis</i> spp.	Coreopsis	S	<i>Penstemon</i> spp.	Beard Tongue	P
<i>Cotyledon</i> spp.	Cotyledon	P	<i>Phyla nodiflora</i>	Common Lippia	C
<i>Crassula</i> spp.	Crassula	P	<i>Pistacia chinensis</i>	Chinese Pistache	T
<i>Delosperma "Alba"</i>	White Trailing Iceplant	C	<i>Polystichum munitum</i>	Sword Fern	P
<i>Dicentra formosa</i>	Western Bleeding Heart	P	<i>Portulacaria afra "Variegata"</i>	Elephant's Foot	P
<i>Dites bicolor</i>	African Iris	P	<i>Potentilla neumanniana</i>	Alpine Cinquefoil	C
<i>Dites vegeta</i>	Fortnight Lily	P	<i>Prunus lyonii</i>	Catalina Cherry	S
<i>Drosanthemum</i> sp.	Rosea Ice Plant	C	<i>Punica granatum</i>	Pomegranate	S
<i>Dudleya</i>	Dudleya or Cliff Lettuce	P	<i>Ranunculus californica</i>	Buttercup	P
<i>Echeveria</i> spp.	Hen and Chicks	P	<i>Rhaphiolepis</i> spp.	India Hawthorn	S
<i>Eouynmus Fortunei coloratus</i>	Winter Creeper	C	<i>Rhododendron (Azalea)</i> spp.	Rhododendrons & Azaleas	S
<i>Erigeron glaucus</i>	Beach Aster	C	<i>Rhus integrifolia</i>	Lemonade Berry	S
<i>Eriogonum</i> spp.	Wild Buckwheat	P	<i>Rhus lancea</i>	African Sumac	T
<i>Eriophyllum confertiforum</i>	Golden Yarrow	P	<i>Romneya coulteri</i>	Matilija Poppy	P
<i>Eriophyllum stachaedifolium</i>	Lizardtail	P	<i>Rosa banksiae</i>	Lady Banks' Rose	V
<i>Erysimum capitatum</i>	Foothill Wallflower	P	<i>Santolina chamaecyparissus</i>	Lavender Cotton	S, C
<i>Erysimum linifolium</i>	Wallflower	P	<i>Santolina virens</i>	Green Lavender Cotton	C
<i>Escallonia</i> spp.	Escallonia	S	<i>Sedum</i> sp.	Stonecrop	C
<i>Eschscholzia</i> spp.	California Poppy	P	<i>Senecio serpens, mandralisce, vitalis</i>	Blue chalksticks	C
<i>Fagus</i> spp.	Beech	T	<i>Sidalcea malviflora</i>	Checkerbloom	P
<i>Feijoa sellowiana</i>	Pineapple Guava	T	<i>Simmondsia chinensis</i>	Jojoba	S
<i>Festuca rubra</i>	Creeping Red Fescue	G, C	<i>Sisyrinchium bellum</i>	Blue-eyed Grass	P
<i>Fragaria chiloensis</i>	Beach Strawberry	C	<i>Sisyrinchium californicum</i>	Yellow-eyed Grass	P

Learn more about fire-resistant and fire-prone plants, defensible space, home hardening, and wildfire preparedness at [www.firesafemarin.org](http://www.firesafemarin.org)

Species	Common Name(s)	Form
<i>Sisyrinchium</i> spp.	Blue-Eyed Grasses	P
<i>Solanum jasminoides</i>	Potato Vine	V
<i>Solanum xanti</i>	Purple Nightshade	S
<i>Stachys byzantina</i>	Lamb's Ears	P
<i>Strelitzia reginae</i>	Bird of Paradise	P, S
<i>Symphiotrichum</i> [Aster] <i>chilensis</i>	Wild Aster	P
<i>Symporicarpos mollis</i>	Creeping Snowberry	V
<i>Tecomaria capensis</i>	Cape Honeysuckle	V
<i>Thymus praecox arcticus</i>	Creeping Thyme	C
<i>Toxicoscordion</i> [Zigadenus] <i>fremontii</i>	Star Lily	P
<i>Trachelospermum jasminoides</i>	Star Jasmine	S
<i>Triteleia</i> [Brodiaea] <i>laxa</i>	Grass Nut	P
<i>Tulbaghia violacea</i>	Society Garlic	P
<i>Vaccinium corymbosum</i>	Blueberry	S
<i>Verbena peruviana</i>	Perennial Verbena	C
<i>Yucca</i> spp.	Yucca	S
<i>Zauschneria californica</i>	California Fuchsia	P
<i>Acer ginnala</i>	Amur Maple	H
<i>Arbutus unedo</i>	Strawberry Tree	H
<i>Berberis</i> spp.	Barberry	H
<i>Buxus</i> spp.	Boxwood	H
<i>Camellia</i> spp.	Camelia	H
<i>Carissa grandiflora</i>	Natal Plum	H
<i>Ceratonia siliqua</i>	Carob	H
<i>Citrus</i> spp.	Citrus	H
<i>Cocculus laurifolius</i>	laurel-leaved snail tree	H
<i>Cornus stolonifera</i>	Red-osier Dogwood	H
<i>Cornus mas</i>	Cornelian Cherry, Sorbet	H
<i>Crateagus phaenopyrum</i>	Washington Thorn	H
<i>Dodonaea viscosa</i>	Hopbush	H
<i>Elaeagus angustifolia</i>	Russian Olive	H
<i>Elaeagus pungens</i>	Silverberry	H
<i>Eriobotrya japonica</i>	Loquat	H
<i>Escallonia rubra</i>	Escallonia	H
<i>Eugenia</i> spp.	Eugenia	H
<i>Euonymus</i> spp.	Euonymus	H
<i>Hibiscus rosa-sinensis</i>	Tropical Hibiscus	H
<i>Hibiscus syriacus</i>	Rose of Sharon	H
<i>Ligustrum</i> spp.	Privet	H
<i>Loncera</i> spp.	Honeysuckle Bush	H
<i>Malus</i> spp.	Apple	H
<i>Myrica californica</i>	Pacific Wax Myrtle	H
<i>Photinia x fraseri</i>	Photinia	H
<i>Pittosporum crassifolium</i>	Karo	H
<i>Pittosporum eugenoides</i>	Lemonwood	H
<i>Pittosporum tobira</i>	Mock Orange Pittosporum	H
<i>Pittosporum undulatum</i>	Victorian Box	H
<i>Plumbago auriculata</i>	Cape Plumbago	H
<i>Platycarpus gracilior</i>	Fern Pine	H
<i>Prunus caroliniana</i>	Cherry Laurel	H
<i>Prunus ilicifolia</i>	Hollyleaf Cherry	H
<i>Prunus laurocerasus</i>	English Laurel	H
<i>Pyrus kawakamii</i>	Evergreen Pear	H
<i>Rhamnus</i> spp.	Buckthorn	H
<i>Rhododendron</i> spp.	Rhododendron/Azalea	H
<i>Vaccinium</i> spp.	Blueberry	H
<i>Viburnum tinus</i>	Viburnum	H
<i>Xylosma congestum</i>	Xylosma	H

## Fire-Prone Plants



Some plants are particularly susceptible to fire: they may ignite readily and burn intensely, and should be removed or aggressively maintained if present near a home, road, or driveway. You may be required to remove some or all of these species depending on local fire codes if present within 100' of structures.

### FIRE-PRONE PLANT CHARACTERISTICS

- Often blade-leaf or needle-leaf evergreens, or grasses.
- Often have stiff, woody, small or fine, lacy leaves.
- Leaves and wood often contain volatile waxes, fats, terpenes or oils (crushed leaves will have strong odors).
- Sap is usually gummy, resinous, and may have a strong odor.
- Usually contain plentiful fine, twiggy, dry, or dead materials.
- May have pubescent (hair covered) leaves.
- May have loose or papery bark.
- Usually flame (not smolder) when ignited with a match.

This is a list of some common fire-prone plants in Marin. It's important to remember that other plants may share these characteristics, and ALL PLANTS can burn if poorly maintained. Many California natives are fire-prone, and some depend on fire to reproduce. Native trees should be maintained free of dead material, with no limbs within 6'-10' of the ground, and clear of shrubs beneath the canopy. Other fire-prone natives should be maintained in isolated stands more than 30' from structures.

Species	Common Name(s)
<i>Abies</i> spp.	Firs
<i>Acacia</i> spp.	Acacia species
<i>Adenostoma fasciculatum</i>	Chamise, Greasewood
<i>Arctostaphylos</i> spp.	Manzanita (some twiggy)
<i>Artemisia californica</i>	Coastal Sagebrush
<i>Baccharis</i> spp.	Coyote Brush
Bamboo	Bamboo (all tribes)
<i>Cedrus</i> spp.	Cedars
<i>Chamaecyparis</i> spp.	False Cypress
<i>Chrysolepis chrysophylla</i>	Chinquapin, Giant
<i>Cortaderia jubata</i>	Jubata Grass
<i>Cortaderia selloana</i>	Pampas Grass
<i>Cupressus</i> spp.	Cypress
<i>Cytisus scoparius</i>	Scotch Broom
<i>Erigonum fasciculatum</i>	California Buckwheat
<i>Eucalyptus</i> spp.	Eucalyptus
<i>Genista monspessulana</i>	French Broom
<i>Juniperus</i> spp.	Junipers
<i>Larix</i> spp.	Larch
<i>Notholithocarpus densiflorus</i>	Tan Oak, Tanbark Oak
Palms	Palm (with dry fronds)
<i>Pennisetum</i> spp.	Fountain Grass
<i>Picea</i> spp.	Spruces
<i>Pickeringia montana</i>	Chaparral Pea
<i>Pinus</i> spp.	Pines
<i>Pseudotsuga menziesii</i>	Douglas-Fir
<i>Quercus</i> spp.	Scrub Oak (brushy oaks)
<i>Rosmarinus officinalis</i>	Rosemary
<i>Salvia mellifera</i>	Black Sage
<i>Spartium junceum</i>	Spanish Broom
<i>Taxus</i> spp.	Yew
<i>Thuja</i> spp.	Arborvitae
<i>Tsuga</i> spp.	Hemlock
<i>Ulex europea</i>	Gorse
<i>Umbellularia californica</i>	California Bay
<i>Vaccinium ovatum</i>	Evergreen Huckleberry

## **Attachment C**

### **Town of Los Gatos Hillside Specific Plan**



# **HILLSIDE SPECIFIC PLAN - INTRODUCTION**

## **Hillside Specific Plan – Introduction**

The purposes of the Los Gatos Hillside Plan are to address the existing and future development policies of town and county, to make recommendations for future development in the planning area, and to promote harmony between development and the natural environment.

The Board of Supervisors and the Town Council jointly appointed the first hillside committee comprised of two planning commissioners and staff from each agency in the spring of 1975. This Committee was to develop a plan for development of lands in the Los Gatos hillside area through the formulation and implementation of development policies and standards in at least five areas:

1. Circulation patterns
2. Water supply
3. Fire protection
4. Sanitary sewage disposal
5. Aesthetic impact of development

This Committee filed its report on November 24, 1975, finding that a substantial portion of the study area was steeper than 50% slope and if developed to the extent allowed by existing regulations would create extensive deficiencies in access, water and sewer services. The Committee also found that due to market pressures, the study area would develop with or without proper plans, policies and standards, and recommended that the board and Council appoint an expanded committee which would include representation of conservationists, county and town homeowners, League of Women Voters or AAUW, county Landowners Associations, Board of Realtors, town citizenry residing outside the study area, and agriculturalists to prepare a specific plan.

During 1976 and early 1977, the second Committee met and formulated a specific plan which was presented at a joint Board of Supervisors Town Council meeting in May, 1977. That plan included the following statement: "In its work the Committee's ever present goal was to attempt to encourage that kind of growth which would be harmonious to the environment and fair to the landowners and residents, both present and future. This report is an effort to reflect as accurately as possible and desires--not always unanimous--of the community in and around Los Gatos as best we could perceive them. The recommendations are based on field trips, questioning of experts in many fields, excellent staff research and technical presentations, and listening to many residents of the study area on such subjects as road circulation patterns, water supply, sanitary sewage disposal, protection of plant life in the fragile hillside area, and the accommodation of an optimum population."

Soon after, the town Planning Commission commenced public hearings on the plan and recommended an amended plan to the Town Council on February 8, 1978. The county Planning Commission recommended approval of the amended plan on November 8, 1978. The Town Council held hearings, studied some further amendments and after having referred the amendments to the Planning Commission adopted the specific plan on August 7, 1978. The Board of Supervisors then adopted the same plan as adopted by the town on March 19, 1979.

Upon adoption of the Plan by the Board of Supervisors, the town amended its various ordinances and created three new

hillside zones in compliance with the provisions of the Hillside Specific Plan. By the end of 1979, all areas in the town and within the urban service area were rezoned or prezoned to one of the new zones in accordance with the recommendations for sub-area residential densities in this plan. In 1980, the town amended the plan regarding circulation in the vicinity of Tourney Road, and LAFCO amended the town's urban service area boundary to correspond to the recommendations in this plan. The town prezoned all of the new urban service area in 1981. The county has also rezoned the entire area as part of a general rezoning of the mountains to zones which are consistent with the plan.

In 1983, as part of the town's comprehensive review of the town's General Plan, the town Planning Commission appointed a subcommittee to study the Hillside Specific Plan to ensure that it was still consistent with the General Plan. The Committee's recommendations included:

- Updating the findings and background information,
- Deleting those items which had been accomplished,
- Revising the policies to reflect actual usage of the plan over the previous four years,
- Reformatting the plan to be consistent with the town General Plan, and
- Strengthening the Hillside Plan.

#### Goals of the Los Gatos Hillside Plan

1. Preservation of the irreplaceable natural environment of the mountains.
2. Addressing of the differences in development policies, regulations and standards between the town and county and study of possible new standards.



# HILLSIDE SPECIFIC PLAN - 1.0 LAND USE

## 1.1 Findings

There are quite a number of physical and economic factors which affect the intensity and type of development desirable for the Los Gatos Hillside Study area. A major physical factor is topography, with a substantial portion of the hillside planning area being steeper than fifty percent slope and either inaccessible or virtually undevelopable. The soils are shallow, generally quite erosive, and permit quite rapid runoff at times of rainfall. The vegetation is composed principally of chaparral on the drier slopes with some hardwoods, (oak and madrone) and grassland interspersed. This vegetation is characterized by a high fire danger, particularly during the dry summer season. A substantial portion of the study area was previously developed without benefit of the basic services (public roads, municipal water service and sanitary sewer). As a result of the adoption of this Plan (1978-79), no additional deficient areas have been allowed to develop.

Both county and Town Zoning Ordinances make provision for clustering of dwelling units to discourage the development of steeper slopes and encourage use of the level areas. In addition, in order to promote design harmonious with the mountain environment, the Town requires architectural and site review

procedure on all uses including single-family residential; however, at the county level, this procedure occurs only when development applications require use permits.

## 1.2 Goals

1. Recognition of the property rights of present and future landowners within the study area
2. Provision of housing for people of various income levels within the study area in a manner that will not adversely affect the mountain environment

## 1.3 Policies

1. Solutions to Development Problems: Solutions to development problems are fundamental to the approval of a particular project. Such solutions shall be reviewed and approved at a public meeting prior to approval of the project.
2. Permitted and Conditional Uses: Land use in the hillside planning area should be limited to agriculture and single-family detached uses except for a restricted list of nonresidential uses subject to the granting of a Conditional Use Permit. The granting of a Conditional Use Permit shall be subject to findings based on rigid and specific criteria.
3. Clustering of Dwelling Units: Clustering of dwelling units should be encouraged to preserve the scenic nature of the hillsides and to allow for economies in the construction of required public and private facilities.
4. Architectural and Site Review:
  1. Architectural and Site Review procedure or Design Review shall be required for all development proposals in the hillsides, including buildings, grading, roads, parking areas, landscaping and outdoor lighting. The purpose is to provide for the design of building sites which will be appropriate with mountain environment.
  2. In subdivision design, home sites shall be so located as not to interfere with the natural ridge silhouette as viewed from the valley floor.
  3. New construction shall not be allowed which would protrude above the natural ridge line or otherwise alter its natural contour as determined by the deciding body.
  4. Construction of multi-story structures at the ridge line shall be prohibited, unless necessitated by other

requirements in this plan or subsequently adopted hillside standards.

5. The lighting of court game areas shall be subject to Architecture and Site Review or Design Review.

## **1.4 Implementation**

1. Solutions to Development Problems: County shall require more detailed plans at time of filing.
2. Permitted and Conditional Uses: The following criteria shall be applied in evaluating proposals for Conditional Use Permits:
  1. Standards for non-residential uses shall not be less than for specified residential or agricultural uses.
  2. The proposed use shall not significantly increase traffic in the area, present traffic hazards, or require exceptional provisions for traffic flow.
  3. The use shall not impose any more burden upon the Town's energy resources or services than would a single-family residence approvable under current hillside standards.
  4. The use shall not adversely affect the privacy or safety of area residents, the value of nearby property, or the topographical integrity or ecological balance of the area.
  5. The use should be limited to that which clearly serves the public interest or needs of the Town.
3. Clustering of Dwelling Units: Reduction of minimum lot size may be considered only through use of cluster permit procedure of county ordinance and Planned Development procedure of Town ordinance.
4. Architectural and Site Review: The Town and the county shall adopt standards to be used in the review of Hillside Development Applications.
5. Prohibited Uses:
  1. a. New secondary dwelling units (except in the county where such uses may be permitted in historic structures.)
  2. b. Bed and Breakfast Inns
6. Sub-Area Residential Densities:

## **1. Sub-Area 1 - Blossom Hill Road**

This sub-area presently lacks adequate circulation and utility services. Approximately one-half of the area has slopes exceeding 50%. The developed properties are generally along the boundaries of the sub-area and are mostly one acre or less. The existing circulation system is characterized by overly long cul-de-sacs. The remainder of this sub-area was included within the Urban Service Area Boundary in 1980. This area should receive special emphasis for future annexations.

The ultimate density for Sub-area 1 shall be from 2½ to 10 acres per dwelling, with a minimum lot size of one acre. The interim density without full services should be a minimum of 10 acres per dwelling.

## **2. Sub-Area 2 - Shannon-Kennedy Roads**

The sub-area exhibits many of the same characteristics of Sub-area 1 except that only about 10% of the area has slopes exceeding 50% and only about 50% of the area is within the Town of Los Gatos. All of Sub-area 2 was included within the Urban Service Area Boundary in 1980. This area should receive special emphasis for future annexations.

The ultimate density for Sub-area 2 shall be from 2½ to 10 acres per dwelling, with a minimum lot size of one acre. The interim density without full services should be a minimum of 10 acres per dwelling.

## **3. Sub-Area 3 - Deer Park-Arnerich Roads**

The sub-area has inadequate circulation and no public water supply or sewage disposal. Approximately one-third of the area has slopes exceeding 50%. Most development consists of large acreages and less than one-third of the area is within the Town of Los Gatos. This area was included within the Urban Service Area Boundary in 1980.

The ultimate density for Sub-area 3 shall be 5 to 40 acres per dwelling.

## **4. Sub-Area 4 - Montezuma Blackberry Hills Roads**

This sub-area is characterized by many developed properties, mostly one-acre or smaller, with limited water and sewer facilities. Even though the existing road pattern does not allow for adequate circulation for

emergency vehicles or regular traffic there are strong neighborhood objections to the construction of new roads. Approximately one-fourth of the area has slopes exceeding 50%. About one-third of the area is within the Town of Los Gatos and all of the area is in the Urban Service Area Boundary.

The density for Sub-area 4 shall be 2½ to 10 acres per dwelling, with a minimum lot size of one acre. This area should receive special emphasis for completion of the road system and for future annexations.

#### **5. Sub-Area 5 - Foster-Prospect Roads**

This sub-area exhibits the same characteristics as Sub-area 4 except that there are even stronger neighborhood objections to the construction of new roads to complete circulation patterns. Approximately one-half of the area is in the Town and all of the area was included within the Urban Service Area Boundary in 1980.

The density for Sub-area 5 shall be 2½ to 10 acres per dwelling.

#### **6. Sub-Area 6 - Wood-Manzanita Roads**

This sub-area exhibits the identical characteristics of Sub-area 5, however, the limitation on road extensions are more topographic than political. Approximately 50% of the sub-area lies within the Town boundary and the Urban Service Area Boundary.

The density for Sub-area 6 shall be 5-20 acres per dwelling.

#### **7. Sub-Area 7 - Novitiate-Guadalupe College**

This sub-area is largely undeveloped with most of the property owned by two parties. Approximately one-half of the area has slopes exceeding 50%. The area is outside the Town boundary but approximately 30% lies within the Urban Service Area Boundary. There are presently no roads or other public facilities in the area except a sewer main serving Guadalupe College. The only road recommended for this area is a ridge road connecting to Highway 17. Because of the lack of circulation, the density for Sub-area 7 shall be 20 to 160 acres per dwelling unit.

## **8. Sub-Area 8 - Southwest of Highway 17**

This sub-area has no roads, public water supply or public sewers and most of the area has slopes exceeding 50%. The Mid-peninsula Regional Open Space District owns about one-half of the area. Almost all of the sub-area is outside the Town boundary and Urban Service Area Boundary.

The density for Sub-area 8 shall be 20-160 acres per dwelling.

## **9. Sub-Area 9 - Wilson Investment-Pheasant Road**

This Sub-area also has no roads, public water supply or public sewers and most of the area has slopes exceeding 50%. Approximately 25% of the area is within the Town and none of the area is within the Urban Service Area Boundary.

The density for Sub-area 9 shall be 20-160 acres per dwelling.

### **Notes**

The Urban Service Area Boundary shall continue to include those areas of highest density where urban service will ultimately be provided.

The terms "interim density" and "ultimate density" which appear in recommendations for Sub-areas 1, 2, and 3 mean development which occurs within the Los Gatos Urban Service Area.



# **HILLSIDE SPECIFIC PLAN - 2.0 FACILITIESSERVICES**

## **2.1 Findings**

A substantial portion of the study area (eighty percent), including both incorporated and unincorporated territory is already developed without benefit of the following services: a) Eighteen foot wide paved roadway; b) Water service by a public utility (such as San Jose Water Works); c) Sewer service by a public sanitary sewer. Existing municipal services are located on the flatland in and adjacent to the Town while the hillside area is characterized by a general lack of services except electrical, garbage and telephone. Public sewers only penetrate the periphery of the hillside area and septic systems predominate for sanitary facilities. Water supply in the hillside area is sparse and service is either by mutual water companies or individual wells and springs. There is a garbage disposal service available to all of the study area.

Existing county policy states that municipal-level services should be provided by the cities. In order to control the timing and location of development and improve the efficiency of provision of urban services and to focus responsibility and accountability for urban services and urban development into single jurisdictions, the following concept of urban service areas has

been developed by the county:

Urban service areas are urban developed areas and vacant and agricultural land, either incorporated or unincorporated, which is now or may be served by facilities, utilities and services existing or able to be provided in the first five years of the city's adopted Capital Improvement Program. Enough developable lands may be provided to allow for normal urban development expected during the next five years.

One of the purposes of this joint jurisdictional study is to define the Town of Los Gatos urban service boundary so that it can develop comprehensive planning for land use and full urban facilities and services, at the same time those areas remaining outside of the boundary would be limited to non-urban type facilities, services and land use.

## **2.2 Goals**

1. Recognition of the fact that existing taxpayers should not bear undue financial burden of providing costly services to more difficult sites.
2. Provisions where appropriate of adequate public services, including water, sewage disposal, refuse disposal, roads, parks, fire protection and police protection.

## **2.3 Policies**

1. Availability of Services for Development: Development proposals shall be approved only if the necessary road, water, sanitation and other services required for the proposed use are provided to the property.
2. Development of Improvements:
  1. a. Within the study area, the Town and the county shall adopt consistent policies requiring all developers of land to demonstrate that required improvements of "access roads" shall not result in excessive grading or tree removal.
  2. b. The Town and county shall adopt compatible road standards within the study area.
  3. c. In addition to uniformity of standards, criteria for varying, such uniform standards shall be developed for special circumstances.

3. Services Costs: The developer shall pay all costs for providing services.

## **2.4 Implementation**

1. Availability of Services for Development:

1. a. Sewage Disposal Services:

1. Sewer service shall be by sanitary sewer whenever practical.

2. Adequately designed alternative systems may be authorized when connection to a publicly regulated sanitary system is not available nor feasible within a reasonable period of time and existing and predictable use and the geologic report shows that such a system on a reasonably permanent basis will adequately meet disposal needs and have no detrimental effect on the environment (including water quality).

2. Domestic Water Supply Services:

1. Water service shall be provided by a recognized public utility whenever possible. In the event that service is not available, service by a private mutual water company or individual wells or springs may be acceptable.

2. Private mutual water systems shall be designed and constructed to the standards of the public utility and acquisition by the public utility encouraged as soon as possible. Individual wells shall meet health standards as to water quality and shall meet minimum quantity standards relative to water production and storage. Specific standards for individual wells should be established.

3. Garbage Disposal Services: Garbage disposal shall be made by the local disposal service with no local outside burial or individual conveyance of garbage offsite.

4. Electrical and Telephone Services: New electrical and telephone distribution facilities to serve the development shall be installed underground unless the deciding body finds undergrounding to be impractical.

5. Lighting: Reflectors and other means shall be considered to reduce the need for road lighting. Road lighting should be limited to intersections, dangerous

curves, dead ends, and multi-use parking areas. Care should be taken in direction and intensity of electroliers.

Lighting design should be controlled to screen excessive light sources in the hillside areas from neighboring residential areas and the valley floor.

6. Signing:

1. Each private and public road shall have a name sign clearly visible from all road approaches and located at intersections. Signing at all intersections should be regulation reflective signs.
2. Joint driveway entrances should have street numbers of all residents using the driveway.
3. Individual residential addresses should be clearly visible from the street.

7. Storm Drainage: County and town should adopt a consistent policy regarding storm drainage design criteria, improvement standards, necessary off-site improvements, right-of-way provisions, and cost responsibility.

8. Sanitary Sewer Pipe: Sanitary sewer pipe facilities should be located in public roadways whenever possible.

2. Stage Development of Improvements: Developers of land in the hillside areas, as in other areas, shall submit development proposals that satisfy Town or county requirements for development of improvements.

3. Service Costs: See Policy above.



## 3.0 CIRCULATION

### 3.1 Findings

The urbanized portion of the study area generally has an adequate system of public roads, with a few exceptions; however, the hillside planning area is characterized by an inadequate discontinuous road network. Residential development in the hillside area is limited by the difficulty of access. Generally, the roads in the hillside area are characterized by inadequate width, steep grades, excessive lengths, poor surfacing, little or no shoulder development, and steep cut banks. Many roads come to a deadend, with no alternate way out in case of fire.

The remote southeastern portion of the area is inaccessible from existing roads. The steep terrain makes road building extremely costly, and unless it is based upon careful and unique design and engineering standards, hillside road building can cause ugly scarring of the landscape. In the past, roadway design has not taken into account the difficult terrain features and geologic hazards of the hillside area. Another problem in the hillside area is the undefined status of maintenance responsibility for roadways; numerous roads are private with little or no maintenance being performed. There have been and continue to be differences between the County and Town in

design standards, ownership, and timing of construction of full street improvements. The Hillside Committee found a lack of safe and adequate road access in much of the hillside area and a definite need for development of a road network subject to the physical limitations of the area, and the desires of the residents.

Mountain roads are very costly to police, maintain and to clean up after landslides or storms. Maintenance of services for each hillside residence costs more than for a flatland residence.

### **3.2 Goals**

Provision for vehicular traffic in harmony with the topography and ecology of the area.

### **3.3 Policies**

#### **1. Design of Hillside Roads and Driveways:**

- a. Hillside roadways and driveways shall be designed and located so as to:**
  - 1. Require a minimum amount of earth movement.**
  - 2. Be consistent with the specified standards for curves, gradients, widths, and other controlling factors.**
  - 3. Be in harmony with the surrounding landscape by utilizing aesthetic design concepts, including landscaping with native plants and materials.**
  - 4. Allow for special designs where natural features such as rocks, slopes and trees require special treatment.**

- b. Adequate slope easements shall be provided.**

#### **2. Private Roads Versus Public Roads:**

- a. An adequate system of publicly owned and maintained roads is the best means of providing adequate access to all properties. Access by private road shall not be allowed unless fundamental to a special approved design concept unless full provisions for construction**

and maintenance of the private road system have been approved and unless it is consistent with neighborhood circulation.

b. A private access road to Guadalupe College from the Lexington Reservoir area will be provided from Alma Bridge Road/Limekiln Road. The private access road shall incorporate provisions for emergency access to Foster Road.

3. Separate Road Improvement Standards for Major Subdivisions and Minor Subdivisions:

In this plan there is no distinction between major and minor subdivisions with regard to road improvement standards.

4. Roadway Design:

a. Special roadway design standards shall be utilized in the development of hillside roadways considering the purpose of the roads.

b. Roadway design techniques such as split-level roadbed should be utilized in order to reduce the "scarring" of hillsides.

c. Increased number of on-site parking spaces shall be provided in lieu of those spaces on the roadway which are eliminated by use of hillside street standards.

5. Mountain Collector Streets:

Collector streets, as defined in the Town General Plan, should be connected to other public streets to provide a basic roadway network of alternate routes, without providing attractive through routes to non-local traffic. Town's General Plan defines a collector street as a street that serves abutting property and carries traffic to the arterials and expressways.

6. Two Means of Access:

a. As a guide to developing a circulation plan, two means of access shall be provided to all areas. If dual access is NOT available, the land use intensity shall be limited

in accordance with the access provided.

- b. Secondary access shall be sought for existing dead end streets.
- c. The second means of access shall not encourage through traffic to nonresidents and could be limited to emergency access only.
- d. Where single access roads exist, acceptable provisions shall be made for emergency access. Emergency access roads shall be designed to assure passability, however, the design shall prevent unauthorized non-emergency through access.

7. Road Costs:

The developer shall pay all costs for all required street improvements.

### **3.4 Implementation**

8. Cul-de-sacs:

Cul-de-sacs should not exceed 800 feet in length, although the length may be increased by the deciding body if it finds that alternative solutions to emergency access, utility services and circulation problems are satisfactory.

9. Road Widths:

Because of unique problems encountered in development of hillside areas, the following standards are recommended for the roads of study area:

a. Flatland standards:

Right-of-way width 60'

Cul-de-sac right-of-way width 56'

Paved width 40'

Cul-de-sac paved width 36'

b. Hillside standards:\*

Right-of-way width 60-40' minimum\*\*

Paved way widths:

One-way 14'

Cul-de-sac 20'\*\*\*

Cul-de-sac 24'

Local 24'

Collector 28'-30'\*\*\*\*

For specific design roads, the width is to be determined as constrained by terrain and major trees.

\*\* County minimum width to be 60'. Town right-of-way width to be 40' for standard two-lane roads and slope easements shall be provided where necessary and as necessary for slope banks.

\*\*\* Cul-de-sac with a potential of six lots or less.

\*\*\*\* County Standards.

10. Maximum Road Grade, Minimum Curve Radius, and Overhead Clearance:

Maximum road grade, minimum curve radius and overhead clearance should be determined by the Road Commissioner, Town Engineer or County Surveyor with advice and recommendation from other appropriate Town or County departments or agencies (e.g. Planning Department, Parks Department, Central Fire District, etc.). Deviation from these standards may be permitted only with special approval when it can be demonstrated that significant environmental damage would result from strict adherence.

11. Parking/Turnouts on Roadways:

- a. Provisions have not been made for parking on roadways under the Hillside standard; if parking on roadways is required for a specific project, it should be provided by parking turnouts.
- b. Turnouts should be provided in accordance with requirements for Central Fire District and for viewpoints on scenic roads.

12. Curbs:

Curbs should be used along both sides of all roads to minimize maintenance costs, control erosion and provide for additional public safety.

13. Pavement Surfacing:

The pavement surfacing for public and private roads should be asphaltic concrete or Portland cement concrete.

14. Walkways:

Improved pathways or walkways should normally be required in the approval of land developments.

Their specific location and relationship to the roadway should be subject to approval by the deciding body; in some cases, the walkway may be separated from the roadway where warranted by topographic conditions.

15. On-Site Parking and Turnaround Areas:

Parking and maneuvering areas for emergency vehicles should be provided as required by the Central Fire District. In addition to those parking spaces in garages or carports, not less than four on-site parking spaces shall be provided where roadways are not designed to permit parking. Driveways may be used to provide this parking, except where all or a substantial part of any residence is in excess of one hundred fifty (150) feet from a safe and adequate access road.

16. Proof of Access Rights:

Documentation of proof of private access rights must be provided by the developer at the initial project review stage.

17. Driveway Standards (width, length, gradient, minimum curve radius):

Driveways serving one residence should have 12-foot minimum width plus 3 feet of shoulder width (15 feet total); however, the deciding body may determine that an 18-foot minimum width is necessary. A common driveway serving two single-family residences should have an 18-foot minimum width plus 3-foot shoulders on each side. This requirement may be reduced to 18-foot minimum if the Town Engineer or County Surveyor determines that the shoulders could be replaced with retaining walls and curbs. Limit of driveway length should be 300 feet unless the deciding body can make specific findings for deviation and can place additional conditions to reduce hazards such as turnouts and secondary accesses. Other standards regarding length, grades, and minimum curve radius are to be determined by the Town Engineer or County Surveyor with advice and recommendation from other appropriate Town or County departments. No more than two dwelling units should be served from a common driveway.

18. Access Roads:

Access roads as used herein are defined as roads connecting a parcel of land being considered for development to the nearest improved public road. Access roads shall meet the following development standards:

Dwelling Units Pavement Shoulder Pavement

Served Width (Each) Surface

2-3 18' 3' AC

4-6 20' 3' AC

7 or more 24' 3' AC

19. Public Transportation:

Any intensive non-residential use shall provide common carrier vehicle service with direct connection to a countywide transit facility.

20. Roadway Landscaping:

Roadway and driveway graded banks shall be provided with planting of native trees, shrubs, and grasses, and include irrigation devices to ensure maintenance of landscaping until it is permanently established.

21. Emergency Access Roads:

Emergency access roads shall be provided in accordance with the following standards:

a. Standards:

1. Right-of-way

Right-of-way shall be an emergency access easement granted to the public. Some consideration of pedestrian trail easements should also be included.

2. Width

The width of the easement should be sufficient to contain the roadway with whatever additional easements are necessary for slope banks in the case of steep terrain. Roadbed widths should be a minimum of 15 feet plus an additional three feet of shoulder. A lesser width may not be approved unless there is a finding by the Planning Commission that the minimum width called for above would have a severe environmental impact, and that with a lesser width adequate fire protection can be maintained.

3. Structural Strength

Structural strength of the roadbed shall be designed to withstand a gross vehicle weight of 30,000 pounds. A minimum of six inches of

aggregate base and some surface sufficient to protect the base shall be required.

#### 4. Roadway Surface

Roadway surface must be sufficient to protect the roadway base and provide a non-skid surface in areas where the grade exceeds 15%. Where the grade is less than 15% the surface shall be a double chip seal.

#### 5. Closure Devices

Gates with locking devices shall provide closure and permit access by Police, Fire and other emergency vehicles, maintenance vehicles and by the general public in times of emergency. Staff shall conduct a study of gates and appropriate locking mechanisms in order to resolve the following and other problems, and submit its report to the Planning Commission meeting at its second meeting in January, 1985:

a) Making operation easy enough to facilitate inspection, maintenance and quick access during emergencies. Ideally, an Operator or Inspector should be able to open the gate without leaving the vehicle.

b) Reducing vandalism.

c) Preventing access by motorcycles.

d) Providing operational effectiveness under emergency conditions.

##### b. Inspection:

Inspection shall occur at three month intervals to ensure that the emergency access road is adequately maintained to serve its intended purpose and to ensure that it has not been blocked by unauthorized storage of construction materials, inoperative vehicles, slides, trees, etc.

c. Inventory:

A thorough inventory shall be made to clearly identify all emergency access roads to determine what deficiencies and limitations exist for their use so that emergency response plans can be made. Any changes in the inventory shall be documented as they occur. A report on the inventory shall be submitted to the Planning Commission at its second meeting in January, 1985.

d. Maintenance:

Developers of land who create the need for emergency access roads shall dedicate the necessary right-of-way and enter into perpetual agreements with the Town, tying responsibility for maintenance of emergency access roadways and locking devices to the land.

e. Complaints:

Complaints of problems with emergency access roads or locking devices shall be investigated promptly by

 [Town Staff](#) [Town Websites](#) by [CivicPlus®](#)



## 4.0 OPEN SPACE

### 4.1 Findings

The hillsides provide a natural scenic resource for residents of the study area of Los Gatos, and of Santa Clara Valley as a whole. It forms a scenic backdrop which is visible from much of the urbanized North Valley area. Retention of this scenic resource through proper hillside residential controls has both an aesthetic and economic impact upon the local community, both Town and County.

Currently, the Local Agency Formation Commission is opposed to the inclusion of Williamson Act lands in urban service areas; however, the Town feels that all unincorporated lands within its urban service area should be annexed, including Williamson Act lands, and has incorporated provisions in its General Plan and Zoning Ordinance to accommodate such lands.

### 4.2 Goals

1. Preservation of large areas of the study area for appropriate kinds of open space, with appropriate consideration of costs to the public.
2. Protection of scenic roads and areas within the study area.
3. Protection of major watershed areas and natural waterways.

4. Study of the potential in the study area for recreation.

### **4.3 Policies**

#### **1. Open Space Easements:**

Open space easements shall be required by the deciding body for hillside subdivisions in accordance with the topographical, ecological, aesthetic and other conditions pertinent to the making of such easements.

#### **2. Open Space:**

This plan supports the Mid-Peninsula Regional Open Space District in its search for and acquisition of sites within the study area.

#### **3. Williamson Act Contract Lands in Urban Service Areas:**

- a. Placing lands in Williamson Act contracts should be encouraged by both Town and County.**
  
- b. Within the study area, those Williamson Act lands shown on the Town's General Plan as Open Space and accompanied by consistent prezoning should not be automatically excluded from the Town's urban service area.**

#### **4. Tree Removal:**

The cutting of live trees shall be controlled under Town and County policies designed to restrict cutting.

#### **5. Landscaping:**

Landscaping plans shall be submitted by land developers for approval to the deciding body.

### **4.4 Implementation**

#### **1. Open Space Easements:**

Open space easement policies shall be implemented for each subdivision or Planned Development application to protect creeks, ridgelines, stands of trees, scenic views, hazardous areas, and to provide for trails.

2. Open Space:

Periodic reports on its investigations and activities by the Mid-Peninsula Open Space District shall be requested and, when possible, acted upon.

3. Williamson Act Contract Lands:

Periodic reports on Williamson Act contract lands shall be provided.

4. Tree Removal:

- a. The cutting of live trees should be limited in order to preserve the scenic beauty, prevent erosion of top soil, protect against flood hazards and risk of landslides, counteract air pollutants, provide wind breaks, and contribute to the value of the land.
- b. Inside the urban service area boundary, the Town's regulations regarding tree removal shall be used; outside the urban service area the County policy for tree removal should be used.
- c. The Town and the County will agree to allow the Town to administer and enforce the tree removal regulations in the unincorporated Urban Service Area.
- d. The County should reaffirm its policy for the northern Santa Cruz Mountain region that no live trees with trunk circumference of 37.5 inches or more measured 4.5 feet above the ground are to be removed without approval of the deciding body.
- e. Whenever protected trees are removed, the deciding body/official shall require a tree replacement program with the size and number of trees commensurate with the trees removed and the space available.

5. Landscaping:

Landscaping plans shall reflect the following considerations:

- a. Use of high moisture content plant materials adjacent to residence and other measures for fire control recommended by Fire Marshal.
- b. Retention of existing trees as defined in tree removal limitation regulation.
- c. Utilization of plant materials with low fire danger (low combustibility).
- d. Utilization of evergreen and screening plant types for "camouflaging" of development scars.
- e. Retention of existing and addition of new planting for erosion control.
- f. County reviewing committee should require landscape plans for individual building areas in the hillside planning area with implementation guarantees such as a two-year maintenance contract.
- g. Building sites and construction visible from Town should be required to have landscape screening along the lower levels of site.
- h. Vegetative clearance for development of sanitary leach fields shall be held to a minimum. Existing trees shall be retained and screening-type vegetation planted. Leach field expansion areas shall not be disturbed prior to need for installation.
- i. Amendments should be added to the County grading regulations to provide for screening types of landscaping in addition to planting for erosion protection purposes in hillside areas.

#### 6. Trails:

The development of a hillside trail network is an important goal of the Town of Los Gatos to increase public recreational opportunities as well as maximize access to regional parks and open space preserves. The trails shall be designed for pedestrian and equestrian use and for bicycle use where practical.

All new subdivision applications shall be reviewed for compliance with the Trails section of the Los Gatos and Santa Clara County General Plans. Trail easement dedication to the Town and construction of trails shall be a condition of subdivision approval. Wherever possible CCR's or maintenance districts shall be developed or formed so expenses of trail maintenance will be borne by property owners in the subdivision.

Trails should be located away from existing residential areas wherever possible. "Cross-country" type trails shall be developed, as opposed to trails bordering roads. Trails should be located through areas containing scenic natural resources and through areas dedicated for open space wherever possible.

Trail design standards consistent, wherever possible, with other local agencies, shall be developed that:

- Limit trail use to pedestrian, equestrian, and, where practical, bicycle use only
- Prevent use by all motorized vehicles
- Protect the natural environment
- Promote safe recreational use
- Determine width, establish policies regarding fencing along trails and type of fencing, and incorporate erosion control measures



# 5.0 SAFETY

## 5.1 Findings

The hillside planning area is a geologically hazardous one and any development allowed to proceed should do so with proper respect and detailed attention to the various geologic hazards involved. These hazards include possibilities of landslides as well as ground shaking and fracturing due to seismic activity.

Development activities such as grading of slopes, clearing of vegetation, altering of drainage courses and concentration of water, if not properly controlled, may reduce the relative geologic stability of the underlying colluvium and bedrock.

Man's activity, along with rainstorm or earthquake, may "trigger" a landslide.

The hillside study area is characterized as a high fire hazard one because of the combustibility of the vegetation, the steep terrain, the low humidity during the dry hot summers, the lack of adequate access, and lack of adequate water supply for fire fighting. The areas which have the highest flammability and steepest slopes are often the most difficult to reach with fire equipment. Of particular significance is the fact that this area is an important portion of the local watershed for northern Santa Clara County. The soils are subject to extreme erosion whenever vegetation is removed or when grading disturbs soil mantle.

Poor site drainage design, increased runoff from roofs and paved surfaces, construction of septic drainfields all remove vegetation, cut into slopes, cause excessive erosion, increase potential for landsliding, and place excessive burdens on existing downhill drainage systems.

Because of inadequate water supplies and potential fire danger of the vegetation, great care needs to be taken in structural plans for all residences and landscape plans for the surrounding site development.

## **5.2 Goals**

Prevention of loss of life or property through careful regulation of development in areas subject to geologic hazard, or high fire risk.

## **5.3 Policies**

### 1. Geologic Hazards Reviews:

Development shall be avoided or carefully controlled in potentially hazardous geologic areas.

### 2.

### Fire Protection:

#### a.

Development should be avoided in areas subject to severe fire danger.

#### b.

Development should be avoided unless measures designed to assure the highest degree of fire prevention and fast, effective means of fire suppression are provided.

## **5.4 Implementation**

### 1. Geologic Hazards Reviews:

#### a.

Geologic engineering investigations and reports shall be required in areas believed to be geologically hazardous.

- b. Construction shall be prohibited in areas with geologic hazards (such as slope instability, seismic hazards, etc.) as identified in the geologic investigations and reports.

2. Fire Protection:

- a. Adequate water supply for fire protection and suppression purposes as required by the Uniform Fire Code shall be required for all properties being developed. If no public hydrant is readily available, then there shall be an on-site water supply in a storage facility with the appropriate outlet valve no less than six to eight feet from an accessible hard surface road. The specific size of such a facility shall be based upon the number of dwelling units and be determined by the Central Fire District.
- b. Minimum fire protection standards for building construction in hazardous areas as established in Appendix E of the Uniform Fire Code shall be implemented and reviewed at the Architectural and Site Review level.
- c. Building construction shall implement special hazardous area recommendations of fire protection agencies regarding roofing materials, retaining and screening walls, and fire retardant structural members in pole construction.

3. Fire Protection and Suppression Services:

Properties outside of Central Fire District shall be required to annex to the District at the time of development if contiguous to the District, unless denied by the District for locational reasons.