

4.3 WILDFIRE AND WILDLAND FIRE HAZARDS

This section summarizes the regulatory framework for wildfire, summarizes the wildfire risk factors affecting the project site, and discusses the potential impacts resulting from implementation of the proposed project. The following documents were used to analyze the potential impacts that could occur:

- Wildland Fire Protection Plan, prepared by Wildland Resource Management, dated January 2023, update received October 22, 2024.
- CEQA Evacuation Analysis, prepared by Fehr & Peers, May 2, 2024

4.3.1 REGULATORY CONTEXT

Federal

Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended, and Related Authorities

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 100-707), signed into law on November 23, 1988, amended the Disaster Relief Act of 1974 (Public Law 93-288). The Stafford Act constitutes the statutory authority for most federal disaster response activities especially as they pertain to FEMA and FEMA programs.

Federal Emergency Management Act

In March 2003, the Federal Emergency Management Agency (FEMA) became part of the U.S. Department of Homeland Security. FEMA's continuing mission is to lead the effort to prepare the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the U.S. Fire Administration. The City of Calistoga is under the jurisdiction of FEMA Region 9, which covers Arizona, California, Hawaii, Nevada, Guam, American Samoa, Commonwealth of Northern Mariana Islands, Republic of Marshall Islands, Federated State of Micronesia, and more than 150 sovereign tribal entities. FEMA Region 9 specifically plans for hazards, including wildfires.

Disaster Mitigation Act of 2000 (DMA 2000)

The DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) to create the framework for state, local, tribal and territorial governments to engage in hazard mitigation planning to receive certain types of non-emergency disaster assistance. The Stafford Act constitutes the statutory authority for most Federal disaster

response activities especially as they pertain to FEMA and FEMA programs. The DMA 2000 encourages state and local authorities to collaborate on pre-disaster planning to assist local governments to accurately assess mitigation needs, resulting in faster allocation of funding and more cost-effective risk reduction projects under FEMA's Hazard Mitigation Assistance program.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency.

Presidential Policy Directive 8: National Preparedness

The National Response Framework (NRF) is an essential component of the National Preparedness System mandated in Presidential Policy Directive 8: National Preparedness (PPD-8). PPD-8 is aimed at strengthening the security and resilience of the United States through systematic preparation for the threats that pose the greatest risk to the security of the Nation. PPD-8 defines five mission areas— Prevention, Protection, Mitigation, Response, and Recovery—and mandates the development of a series of policy and planning documents to explain and guide the Nation's collective approach to ensuring and enhancing national preparedness. The NRF presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies. It establishes a comprehensive, national, all-hazards approach to domestic incident response. The National Response Plan was replaced by the NRF effective March 22, 2008, and updated most recently in June 2016.

The NRF defines the principles, roles, and structures that organize response protocols as a nation. The NRF:

- Describes how communities, tribes, states, the federal government, private-sectors, and nongovernmental partners work together to coordinate national response;

- Describes specific authorities and best practices for managing incidents, and
- Builds upon the National Incident Management System (NIMS), which provides a consistent template for managing incidents.

National Fire Plan

The Department of the Interior's National Fire Plan is intended to ensure an appropriate federal response to severe wildland fires, reduce fire impacts to rural communities, and ensure sufficient firefighting capacity in the future. The Rural Fire Assistance program is funded to enhance the fire protection capabilities of rural fire districts and safe and effective fire suppression in the wildland/urban interface. The program promotes close coordination among local, state, tribal, and federal firefighting resources by conducting training, equipment purchase, and prevention activities on a cost-shared basis.

State

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) protects people and safeguards property from wildland fires in California. Prevention is a key component of CAL FIRE's mission including pre-fire engineering, vegetation management, fire planning, education, and law enforcement. It provides statewide direction for fire prevention in wildland areas and reviews regulations and building standards. CAL FIRE has developed a Fire Hazard Severity Scale to map Fire Hazard Severity Zones (FHSZs) sitewide based on fuel loading (vegetation), weather (winds, temperatures, humidity levels and fuel moisture contents) and slope. CAL Fire also designates land as either Federal, State, or Local Responsibility Area (FRA, SRA, or LRA).

California Fire Plan

The Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection. By placing the emphasis on what is warranted long before a fire starts, the Fire Plan looks to reduce firefighting costs and property losses, increase firefighter safety, and to contribute to ecosystem health. The current plan was finalized in the summer of 2018.

California Fire Code

The California Fire Code (CFC) is Part 9 of Title 24, California Code of Regulations, also referred to as the California Building Standards Code. The CFC incorporates the 2018 International Fire Code of the International Code Council with necessary California

amendments. The purpose of the CFC is to establish the minimum requirements consistent with nationally recognized best practices to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations.

California Building Code

Chapter 7A of the California Building Code (CBC) establishes specific requirements for construction of new buildings located within areas designated as wildland urban interface (WUI). This chapter of the CBC is intended to increase fire resistance of buildings and structures located within the WUI and includes regulations related to vegetation management, non-combustible materials, and the location of vents, among other requirements.

AB 747: General Plans – Safety Element

Adopted in 2019, AB 747 revised Government Code section 65302(g) to require cities and counties to address evacuation routes related to identified fire and geologic hazards in the safety element of general plans. The law also requires the safety element to identify measures for the protection of the community from unreasonable risks associated with the effects of various geologic hazards, flooding, wildland and urban fires, and climate adaptation and resilience strategies. Local agencies are also required to prepare a local hazard mitigation plan (LHMP) every five years and can work together on a multi-jurisdictional basis.

Public Resources Code 4291

The Public Resources Code was amended in 2005 to include regulations related to defensible vegetation clearing around structures located within a State Responsibility Area. Specifically, property owners with structures adjoining a mountainous area, forest, or grassland must provide and maintain a 100-foot defensible space to minimize potential fuel around structures with the intent of minimizing risk of loss and to improve the safety of firefighters. The 100-foot defensible space area is comprised of two zones: a home defense zone within 30 feet of the structure with more intensive fuel management and the reduced fuel zone extending to 70 feet or the property line.

Senate Bill 1241

In 2012, Senate Bill 1241 added Section 66474.02 to Title 7 Division 2 of the California

Government Code, commonly known as the Subdivision Map Act. The statute prohibits subdivision of parcels designated very high fire hazard, or that are in a State Responsibility Area, unless certain findings are made prior to approval of the tentative map. The statute requires that a city or county planning commission make three new findings regarding fire hazard safety before approving a subdivision proposal. The three findings are, in brief: (1) the design and location of the subdivision and its lots are consistent with defensible space regulations found in PRC Section 4290-91, (2) structural fire protection services will be available for the subdivision through a publicly funded entity, and (3) ingress and egress road standards for fire equipment are met per any applicable local ordinance and PRC Section 4290.

California Disaster Assistance Act (CDAA)

The California Disaster Assistance Act (CDAA; CCR Title 19, Chapter 6) authorizes the Director of the California Governor's Office of Emergency Services (Cal OES) to administer a disaster assistance program that provides financial assistance from the state for costs incurred by local governments as a result of a disaster event. Funding for the repair, restoration, or replacement of public real property damaged or destroyed by a disaster is made available when the Director concurs with a local emergency proclamation requesting state disaster assistance.

California Emergency Services Act (AB 38)

AB 38 gave the California Emergency Management Agency (EMA) responsibility for overseeing and coordinating emergency preparedness, response, recovery, and homeland security activities in the state. The Governor's Office of Emergency Services (OES) mission statement is "Protect lives and property, build capabilities, and support our communities for a resilient California." OES goals include:

- Goal 1: Anticipate and enhance prevention and detection capabilities to protect our state from all hazards and threats.
- Goal 2: Strengthen California's ability to plan, prepare for, and provide resources to mitigate the impacts of disasters, emergencies, crimes, and terrorist events.
- Goal 3: Effectively respond to and recover from both human-caused and natural disasters.
- Goal 4: Enhance the administration and delivery of all state and federal funding, and maintain fiscal and program integrity.
- Goal 5: Develop a united and innovative workforce that is trained, experienced,

knowledgeable, and ready to adapt and respond.

- Goal 6: Strengthen capabilities in public safety communication services and technology enhancements.

2018 State Hazard Mitigation Plan (SHMP)

Approved by FEMA in September 2018 as an Enhanced State Mitigation Plan, the 2018 SHMP update continues to build upon California's commitment to reduce or eliminate the impacts of disasters caused by natural, technological, accidental, and adversarial/human-caused hazards, and further identifies and documents progress made in hazard mitigation efforts, new or revised state and federal statutes and regulations, and emerging hazard conditions and risks that affect the State of California. Resilience depends on the whole community and is a shared responsibility for all levels of government, private and nonprofit sectors, and individuals.

Senate Bill 901

After record-breaking drought in California from 2011 to 2017, perfect wildfire conditions allowed faulty Pacific Gas & Electric (PG&E) utility lines to spark devastating fires that burned over 4,000 square miles across the state. In response, the California Legislature developed Senate Bill 901 (Utility Wildfire Management Plans) as the "centerpiece measure" in its attempt to rectify damages from the 2017 wildfires and prevent future wildfire disasters. SB 901 mandates all electric utilities to prepare and submit wildfire mitigation plans that describe the utilities' plan to prevent, combat, and respond to wildfires affecting their service territories. The California Public Utilities Commission (CPUC) will review and refine the plans before implementing and enforcing them. In the short-term, SB 901 allows PG&E to lean on its customers in paying for billions of dollars in fire-related damages. It also provides over \$1 billion for vegetation management over five years.

Executive Order N-05-19

On May 31, 2019, Governor Gavin Newsom signed Executive Order N-12-19 to assist communities recovering from historically devastating wildfires in 2017 and 2018. Specifically, the executive order extends protections against price gouging in counties recovering from fires, including Mendocino, Napa, Santa Barbara, Shasta, and Sonoma Counties. The extended protections remained in effect through December 31, 2019. On November 22, 2019, Governor Gavin Newsom issued Executive Order N-21-19 to help streamline recovery efforts in communities across the state impacted by the previous month's devastating fires. The executive order included a variety of relief measures for fire

victims, including: a three-year suspension of planning and zoning rules pertaining to recreational vehicles and mobile home parks; fee waivers for replacement of driver's licenses and birth certificates; and easing liquor license rules for bars and restaurants damaged by the fires. The executive order extended the state of emergency proclaimed in October 2019 for the Sonoma County.

Assembly Bill 1054 (AB 1054)

AB 1054 was signed into law by Governor Gavin Newsom on July 12, 2019, creating a \$21 billion fund to help California's investor-owned utilities cover liabilities caused by wildfires. Under the legislation, the state's investor-owned utilities will put a combined \$5 billion toward improvements in their electrical grids to access the fund. Ratepayers will also contribute \$10.5 billion by way of a 15-year extension of an existing rate increase. The bill also imposes several conditions on utilities, including \$5 billion in safety investments and utility participation in a new annual safety certification process overseen by CPUC. The legislation was passed in the wake of the Camp Fire, California's deadliest and most destructive wildfire in history. PG&E Corp's equipment failure was responsible for the blaze. PG&E sought bankruptcy protection after the Camp Fire so it could reorganize its finances to pay \$30 billion in liabilities from multiple wildfires.

Regional

Napa County Community-Wide Comprehensive Wildfire Mitigation Program

In 2023, Napa County was awarded the federal Building Resilient Infrastructure and Communities (BRIC) grant to implement the Napa County Community-Wide Comprehensive Wildfire Mitigation Program. The BRIC grant will build upon the County's ongoing efforts to implement the Napa County Community Wildfire Protection Plan (CWPP), which, as further discussed below reinforces long-term wildfire and climate resilience for the County's residents and communities.

Napa County Community Wildfire Protection Plan (CWPP)

The Napa County CWPP, adopted by the Napa County Board of Supervisors in March 2021, was prepared by the Napa Communities Firewise Foundation (NCFF) to help Agencies, Fire Safe Councils, Communities, and local homeowners define, plan, and prioritize actions to limit damage from wildland fires. The CWPP provides a roadmap for fire hazard mitigation and preparedness at both the county-wide and neighborhood level.

The following are among the key goals of the Napa County CWPP:

- Align with the County, CAL FIRE and Federal cohesive pre-fire strategies that include educating homeowners and building understanding of wildland fire, ensuring defensible space clearing and structure ignition resistance, safeguarding communities through fuels treatment, and protecting evacuation corridors.
- Identify and prioritize areas for hazardous fuel-reduction treatment.
- Recommend the types and methods of treatment that will reduce damage from wildfire.
- Recommend measures to reduce the ignitability of structures throughout unincorporated areas of Napa County.

Figure 14 of the CWPP displays the county-assessment of risk from fire, which was calculated by assigning values to fire hazards, suppression activities, assets to protect, and owner interventions. To reduce wildland fire hazards within the County, the CWPP identifies projects that are organized into five categories, including fuel management, wildfire response support, community education and outreach, critical Infrastructure, and Planning. The CWPP prioritizes project in the following order:

1. Evacuation Corridors and Containment
 - a. Major corridors e.g., state highways (29, 121, 128)
 - b. Secondary corridors, e.g., County roads, and
 - c. Select containment lines.
2. Community Perimeter Fuelbreaks and Forest Health Projects
3. Projects that protect Drinking Water, Critical Infrastructure
4. Landscape-scale Projects

All other projects are prioritized by those that improve life safety, address property damage, and protect natural resources. Projects identified in Appendix A and B of the CWPP that are in proximity to the project site include the following:

- Evacuation Corridors (EVAC1 State Highways 121 & 128; EVAC3 Lincoln Ave) – These projects aim to protect evacuation routes by removing hazardous trees and reducing fuel volumes within 100- feet on both sides of emergency access and evacuation routes as defined by Napa County with priority to treat areas within the perimeter of the 2020 fires.
- Expand roadside turnouts along Kortum Canyon Road (DMFSC-10)
- Improve Kortum Canyon Road (DMFSC-3)

Napa County Multi-Jurisdictional Hazard Mitigation Plan 2020 Update (MJHMP)

As indicated above, the DMA 2000 requires proactive pre-disaster planning (Hazard Mitigation Plan) by state and local authorities as a condition of receiving certain federal financial assistance under the Robert T. Stafford Act. As a DMA 2000 requirement, the Hazard Mitigation Plan must be updated every five years to remain in compliance with the federal mitigation grant conditions.

Consistent with the planning requirements of the DMA 2000, Napa County prepared the MJHMP in partnership with the County stakeholders and multiple participating local jurisdictions, including the City of Calistoga. The MJHMP that covers the entire geographic area within Napa County explains the prevalent hazards within the County and how they may affect the County and participating cities and special districts differently based upon their proximity to natural hazards. The MJHMP includes a vulnerability assessment that identifies risks to vulnerable assets, both people and property, and sets forth a mitigation strategy to respond to the identified vulnerabilities within each participating community. Additionally, The MJHMP provides prescriptions or actions to achieve the greatest risk reduction based upon available resources. In that context, the City of Calistoga planning and regulatory mitigation capabilities with respect to wildfire are set forth in the Community Wildfire Protection Plan (CWPP) that is described above, and the City's General Plan, as described below.

Local

City of Calistoga General Plan

The Public Safety Element of the City's General Plan, last updated in 2020 with the MJHMP references state law requirements for new construction, and includes the General Plan goals, objectives, policies and actions for wildfire prevention, response and recovery in Very High and High Fire Hazard Severity Zones in the City's Planning Area. These goals, objectives, policies, and actions are outlined on pages SAF-19 and SAF-20 of the Public Safety Element of the Calistoga General Plan.

Projects located in the Very High and High Fire Hazard Severity Zones, such as the proposed project, are required to adhere to guidelines for defensible space, vegetation management in a fire-safe manner, financial responsibility for maintenance of landscaping and open parcels (forest), and other measures. In addition, a wildfire behavior model is required to specify building setbacks and fire resistive ratings.

The City requires preparation of a wildland fire protection plan (WFPP) by a licensed or registered specialist that is submitted to the City for review and approval for projects that

are proposed within the wildland-urban interface area and cannot meet the requirements per the CBC and City's building code. As detailed further below, a Wildland Fire Protection Plan was prepared for the project. Prior to Final Map approval, the WFPP prepared by Wildland Resource Management will be subject to final approval by the City of Calistoga.

Vegetation management requirements in the Very High Fire Hazard Area are enforced by the Calistoga Fire Department through routine inspections of properties and homes. The Fire Department also promotes the chipping program provided by the Napa Communities Firewise Foundation, which encourages the removal of fire prone vegetation.

Calistoga Municipal Code

The Calistoga Municipal Code (CMC) Chapter 15.36 incorporates the fire safety requirements for new construction in the wildland-urban interface fire area as established by the CFC Chapter 49. These requirements include, but are not limited to, fire-resistant building materials, and adequate access for emergency vehicles in Very High and High Fire Hazard Severity Zones.

4.3.2 ENVIRONMENTAL SETTING

A combination of factors, including wind, temperature, humidity, and fuel moisture content contribute to the risk of wildland fire hazard with wind being the most critical factor as it aids in the spread of wildfires. Steep slopes also contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. In recent years, the City of Calistoga has been impacted by wildfire events, including the 2020 Glass Fire, which burned approximately 67,484 acres south, west and east of the City, and the 2017 Tubbs Fire, which burned approximately 36,807 acres north, south, and west of the City. While neither of these fires burned areas within incorporated city limits, due to their proximity, full evacuation of the city's occupants was required.^{1,2} In addition to recent wildfires, in 1964 the Hanly fire impacted portions of the City and also required evacuation of its residents. As shown on CalFIRE's California Fire Perimeters map, the project site has not been directly impacted by wildfire.³ However, based on the site's topography, location within the wildland urban interface, and history of fires in the region, the Project site has the potential

¹ California Department of Forestry and Fire (CAL FIRE). 2022. Glass Fire Incident. Website: <https://www.fire.ca.gov/incidents/2020/9/27/glass-fire/>. Accessed April 2024.

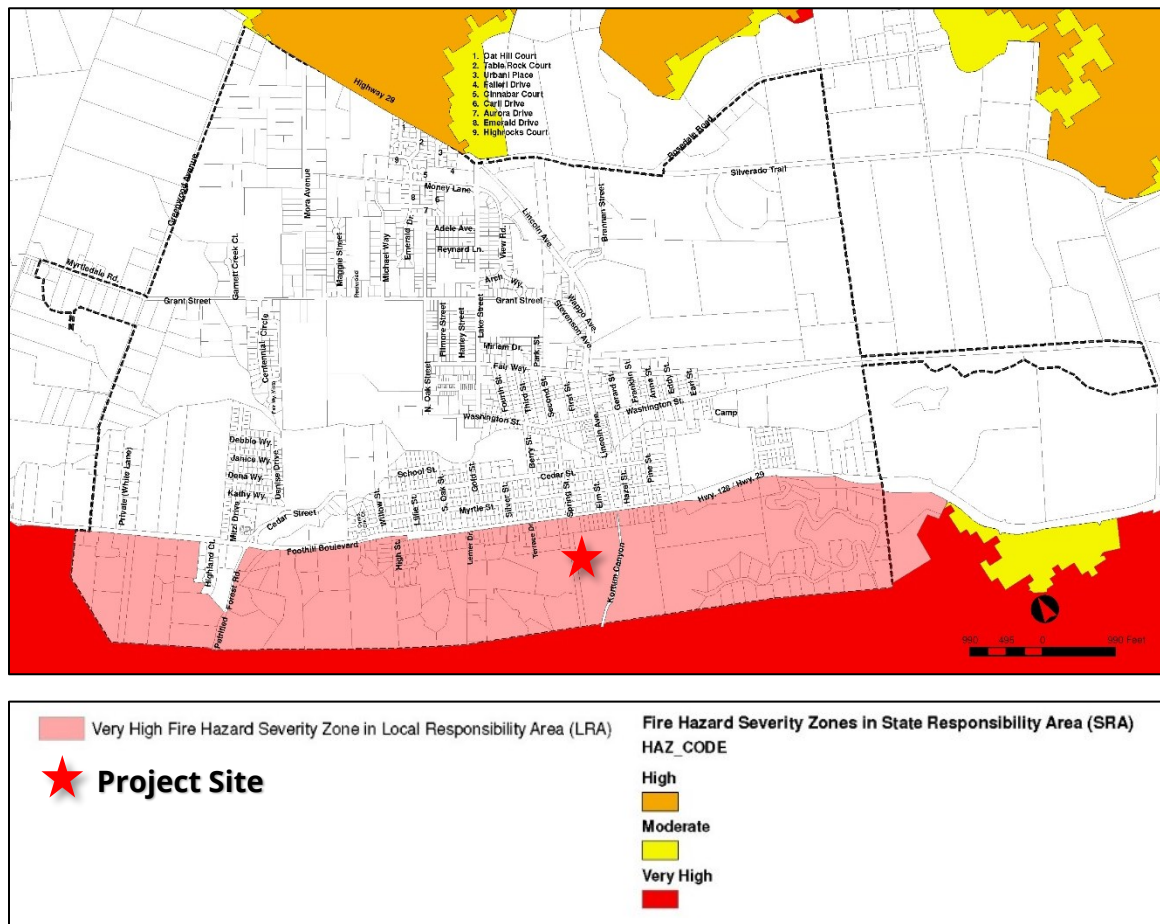
² California Department of Forestry and Fire (CAL FIRE). 2022. Tubbs Fire (Central LNU Complex) Incident. Website: <https://www.fire.ca.gov/incidents/2017/10/8/tubbs-fire-central-lnu-complex/>. Accessed April 2024.

³ California State Geoportal, California Historical Fire Perimeters, <https://gis.data.ca.gov/>, accessed April 2024.

to be subject to wildland fires.

As shown in Figure SAF-6 of the City's General Plan, the majority of the City is not within a Moderate, High, or Very High Fire Hazard Severity Zone. Areas north of Silverado Trail/Highway 29 that are outside of the City are classified as Moderate and High Fire Hazard Severity Zones. As detailed in the Public Safety Element of the General Plan, nearly all of the 370-acre area south of Foothill Boulevard, including the project site, is located within the Very High Fire Hazard Severity Zone within the local responsibility area (LRA). Areas south of the city limit are designated Very High Fire Hazard Severity Zone within the state responsibility area (SRA).

FIGURE 4.3-1: WILDLAND FIRE HAZARDS⁴



Areas south, east, and west of the project site are characterized by large, heavily wooded

⁴ City of Calistoga General Plan, Public Safety Element, Figure SAF-6, Page SAF-17, annotated to show location of project site.

lots dominated by oak woodlands and coniferous forests. Existing commercial uses are located north of the project site with frontage on Foothill Boulevard. Large parcels zoned for agriculture and used mainly for viticulture are located to the north, east, and west of the site. The area located west of Kortum Canyon Road, which was recently divided from the site through a line adjustment, is at the interface between residential neighborhoods, agricultural lands, and vast open space extending west to Healdsburg, Windsor, and Larkfield-Wikiup and southeast to Sonoma.

The 30.11-acre Project site contains distinct clearings that are void of vegetation and trees. As proposed, future single-family residences will be sited in these previously disturbed areas.

4.3.3 THRESHOLDS OF SIGNIFICANCE

As provided in Appendix G of the CEQA Guidelines, the project would result in a significant impact to wildfire if it would:

- A. Substantially impair an adopted emergency response plan or emergency evacuation plan.
- B. Exacerbate wildfire risks due to slope, prevailing winds, and other factors, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
- C. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
- D. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.
- E. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires (Impact HAZ-G in Initial Study).
- F. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect to wildfire (Impact LUP-B in Initial Study).

4.3.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

The impact analysis contained herein is based on the Wildland Fire Protection Plan (Appendix 4.3-A) and Fehr & Peers Report (Appendix 4.3-B). Impacts related to wildfire and hazards associated with wildland fires are assessed using the significance criteria listed in

4.3.2, above. This analysis identifies the potential direct and indirect impacts related to wildfire and hazards associated with wildland fires from construction, operation, and maintenance activities related to the proposed project.

Impact FIR-A: The project could substantially impair an adopted emergency response plan or emergency evacuation plan (less than significant impact).

Community Wildfire Protection Plan

Policy P1 of Objective SAF-5.1 of the Safety Element identifies Foothill Boulevard/Highway 128 and Lincoln Avenue/Highway 29 as evacuation routes in the City. As discussed above, the CWPP identifies projects that are intended to reduce wildland fire hazards within the County. Among other goals, these projects seek to reduce wildfire risk through management of fuel sources, including along evacuation routes, and support wildfire response, through improved access. Near the project site, the CWPP identifies planned improvements along State Highway 128 and Lincoln Ave including removal of hazardous trees and reduction of fuel volumes. Additionally, the CWPP identifies expansion of roadside turnouts and improvements to Kortum Canyon Road. As proposed, the project will not conflict with improvements identified in the CWPP, and in the case of Kortum Canyon Road, will contribute to improvements identified in the CWPP as the project will widen a portion of Kortum Canyon Road to between 24 and 25 feet and will realign the intersection of Foothill Boulevard and Kortum Canyon Road, providing improved access and circulation for both emergency response and evacuation. The project will implement improvements identified in the CWPP and therefore furthers the goals of the Plan, including fire hazard mitigation and emergency preparedness. By contributing to these improvements, the project will not substantially impair an adopted emergency response plan and potential impacts would be less than significant.

City of Calistoga Emergency Operations Plan

When wildfire and other events impacting the city occur, the Office of Emergency Services communicates evacuation procedures including notifying the public via Alert Napa-Everbridge an internet communication platform used to release important information to the community, ZoneHaven, which delineates evacuation zones within the city, and the City's emergency siren system which includes three sirens located throughout the City. The City's siren system has an Lmax of 75 to 80 dBA at the project site, which is a sufficient noise level to notify project site occupants of an evacuation via siren. The City of Calistoga's Emergency Operations Plan identifies major evacuation activity as the responsibility of the

Law Enforcement and Fire Operations Branches.

Evacuation Analysis Report

An Evacuation Analysis Report, dated May 2, 2024, was prepared by Fehr and Peers to document the effects of three projects (Yellow Rose Ranch, 2565 Grant Street, Kortum Ranch Development), on evacuation times along Highway 29/Lincoln Avenue, Silverado Trail, Foothill Boulevard/Highway 128, and Petrified Forest Road during potential wildfire events. The report analyzes impacts on evacuation times under two wildfire scenarios for both the near (2019) and far (2040) term: a Northeast Fire scenario assuming a fire starting near Mt. Saint Helena and a South Fire scenario assuming a fire starting along the west and east ridge in the southern portion of the city.

Under both scenarios the analysis assumes a mass evacuation of the entire study area⁵ occurring on the Friday prior to the Labor Day holiday with a single evacuation order issued for the entire study area at 4:30 p.m. and the Saturday during the Labor Day holiday weekend with a single evacuation order issued for the entire study area at 12:30 p.m. To estimate the total time needed to evacuate the study area, the analysis includes background traffic, which represents typical traffic that would utilize area roadways leading up to the start of and through an evacuation, as well as trips generated by the three projects included in the study. As detailed in the Report, the total number of evacuation trips associated with the three projects studied is 283. Of these, 43 are attributed to the Kortum Ranch Development project, 136 to the Yellow Rose Ranch project, and 104 to the 2565 Grant Street project.

The scenarios analyzed in the Report represent a conservative estimate of the effects of the three projects on evacuation, as the time of year studied is during peak tourism for wineries in the area, which would result in a greater volume of people evacuating, coincides with fire season, which represents a greater likelihood of a major fire event occurring, and assumes all people in the study area would evacuate under a single order, representing a high urgency wildfire event requiring immediate evacuation of all people in the area at the same time. The two wildfire scenarios and associated impacts on evacuation time were analyzed for, (1) No Projects, (2) No Yellow Rose Ranch, (3) No Kortum Ranch (subject project), (4) No 2565 Grant Street Project, and (5) All Three Projects for both the 2019 and 2040 buildout conditions. The report indicates that during the

⁵ The study area is generally bounded by Foothill Boulevard/Highway 128 and Tubbs Lane, Highway 29 and Tubbs Lane, Highway 29 and Dunaweal Lane, and Silverado Trail and Dunaweal Lane.

Northeast Fire scenario most of the evacuation would occur south towards the City of Napa along Hwy 29 and the Silverado Trail. The overall time needed to clear the study area under the Northeast Fire scenario in the near term (2019) for a Friday and Saturday evacuation event was estimated to be 3.5 hours for the No Project and All Projects condition. Under the 2040 scenario, the total time was 4.5 hours for both conditions. Under the South Fire scenario, most of the evacuation is presumed to occur north along Highway 128 towards Healdsburg, Highway 29 towards Mount St Helena, and Petrified Forest Road towards Santa Rosa. The overall time needed to clear the study area under the South Fire scenario in the near term (2019) for a Friday and Saturday evacuation event was estimated to be 4 hours for both the No Project and All Projects condition. Under the 2040 scenario, the total time was 5 hours for both conditions.

The Report concludes that under both wildfire scenarios, the evacuation trips from any combination of the three projects, including the proposed project, would have a marginal effect on the City-wide evacuation time, resulting in less than a 15-minute effect on the total time needed to evacuate the study area. This result was the same regardless of near or far term conditions (2019 and 2040) as well as an evacuation occurring on the Friday before Labor Day or the Saturday of Labor Day weekend.

The conclusion that impacts on evacuation time would be marginal as a result of implementing the three projects, including the proposed project, is supported by the minimal share of maximum hourly flow rate occupied by project vehicles evacuating the study area. The maximum hourly flow rate can be described as the highest possible rate at which vehicles can evacuate the study area within one hour. The proportion of the maximum hourly flow rate consumed by the proposed project under the Northeast Fire scenario is 2% and under the South Fire scenario is 1%. The proportion consumed by the Yellow Rose Ranch project is 6% and 5%, and the proportion consumed by the 2565 Grant Street project is 5% and 4%, respectively. The overall share of capacity consumed as analyzed under the conservative analysis represents the maximum impact that the three residential projects would have on overall evacuation time.

The analysis indicates substantial congestion in the study area in the event of a mass evacuation as evacuation routes would carry traffic volumes exceeding their capacity. With no evacuation procedures in place, evacuation of the study area would occur at the same time as nearby communities, such as the City of Saint Helena, which would result in additional congestion and increased time needed to evacuate the area (see discussion above for estimated overall evacuation time). As stated previously, evacuation of the study

area under a single evacuation order represents a conservative analysis and is not a typical approach taken by the City. Rather, the City closely monitors wildfire events and employs evacuation procedures appropriate for individual events, which may include evacuation alerts (prepare for evacuation) and evacuation orders (evacuation required), which prioritizes evacuation of the highest threat areas first, allowing for a staggered evacuation approach, which reduces congestion on evacuation routes and ensures the areas under imminent threat from wildfire are cleared first.

Through compliance with standard evacuation procedures issued by the Law Enforcement and Fire Operations Branches, impacts of the project on the overall evacuation time and the City of Calistoga's Emergency Operations Plan will be less than significant.

Impact FIR-B: The project could exacerbate wildfire risks due to slope, prevailing winds, and other factors which could expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire (potentially significant impact).

Future single-family residences and associated development as well as existing vegetation onsite could serve as fuel for a wildfire and, if not properly designed and controlled, could exacerbate wildfire risks which could in turn expose project occupants to pollutant concentrations from a wildfire.

A Wildland Fire Protection Plan (WFPP), prepared by Wildland Resource Management and dated January 2023, analyzes wildfire risks on the project site and provides recommendations to reduce those risks. The WFPP also includes recommendations for structure ignition resistant features, emergency preparedness and notification, and delegates responsibilities for implementation. According to the WFPP, the Project site is subject to wildfires due to its topographic characteristics, fuel characteristic and density, and susceptibility to Santa Ana or Diablo winds that typically blow from the northeast.

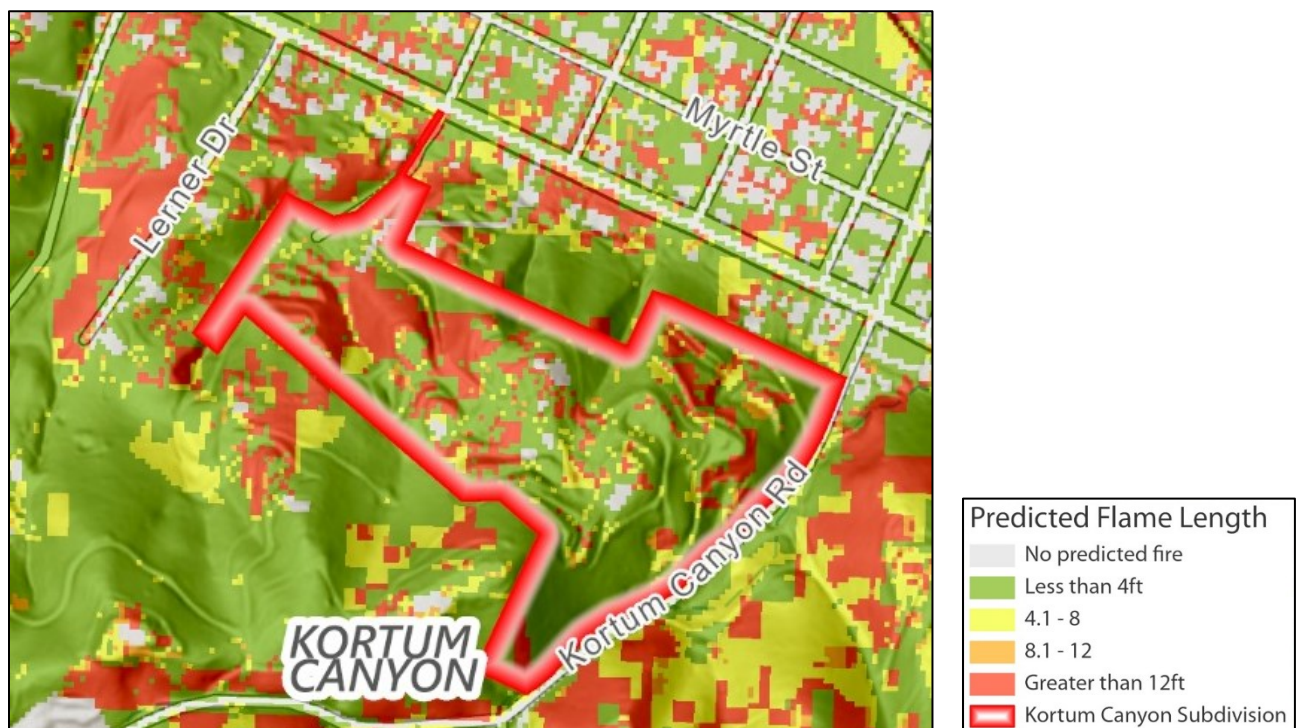
As detailed in the WFPP, during a wildfire event, the entire project site is predicted to burn, with the majority of the site predicted to burn with flames 4 feet or less, which is the limit for what can be effectively controlled by fire fighting response. As shown in Figure 4.3-2, areas comprised of coniferous forests and steep slopes on the eastern portion of the site are predicted to burn with flame lengths between four and eight feet. Oak woodland areas located at the northwest and northeast portions of the site are predicted to burn intensely, with flame lengths greater than 12 feet.

As stated in the WFPP, a worst-case fire scenario would be one advancing from the east, which would cast embers carried by Santa Ana or Diablo winds and would land on the

eastern slopes of the Project site, igniting these areas and carrying fire upslope to the proposed development, further facilitating the spread of embers in the oak woodland and coniferous forest area of the Project site and its surroundings. In addition, poorly maintained landscaping or shrubs/trees could provide additional fuel on the project site, thereby exacerbating wildfire risk.

In addition to risk associated with ember cast and poorly maintained landscaped areas, the spread of wildfire on the site and surrounding areas can be accelerated due to the presence of topographical draws, which are canyon like features formed by two ridges with low ground between. These topographical features contribute to the rapid spread of wildfire through the chimney effect, where steep slopes channel hot air and flames upwards, creating an upward draft which can cast embers a greater distance and result in further spread of wildfires.

FIGURE 4.3-2: PROJECT SITE PREDICTED FLAME LENGTH⁶



To address impacts associated with exacerbating wildfire risk, the Project's WFPP proposes implementation of a Fuel Management Program which includes establishment of two treatment zones and associated maintenance activities as well as standards for roadside

⁶ Wildfire Protection Plan, Wildland Res Mgt, January 2023, Figure 17.

vegetation management. The following describes the proposed treatment zones and standards for roadside vegetation management:

Defensible Space/Landscaping Zone (Zone 1). This zone encompasses the space in the immediate vicinity of single-family residences as defined under Section 4291 of the California Public Resources Code and Title 15, Section 36 of the Calistoga Municipal Code. Fuel management in this zone is designed to reduce ignitions near structures, support structural survival during a wildfire, and reduce the chance of ignition moving and spreading wildfire offsite. Maintenance activities in this zone apply to all residential lots and areas within 100 feet of structures on residential lots.

Fuel-Modification Zone (Zone 2). This zone encompasses undeveloped open spaces and perimeter areas on the project site. Maintenance activities in this zone include minimizing growth of Douglas fir trees and volumes of understory shrubs. In addition to open space fuel management, this zone also includes perimeter fuel management. Maintenance of perimeter fuels includes mowed strips 30-feet wide by 4-inches high, as well as establishment of fire trails. Maintenance of perimeter fuels associated with topographical draws around Lots 1, 8, 9, 12, and 15 include orderly fuel spacing, removal of ladder fuels and crowded canopies, and home hardening construction.

Related to fuel modification, Napa County was recently awarded the federal Building Resilient Infrastructure and Communities grant to implement the Napa County Community-Wide Comprehensive Wildfire Mitigation Program. As part of the grant application, the county identified areas within 1,000 feet of Foothill Blvd/Hwy 29 for vegetative fuel treatment. The project site and surrounding areas are within the area planned for treatment of fuels, which would reduce flame lengths to two feet or less, thereby decreasing the intensity and likelihood of the spread of wildfire. The proposed fuel modification zone and maintenance activities proposed by Napa County will work in tandem to reduce fire hazards at the site.

Roadside Vegetation Management. Areas recommended for roadside vegetation management comprise those within 30 feet of the pavement edge of roads and is intended to address roadside ignitions and facilitate evacuation and emergency vehicle access. The fuel management standards and actions in this area are the same as that of the Defensible Space/Landscaping (Zone 1) except that there must also be a 15-foot vertical clearance created by tree-trimming along the entire length of the roadway.

In addition to the fuel management zones and associated maintenance standards, the

WFPP also provides recommendations for ignition resistant features beyond the requirements of the California Building Code and Uniform Fire Code, as adopted by the City of Calistoga.

To ensure implementation of recommendations included in the WFPP prepared to address impacts associated with exacerbating wildfire risks and exposing project occupants to pollutant concentrations from a wildfire, **Mitigation Measure FIR-1**, which requires preparation and implementation of a final Wildland Fire Protection Plan shall be required. In addition, consistent with the City's General Plan, compliance with **Mitigation Measure FIR-2**, which requires submittal of lot-specific wildfire behavior models to establish building setbacks and fire resistive ratings for single-family residences as deemed necessary in the final WFPP required pursuant to Mitigation Measure FIR-1. As provided in measure FIR-2, the requirement to perform lot-specific wildfire behavior models shall be included on the Kortum Ranch Final Map.

Implementation of defensible space/landscaping maintenance, fuel management programs, and roadside maintenance required under measure FIR-1, as well as county maintenance activities will reduce sources of wildfire fuels such that any ignited fires will travel at more containable speeds, produce flame lengths that can be managed with direct firefighting techniques, and will minimize active and passive crown fires.⁷ Lot-specific wildfire behavior modeling required by measure FIR-2 will provide site-specific building setbacks and fire resistive measures, which will account for topographical features and ensure individual single-family dwellings are sited in a way that minimizes wildfire risk. As such, with implementation of measures FIR-1, FIR-2, and ongoing planned maintenance proposed at the county level, exacerbation of wildfire risks due to the proposed project will be reduced to less than significant.

Impact FIR-B Mitigation Measures:

Mitigation Measure FIR-1: Prior to approval of the Kortum Ranch Final Map, a final Wildland Fire Protection Plan (WFPP) shall be submitted to the City of Calistoga and the Diamond Mountain Fire Safe Council (DMFSC) for review and approval. To ensure proper implementation of vegetation management, fuel management, and other recommendations to address wildfire risk at the site, the City of Calistoga Fire Department

⁷ Active crown fires spread from tree crown to tree crown. Passive crown fires (or torching): occurs where surface fire intensity is sufficient to ignite tree crowns, individually or in groups, but winds are not sufficient to support spread from tree to tree.

and/or DMFSC shall provide recommendations for appropriate periodic inspection of the site. The WFPP shall delineate treatment zones for Defensible Space/Landscaping (Zone 1), and Fuel-Modification (Zone 2), and shall confirm lots requiring preparation of a wildfire behavior model (see Mitigation Measure FIR-2) Treatment zones identified in the final approved WFPP as well as lots requiring preparation of a wildfire behavior model shall be noted on the Final Map prior to approval and/or recordation.

Compliance with all recommendations, including those related to structure ignition resistant features contained in the WFPP shall be demonstrated by individual property owners/applicants upon submittal of a Final Development Plan for Design Review approval.

Mitigation Measure FIR-2: Upon submittal of a Final Development Plan for Design Review approval to develop individual lots, lot specific wildfire behavior models shall be prepared by a qualified wildfire specialist and submitted by the applicant to the City for review and approval. Lots subject to this requirements shall be determined in the final WFPP as required by Mitigation Measure FIR-1, and shall be used to determine precise setbacks, fire resistive ratings, and other design features. Lot-specific wildfire behavior models shall characterize the following factors for each lot and shall be used to inform orientation, setbacks, fire resistive ratings, and other design features for development of single-family residences and associated improvements:

- Fuel composition including moisture level, chemical makeup, and density.
- Weather conditions including wind speed and direction, temperature, and humidity.
- Topographic features including elevation, slope, and aspect.

Building location, fire-resistive ratings, and other design features shall be subject to review and approval by the City of Calistoga Fire Department and Planning Division prior to review and approval of the Design Review permit by the Planning Commission.

To ensure individual property owner awareness of this mitigation measure, the following shall be included as a note on the final map:

“Upon submittal of lot-specific development proposals for single-family dwellings, a wildfire behavior model shall be prepared by a wildfire specialist and submitted to the City of Calistoga. Lot-specific behavior models shall be used to specify building setbacks and fire resistive ratings for individual single-family residences.”

Impact FIR-C: The project would not require installation or maintenance of infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment (less than significant impact).

As proposed, the Project does not require infrastructure that would exacerbate fire risk. Improvements are proposed to formalize access through the project site utilizing a majority of the existing alignment of the internal drive extending between Kortum Canyon Road and Terrace Drive. The Project proposes improvements to an existing east/west right-of-way that traverses the project site and connects to Terrace Drive, west of Kortum Canyon Road, which will provide site access for the residents of lot 20 as well as secondary emergency vehicle access to the site via a 12-foot wide access road connecting to Terrace Drive, inclusive of EVA turnarounds per Fire Safety Standards. Access to individual lots will be provided from the east/west right of way via driveways whose specific locations will be determined through the preliminary and final development plan process set forth in Chapter 17.15 of the CMC. The existing access roadway will be widened to 20-feet at the project site's main entrance from Kortum Canyon Road with 10-foot travel lanes in each direction and a two-foot shoulder on either side. Consistent with regional stormwater management regulations, vegetated swales or rock-lined drainage swales will be installed beyond the roadway shoulder on the downslope portion of the right-of-way to capture stormwater runoff. In addition to onsite roadway improvements, approximately 240 linear feet of the Kortum Canyon Road right-of-way commencing at its intersection with Foothill Boulevard/Highway 128 and extending south towards the project site will be widened to be between 24 and 25 feet wide and the intersection of Foothill Boulevard/Highway 128 and Kortum Canyon Road will be re-aligned. Further, offsite improvements are proposed to Terrace Drive including paving, striping, and stenciling between Foothill Blvd./Highway 128 and the project site.

None of these improvements will exacerbate fire risks or result in temporary or ongoing impacts to the environment. The proposed improvements to Kortum Canyon Road, including at its intersection with Foothill Boulevard, are consistent with the CWPP and will contribute to reducing wildfire risks in the area by providing improved access to emergency evacuation routes. In addition to roadway improvements, all proposed utilities will be located underground, and, therefore, will not exacerbate wildfire or result in other environmental impacts. Therefore, impacts of the project will be less than significant.

Impact FIR-D: The project could expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes (potentially significant impact).

Wildfires burn healthy vegetation that can absorb stormwater and leaves behind burned areas that become water repellent, thereby resulting in drainage changes that can result in downslope flooding. In addition, burned areas have a decreased ability to hold soil in place, which can lead to an increased risk of slope instability and landslides.

Due to the project's location on steeply sloped terrain, there is a potential for post-fire hazards to expose people or structures to downslope hazards including both project uses and occupants and offsite land uses located north of the site along Foothill Boulevard. As noted in the Public Safety Element of the General Plan, the project site and surrounding area has previously experienced landslides as a result of excessive rainfall, tree removal, and grading. As discussed in detail in the Initial Study, the project site, has previously experienced landslide activity in the area of lots 2, 4, and 11 and has the potential to result in debris flow that could impact downslope hazards. As such, **Mitigation Measure GEO-1** is imposed on the project, which requires installation of catchment basins or debris fencing in areas identified as potential hazards. In addition to site design required by measure GEO-1, as detailed in the WFPP prepared for the project, the Calistoga Fire Department has the authority to periodically review the condition of vegetative fuel onsite and provide recommendations to reduce potential hazards, including potential issues related to slope instability. As required by **Mitigation Measure FIR-1**, prior to approval of the Kortum Ranch Final Map, a final WFPP is required to be submitted to the City of Calistoga for review and approval. As part of this review process, the City of Calistoga Fire Department will provide recommendations for periodic inspection of the site to allow ongoing identification of hazards that should be addressed and require the property owner to carry out those recommendations, including compliance with standards for defensible space around single-family residences.

With implementation of measures GEO-1 and FIR-1, substantial adverse impacts due to downslope or downstream flooding or landslides, as a result of post-fire slope instability, runoff, or drainage changes will be reduced to less than significant.

Impact FIR-D Mitigation Measures:

Mitigation Measure GEO-1: Prior to issuance of grading or construction permits, the applicant shall demonstrate compliance with the recommendations set forth in the Debris

Flow Hazard Assessment prepared by Bajada Geosciences, Inc., dated August 8, 2023. As provided therein, to reduce risks associated with debris flows downslope of Lots 2, 4, 9, 10, and 11 (identified as Areas A, B, and C in the Assessment), catchment basins or debris fencing shall be installed to capture debris and prevent displacement downslope. Final design shall be subject to review and approval by the City of Calistoga and ongoing maintenance shall be required to ensure adequate capacity in the event of a debris flow. The location of debris flow areas shall be included in the Final Map and Improvement Plans and a note shall be included related to required ongoing maintenance.

Mitigation Measure FIR-1: See Impact FIR-B Mitigation Measures above.

Impact FIR-E (Impact HAZ-G in Initial Study): The project could expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires (potentially significant impact).

As described above, the project site is in a VHFHSZ and the introduction of new single-family residences on the site could expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires. Direct impacts could result through loss of individual structures or lives on the project site and surrounding area as a result of the wildfire itself, whereas indirect impacts could result through secondary damage, such as landslides, or health issues associated with wildfire smoke. As required by **Mitigation Measure FIR-1**, final approval and implementation of the WFPP, which includes a Fuel Management Program, construction in accordance with California Building Code and Uniform Fire Code, and implementation of site-specific ignition resistant features is required. In addition, **Mitigation Measure FIR-2** requires preparation of site-specific wildfire behavior modeling to inform building setbacks and resistive ratings for individual single-family residences. Implementation of measures FIR-1 will reduce wildfire hazards on the project site, thereby reducing wildfire risk introduced by the project, and measure FIR-2 will reduce wildfire risks associated with development in a VHFHSZ by appropriately siting single-family residences and incorporating wildfire resistive design, materials, and landscaping. With implementation of measures FIR-1 and FIR-2, impacts associated with the risk of loss, injury, or death involving wildland fires will be less than significant.

Impact FIR-E Mitigation Measures:

Mitigation Measure FIR-1: See Impact FIR-B Mitigation Measures above.

Mitigation Measure FIR-2: See Impact FIR-B Mitigation Measures above.

Impact FIR-F (Impact LUP-B in Initial Study): The project could cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect related to wildfires (potentially significant impact)

Through implementation of **Mitigation Measure FIR-1**, requiring implementation of recommendations in the WFPP, the project is consistent with Objective SAF-3.1, policies P1 and P2 of the General Plan as the project will incorporate design measures to reduce wildland fire risk and will design roadways and driveways in a way that facilitates access by fire personnel and their associated equipment. The WFPP also achieves Objective SAF-3.3., policy P1 as it provides opportunities for residents to be informed about wildfire prevention and response. Additionally, **Mitigation Measure FIR-2** is consistent with Objective SAF-3.2, policy P1 as it requires additional fire behavior modeling to be prepared as part of applications for development of future single-family residences. Lots requiring preparation of additional fire behavior modeling will be determined in the Final WFPP and will be used to inform lot-specific design features such as building setbacks and fire resistive features.

In addition to the City's General Plan, the project is also consistent with the Napa County CWPP as it will contribute to priority projects identified in the Plan. Specifically, the project will improve Kortum Canyon Road by widening an approximately 240 foot segment of the roadway to between 24 and 25 feet wide, thereby improving access on Kortum Canyon Road, and will realign the intersection of Kortum Canyon Road/Foothill Boulevard, which will improve access to a designated evacuation route.

As proposed and through implementation of measures FIR-1 and FIR-2 potential impacts resulting from a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect related to wildfires will be less than significant.

Impact FIR-F Mitigation Measures:

Mitigation Measure FIR-1: See Impact FIR-B Mitigation Measures above.

Mitigation Measure FIR-2: See Impact FIR-B Mitigation Measures above.

4.3.5 CUMULATIVE IMPACTS

The geographic scope of cumulative wildfire impacts as it relates to emergency evacuation includes the entire City of Calistoga as wildfire events often impact the entire community

and may require evacuation of some or all of the City's occupants. As detailed above, Fehr & Peers conducted an evacuation analysis to document the overall time needed to evacuate the study area in the event of a wildfire and concluded that the project's contribution, and the contribution of cumulative development would not result in a significant increase in the time needed to evacuate the study area. Furthermore, the City has multiple notification platforms that can be used to issue evacuation advisories and orders to promote evacuation of the most at-risk areas first and reduces congestion on evacuation routes.

Significant cumulative impacts related to wildfire could occur as a result of substantial increases in structures and residents in areas with a high risk of wildfire or of post-fire debris flows or slope failures. In addition, placement of development in areas characterized by high fire risk increases the likelihood of wildfires and the resulting regional exposure to public health risk due to air quality impacts. The cumulative projects provided in Table 4-1 of Chapter 4.0 Environmental Evaluation are primarily located outside of the VHFHSZ, with the exception of two projects, one of which is the proposed project. Though the project site is located in an area with wildfire risk, implementation of mitigation measures address wildfire hazards on the site and reduce risks introduced by the project to less than significant. Furthermore, all projects within the City of Calistoga are subject to applicable State and City fire codes, which address impacts related to wildfire.

Due to cumulative projects being located outside of high risk fire areas and because all projects are subject to applicable fire codes, cumulative projects will not exacerbate wildfire risk or have significant cumulative impacts related to wildfire hazards. Similarly, because mitigation measures will reduce the projects wildfire impacts to less than significant the proposed project will not incrementally contribute to cumulative impacts. As such, cumulative wildfire impacts will be less than significant.

4.3.6 APPENDICES

- Appendix 4.3-A: Draft Wildland Fire Protection Plan, prepared by Wildland Resource Management, dated January 2023, update received October 22, 2024.
- Appendix 4.3-B: CEQA Evacuation Analysis, prepared by Fehr & Peers, February 9, 2024

4.3.7 REFERENCES

1. California Department of Forestry and Fire (CAL FIRE). 2022. Glass Fire Incident. Website: <https://www.fire.ca.gov/incidents/2020/9/27/glass-fire/>. Accessed April 2024.

2. California Department of Forestry and Fire (CAL FIRE). 2022. Tubbs Fire (Central LNU Complex) Incident. Website: <https://www.fire.ca.gov/incidents/2017/10/8/tubbs-fire-central-lnu-complex/>. Accessed April 2024.
3. California State Geoportal, California Fire Perimeters, <https://gis.data.ca.gov/datasets/CALFIRE-Forestry::california-fire-perimeters-all-1/explore?location=37.251628%2C-119.269132%2C5.84>, accessed April 2024
4. Federal Emergency Management Agency, California: Napa County's Community-Wide Comprehensive Wildfire Mitigation Program, <https://www.fema.gov/case-study/california-napa-countys-community-wide-comprehensive-wildfire-mitigation-program>, accessed April 2024.
5. Napa Fire Wise, Napa County Community Wildfire Protection Plan (CWPP), March 15, 2021.