2.8 Hazards and Hazardous Materials

This section describes the existing conditions of the project Site; identifies associated regulatory requirements; evaluates potential significant wildfire hazards, hazardous materials, emergency response plans, and vector impacts; and identifies applicable mitigation measures related to implementation of the proposed project. This section is based, in part, on the following technical reports:

- Phase I Environmental Site Assessment Report, Newland Sierra, San Marcos, California prepared by Leighton and Associates (EIR, Appendix L-1)
- Phase I Environmental Site Assessment, 2733 Sarver Lane, San Marcos, California prepared by Leighton and Associates (EIR, Appendix L-2)
- Focused Soil and Soil Vapor Screening Survey Report, Newland Sierra, San Marcos, San Diego County, California prepared by Leighton and Associates (EIR, Appendix L-3)
- Report of Removal of Above Ground Storage Tank, Prepared by Leighton and Associates (Appendix L-4)
- Vector Management Plan for the Newland Sierra Project prepared by Dudek (EIR, Appendix M)

Two Fire Protections Plans (FPPs) have been prepared for the project: (1) for the portion of the project within the Deer Springs Fire Protection District, and (2) for the portion within the San Marcos Fire Protection District (which only includes the Sierra Farms portion of the project). These two FPPs, listed below, are collectively referred to as the “the project’s FPP” throughout this EIR. Additionally, an Evacuation Plan has been prepared for the project:

- Fire Protection Plan for the Newland Sierra Project prepared by Dudek (EIR, Appendix N-1)
- Wildland Fire Evacuation Plan for Newland Sierra (EIR, Appendix N-2)
- Fire Protection Plan for Sierra Farms prepared by Dudek (EIR, Appendix O).

Comments received in response to the Notice of Preparation (NOP) included concerns regarding proximity to High Fire Hazard Severity Zones, health risks associated with blasting and hauling from construction, emergency and fire evacuation, and location of residents near high-fuel vegetation. These concerns are addressed and summarized in this section. A copy of the NOP and comment letters received in response to the NOP is included in Appendix A of this EIR.
2.8.1 Existing Conditions

Wildfire Hazards

Fire History

Fire history information can provide an understanding of fire frequency, fire type, most vulnerable project areas, and significant ignition sources, among other factors. There have been several fires recorded by the California Department of Forestry and Fire Protection (CAL FIRE) in its Fire Resource and Assessment Program database in the vicinity of the project Site. The most notable fire, occurring to the north and east of the project Site, was the 1969 Moosa Fire. That fire burned 6,900 acres in 1969 and spread within 1,200 feet of the project Site, opposite Interstate (I) 15. In addition, three fires are noted within 1 mile of the project Site, dating back to 1969. (This information excludes fires less than 10 acres.) There have been multiple fires throughout inland North San Diego County, including two fires along Old Castle Road to the east of the project Site and fires along the I-15 corridor to the north and south of the project Site during the summer of 2006. Rapid and overwhelming response to these fires has resulted in their containment before they could grow to the size that would include them in CAL FIRE’s database. Similarly, more recent fires are not included in the database until their data are loaded by CAL FIRE. For example, the May 2014 fire that occurred near State Route 76 and Old Highway 395 in the Bonsall area of San Diego County would not currently be included in the database. That fire, which burned just less than 400 acres, was roughly 6 miles north of the northern boundary of the project Site. It occurred during a Red Flag Warning, initially alluded containment, and caused evacuations of approximately 2,000 residents.

Portions of the project’s landscape and some areas to the east and west of I-15 have not burned in 100 years or more. The Merriam Mountains, as with much of the open space in the region, in their present state, represent a potential threat to the many existing homes scattered along Deer Springs Road, the small avocado and citrus ranches and homes along the western side of the Merriam Mountains, and the City of San Marcos and beyond, which are all at immediate risk from a Santa Ana wind driven wildfire. One scenario San Diego County firefighters have modeled and pre-planned is a Santa Ana wind driven wildfire igniting to the east of I-15, and jumping I-15 from the northeast, or sourcing on the west side of I-15 and burning slopes, across the project Site and expanding into the City of San Marcos and other neighboring downwind communities.

Dudek conducted a field assessment of the project Site on February 19, 2014, to confirm/acquire Site information, document existing Site conditions, and determine potential actions for protecting the project’s structures. While on the Site, Dudek assessed the area’s topography, natural vegetation and fuel loading, surrounding land use, and general susceptibility to wildfire. The following field tasks were completed:

- Vegetation estimates and mapping refinements
2.8 Hazards and Hazardous Materials

- Fuel load analysis
- Topographic features documentation
- Photograph documentation
- Confirmation/verification of hazard assumptions
- Ingress/egress documentation
- Meetings with fire agencies dating to 2013 and as recently as March 2017

Following Site evaluation and vegetative fuels data collection efforts, Dudek conducted fire behavior modeling to document the type and intensity of fire that would be expected on the project Site, given characteristic features such as topography, vegetation, and weather. Dudek used FlamMap, which is a graphics-based GIS model that uses the same fire spread algorithms contained in the BehavePlus software package. The advantage of FlamMap modeling is that it evaluates anticipated site-wide fire intensity and flame length values based on variations in topography and vegetative cover, and provides a graphical output that can be evaluated on site maps, whereas BehavePlus provides a tabular output. BehavePlus was used for specific target areas for confirmation of FlamMap results. See EIR, Appendix N, for complete methodology and results.

Based on the fire behavior modeling, a worst-case summer fire would result in a fire spreading at a rate of up to 4.3 miles per hour (mph). During a fall fire with gusty Santa Ana winds and low fuel moisture (peak condition), fire is expected to be fast moving at up to 17.3 mph, with highest flame length values reaching approximately 67 feet in specific portions of the Site. Spotting (where airborne embers can ignite new fires downwind of the initial fire) is projected to occur up to nearly 1 mile during a summer fire and nearly 2.8 miles during a fall fire.

Fire Facilities

The project Site is located within the Deer Springs Fire Protection District (DSFPD) and the San Marcos Fire Protection District (SMFPD). The majority of the project Site is located within the DSFPD, and the Sierra Farms portion (see Figures 1-3 and 1-17 in Chapter 1 of this EIR) is located within the SMFPD.

Deer Springs Fire Protection District

DSFPD is provided fire service through a contract with CAL FIRE, which provides staffing for the DSFPD. DSFPD currently operates three fire stations, all of which could respond to a fire or medical emergency at the Site. Table 2.8-1 of this EIR summarizes the DSFPD’s fire and emergency medical delivery system.
DSFPD’s closest station is Fire Station (FS or Station) 12, located at 1321 Deer Springs Road, which staffs a minimum of three firefighters 24 hours per day, 7 days per week and houses one Type I Engine and one Type III engine. Secondary response would be provided from other DSFPD fire stations as needed. Station 13 is the next closest DSFPD station and is located in the community of Hidden Meadows at 10308 Meadow Glen Way East. The station staffs three firefighters on-duty, 24-hours per day firefighters and houses one Type I and one reserve Type I engine. Station 11, DSFPD’s headquarters, is located at 8709 Circle R Drive and houses one Type I and one reserve Type I engine, and one private paramedic ambulance.

There is a “closest unit boundary drop” in effect for several fire agencies in north San Diego County. Units dispatched by Northcom include North County Fire Protection District, Vista Fire Protection District, San Marcos Fire Protection District, Pala, Oceanside Fire Department, and Rancho Santa Fe Fire Protection District. Vehicles have automatic vehicle locators and CAL FIRE, through San Diego County Fire Authority funding, is being outfitted with automatic vehicle locators so that the dispatch center system can locate and dispatch the closest units to an emergency. The dispatch center for the automatic aid units is Northcom. CAL FIRE Monte Vista dispatch center dispatches the CAL FIRE-operated DSFPD units. If automatic aid units are needed, Monte Vista notifies Northcom via a computer-aided design system with very little delay. CAL FIRE dispatch center is the secondary public safety answering point. All 911 calls in DSFPD are routed to CAL FIRE first.

San Marcos Fire Protection District

The proposed Sierra Farms portion of the proposed project is located within the jurisdiction of the San Marcos Fire Department (SMFD), which is a full-service department responsive to the City of San Marcos and the SMFPD. SMFD operates two Fire Stations (Stations 1 and 3) that would respond to an incident at the Proposed project Site, although primary response would be from Station 1, with Station 3 responding as necessary, as outlined in Table 2.8-2. In addition, the City has signed an automatic aid agreement on first alarm or greater fires with all surrounding communities. As such, additional resources to Sierra Farms would also likely dispatch from the DSFPD FS 12, which is the closest station, located to the east along Deer Springs Road.

Hazards and Hazardous Materials

Site Reconnaissance

On January 12 through 14, 2015, Leighton conducted a reconnaissance-level assessment of the Site. The property reconnaissance consisted of observing and documenting existing conditions of the Site and the neighboring development within 0.25 mile of the subject Site.
The majority of the Site is undeveloped with dirt trails. There are no structures on the Site except the four residential structures and associated improvements and outbuilding, which are located along Sarver Lane.

No hazardous substances or drums were observed during Site reconnaissance except for a number of empty quarts to gallon plastic containers of oil, which were illegally dumped on the Site. Staining was not observed beneath these containers.

No evidence of underground storage tanks was observed on the subject Site. One aboveground storage tank was observed. The project applicant provided Leighton with a copy of a County of San Diego Official Notice for APN 178-101-16, dated December 23, 2014. According to the notice, on December 22, 2014, a representative from the San Diego Department of Environmental Health (DEH) investigated an abandoned aboveground storage tank on this parcel (see EIR, Appendix L). The aboveground storage tank was located in open space approximately 1 mile past the end of Joni Lane, and was observed on its side and appeared to have lost oil. Evidence of staining and discolored soils was observed associated with the abandoned aboveground storage tank. In February 2015, the aboveground storage tank was removed from the Site removed and disposed of in accordance with the requirements of the DEH Hazardous Materials Division.

Minor amounts of household trash and construction debris were observed on the project Site. No evidence of dumping that would lead to an environmental concern was observed, except for the presence of shotgun shells in two areas where trash and a TV were used for target practice (see EIR, Appendix L).

2733 Sarver Lane

Leighton assessed the approximately 1-acre parcel located at 2733 Sarver Lane. This site is developed as a single-family residence, guest house, work shop structure, and shed, and is currently unoccupied. On March 4, 2014, Leighton conducted a reconnaissance-level assessment of 2733 Sarver Lane. The interiors of all of the on-site structures were found to be clean, with no staining or indication of hazardous materials stored on-site. A septic system is located in the front yard (west of the structure) of the on-site residence. In addition, a drain pipe of unknown use was observed in the middle of the front yard. No other visible evidence of potentially hazardous material was observed on-site.

Record Searches

Leighton conducted a search of government databases using the Environmental Data Resources (EDR) Radius Report. Details of the database search, along with descriptions of each database researched, are provided in the EDR Radius Report (EIR, Appendix L). Thornton Flower Growers located at 628 Deer Springs Road was identified on the Underground Storage Tank
(UST) and San Diego County Hazardous Materials Management Division databases. According to the information provided, two USTs were located on this parcel. Additional information was not provided; however, according to the records provided by the San Diego DEH, the USTs were removed and issued closure letters. In addition, the USTs were formerly located on the southern portion of this parcel, which is not part of the project Site.

Located off-site, Arco Facility No 05625 (26915 Mesa Rock Road) was identified on the following databases: (1) the Resource Conservation and Recovery Act (RCRA) Small Quantity Generator, (2) the Facility Index System, (3) the Leaking Underground Storage Tank (LUST), (4) the Hazardous Waste Manifest (HAZNET), (5) the Toxics and Criteria Pollutant Emissions Data (EMI), (6) the UST, and (7) the Recovered Government Archive LUST.

According to the information provided, the facility has generated hazardous waste from approximately 1994 through 2013, and has registered USTs. According to the EDR report, a gasoline release has impacted the aquifer and is currently under investigation (EIR, Appendix L). Groundwater was monitored in March 2014 and the wells were abandoned in August 2014. The Arco facility was issued a closure letter by the Regional Water Quality Control Board on October 28, 2014. Total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, and total xylenes, and oxygenates, with the exception of methyl tertiary butyl either (MTBE), were not detected in these groundwater monitoring wells.

2733 Sarver Lane

As to 2733 Sarver Lane, Leighton conducted a search of selected government databases using the EDR Radius Report, dated February 25, 2014. Details of the database search, along with descriptions of each database researched, are provided in the EDR Radius Report (EIR, Appendix L). The property was not identified in the EDR Report. Several properties located 0.25 to 0.5 mile from the property were identified on the EDR Report (see EIR, Appendix L).

2.8.2 Regulatory Setting

Federal Regulations


Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act of 1976, as amended (RCRA). RCRA establishes a framework for national programs to achieve environmentally sound management of both hazardous and non-hazardous wastes. RCRA was designed to protect human health and the environment, reduce/eliminate the generation of hazardous waste, and conserve energy and natural resources. RCRA also promotes
resource recovery techniques. The Hazardous and Solid Waste Amendments of 1984 both expanded the scope of RCRA and increased the level of detail in many of its provisions. The Hazardous Waste Management subchapter of the RCRA addresses a variety of issues regarding the management of hazardous materials, including the export of hazardous waste, state programs, inspections of hazardous waste disposal facilities, enforcement, and the identification and listing of hazardous waste.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended and commonly known as Superfund, on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous substances at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to $8.5 billion.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Title 49 of the Code of Federal Regulations. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation (Caltrans). These agencies also govern permitting for hazardous materials transportation.

U.S. Environmental Protection Agency Region 9, Preliminary Remediation Goals

Region 9 is the Pacific Southwest Division of the U.S. Environmental Protection Agency (EPA), which includes Arizona, California, Hawaii, Nevada, the Pacific Islands, and more than 140 Tribal Nations. Preliminary Remediation Goals are tools for evaluating and cleaning up contaminated sites. Preliminary Remediation Goals for the Superfund/RCRA programs are risk-based concentrations, derived from standardized equations combining exposure information
assumptions with EPA toxicity data. They are considered to be protective for humans (including sensitive groups) over a lifetime. However, Preliminary Remediation Goals are not always applicable to a particular site and do not address non-human-health issues, such as ecological impacts. Region 9’s Preliminary Remediation Goals are viewed as agency guidelines, not legally enforceable standards.

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, and 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.

State Regulations

California Government Code Section 65962.5(a), Cortese List

The Hazardous Waste and Substance Sites (Cortese) List is a planning document used by the state, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires that the California Environmental Protection Agency (CalEPA) develop at least annually an updated Cortese List. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Title 22 of the California Code of Regulations and Hazardous Waste Control Law, Chapter 6.5

The Department of Toxic Substances Control regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under RCRA and the California Hazardous Waste Control law. Both laws impose “cradle-to-grave” regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other Certified Unified Program Agencies, including the San Diego County DEH.
Title 23 of the California Code of Regulations, Underground Storage Tank Act

The underground storage tank monitoring and response program is required under Chapter 6.7 of the California Health and Safety Code and Title 23 of the California Code of Regulations. The program was developed to ensure that the facilities meet regulatory requirements for design, monitoring, maintenance, and emergency response in operating or owning underground storage tanks. The San Diego County DEH is the local administering agency for this program.

Title 27 of the California Code of Regulations, Solid Waste

Title 27 of the California Code of Regulations contains a waste classification system that applies to solid wastes that cannot be discharged directly or indirectly to waters of the state and that, therefore, must be discharged to waste management sites for treatment, storage, or disposal. The California Integrated Waste Management Board and its certified Local Enforcement Agency regulate the operation, inspection, permitting, and oversight of maintenance activities at active and closed solid waste management sites and operations.

California Human Health Screening Levels

The California Human Health Screening Levels (CHHSLs) are concentrations of designated hazardous chemicals in soil or soil gas that CalEPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment on behalf of CalEPA. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the EPA and CalEPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSL can be assumed to not pose a significant health risk to people who may live or work at the site. There are separate CHHSLs for residential and commercial/industrial sites.

Senate Bill 1889, Accidental Release Prevention Law/CalARP

Senate Bill (SB) 1889 required California to implement a new federally mandated program governing the accidental airborne release of chemicals promulgated under Section 112 of the Clean Air Act (42 U.S.C. Section 7412). Effective January 1, 1997, the California Accidental Release Prevention (CalARP) Program replaced the previous California Risk Management and Prevention Program and incorporated the mandatory federal requirements. CalARP addresses facilities that contain specified hazardous materials, known as “regulated substances,” which if involved in an accidental release could result in adverse off-site consequences. CalARP defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.
California Fire Code

The California Fire Code (CFC) is found in Chapter 9 of Title 24 of the California Code of Regulations. It was created by the California Building Standards Commission and is based on the International Fire Code created by the International Code Council. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every 3 years.

California Emergency Services Act

The California Emergency Services Act, Government Code Section 8550 et seq., was adopted to establish the state’s roles and responsibilities during human-made or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or the resources of the state. This act is intended to protect health and safety by preserving the lives and property of the people of the state.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The California Natural Disaster Assistance Act is activated after the following occurs: (1) a local declaration of emergency; or (2) California Emergency Management Agency gives concurrence with the local declaration, or the governor issues a proclamation of a state emergency. Once the act is activated, local government is eligible for certain types of assistance, depending upon the specific declaration or proclamation issued.

Title 14 Division 1.5 of the California Code of Regulations

Title 14 of the California Code of Regulations, Division 1.5, establishes regulations for CALFIRE and is applicable in all State Responsibility Areas—areas where CALFIRE is responsible for wildfire protection. Most of the unincorporated area of San Diego County is a State Responsibility Area, and any development in State Responsibility Areas must comply with these regulations. Among other things, Title 14, Section 1270 et seq. establishes minimum standards for emergency access, fuel modification, setback to property line, signage, and water supply.
State Fire Regulations

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. As provided by Section 13104, the state fire marshal enforces these regulations and building standards in all state-owned buildings, state-occupied buildings, and state institutions throughout California.

Local Regulations

San Diego County, Site Assessment and Mitigation Program

The County of San Diego (County) DEH maintains the Site Assessment and Mitigation list of contaminated sites that have been previously undergoing, or are currently undergoing, environmental investigations and/or remedial actions. The County Site Assessment and Mitigation Program, within DEH’s Land and Water Quality Division, has a primary purpose to protect human health, water resources, and the environment within the County by providing oversight of assessments and cleanups in accordance with the California Health and Safety Code and California Code of Regulations. The program also provides staff consultation, project oversight, and technical or environmental report evaluation and concurrence (when appropriate) on projects, including properties contaminated with hazardous substances.

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

On October 19, 2004, the County Board of Supervisors adopted the Multi-Jurisdictional Hazard Mitigation Plan in compliance with federal and State regulations intended to reinforce the importance of mitigation planning and emphasized planning for disasters before they occur. The County Hazard Mitigation Plan is implemented by the County of San Diego Office of Emergency Services. The Hazard Mitigation Plan is a countywide plan that identifies risks posed by natural and human-caused disasters, and discusses ways to minimize potential damage occurring as a result of these disasters. The countywide plan is intended to serve many purposes, including enhancing public understanding and awareness of potential hazardous situations, creating a decision tool for managing hazards, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, providing inter-jurisdictional coordination, and achieving regulatory compliance (County of San Diego 2010a).
Operational Area Emergency Plan

The County Operational Area Evacuation Plan is used as a template, as cities throughout the County continue to develop their individual evacuation plans. The Plan outlines procedures and organizational structures that can be used for a coordinated regional evacuation effort. Transportation routes and capacities are identified in addition to countywide shelter space and considerations for special needs populations (County of San Diego 2011b).

The County’s Office of Emergency Services implements the Operational Area Emergency Plan. The Operational Area Emergency Plan describes a comprehensive emergency management system, which provides for a planned response to disaster situations associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. It delineates concepts relating to various emergency situations, identifies components of a comprehensive emergency management system, and describes the overall responsibilities for protecting life and property and assuming the overall well-being of the population. The plan contains 17 annexes detailing specific emergency operations for different emergency situations; in addition, there are seven stand-alone emergency plans (County of San Diego 2010b).

County of San Diego Code of Regulatory Ordinances Sections 68.401–68.406, Defensible Space for Fire Protection Ordinance

This Ordinance addresses the accumulation of weeds, rubbish, and other materials on a private property found to create a fire hazard and be injurious to the health, safety, and general welfare of the public. The Ordinance considers the presence of such weeds, rubbish, and other materials a public nuisance, which must be abated. The Ordinance is enforced in all County Service Areas, and in the unincorporated areas of the County outside of a fire protection district. All fire protection districts have a combustible vegetation abatement program, and many fire protection districts have adopted and enforce the County’s Ordinance.

County of San Diego Code of Regulatory Ordinances Sections 96.1.005 and 96.1.202, Removal of Fire Hazards

The San Diego County Fire Authority, in partnership with CAL FIRE, the Bureau of Land Management, and the U.S. Forest Service, is responsible for the enforcement of defensible space inspections. Inspectors from CAL FIRE are responsible for the initial inspection of properties to ensure an adequate defensible space has been created around structures. If violations of the program requirements are noted, inspectors provide a list of required corrective measures and a reasonable time frame to complete the task. If the violations still exist upon reinspection, the local fire inspector would forward a complaint to the County for further enforcement action.
County of San Diego Consolidated Fire Code

The County, in collaboration with the local fire protection districts, created the first Consolidated Fire Code in 2001. The Consolidated Fire Code contains the County and fire protection districts’ amendments to the California Fire Code. The purpose of consolidation of the County and local fire districts’ adoptive ordinances is to promote consistency in the interpretation and enforcement of the fire code for the protection of the public health and safety, which includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code. The Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management. Additionally, the fire code regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases. San Diego County’s 2017 Consolidated Fire Code is the most recently adopted version and it contains the County and fire protection districts’ amendments to the California Fire Code.

County of San Diego General Plan

The County General Plan contains policies related to emergencies, hazards, and hazardous materials that may apply to the proposed project. The policies are listed below, as cited from the Land Use Element (County of San Diego 2011a) and the Safety Element (County of San Diego 2011b), followed by an explanation of how the proposed project conforms to those policies.

As to fire hazards, the County recognizes that fire hazards represent a high level threat to personal injury and property damage. The County reports that comparing structural loss data from CALFIRE of the 20 largest California wildland fires by structural loss between 1923-2008, San Diego County accounted for over 34 percent of the total destroyed structures statewide. Between 1967 and 2007, San Diego County experienced more than 9,000 destroyed dwellings from wildland fires (County of San Diego 2011b).

Further, most of the unincorporated County is located within very high or extreme fire threat areas; and, thus, “avoiding high threat areas is not possible (Safety Element, Figure S-1 [Fire Threat])” (County of San Diego 2011b). Avoidance is not possible because the topography, geographic, and climatic conditions within the San Diego region lead to the overall regional fire problem. Therefore, County Safety Element policies focus on minimizing the impact of wildfires through land use planning techniques and other mitigation measures.

Key responses include defensible space considerations, “hardening” of structures, and County safety-related programs, policies, and regulations. Defensible space refers to a separation zone between wildlands and structures where fuel, including natural and ornamental vegetation, man-made combustible materials, and ancillary structures, is managed or modified to minimize the spread of fire to the structure and allow space for defending structures from burning.
vegetation. This separation is important to improving the survivability of structures in a wildland fire event and is most readily maintained when planned for as part of project design (County of San Diego 2011b).

In addition, for optimal protection against wildfires, the County recognizes that structures should be “hardened” to make them more ignition resistant (County of San Diego 2011b). Further, the County’s response includes its adopted safety-related programs, policies, and regulations (described in this section above).

**Land Use Element**

- **Policy LU-6.10: Protection from Hazards.** Require that development be located and designed to protect property and residents from the risks of natural and human-induced hazards.

- **Policy LU-6.11 Protection from Wildfires and Unmitigable Hazards.** Assign land uses and densities in a manner that minimizes development in extreme, very high and high hazard fire areas or other unmitigable hazardous areas.

**Safety Element**

- **Policy S-1.1 Minimize Exposure to Hazards.** Minimize the population exposed to hazards by assigning land use designations and density allowances that reflect site specific constraints and hazards.

- **Policy S-3.1: Defensible Development.** Require development to be located, designed, and constructed to provide adequate defensibility and minimize the risk of structural loss and life safety resulting from wildland fires.

- **Policy S-3.3: Minimize Flammable Vegetation.** Site and design development to minimize the likelihood of a wildfire spreading to structures by minimizing pockets or peninsulas, or islands of flammable vegetation within a development.

- **Policy S-3.4: Service Availability.** Plan for development where fire and emergency services are available or planned.

- **Policy S-3.5: Access Roads.** Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.

- **Policy S-3.6: Fire Protection Measures.** Ensure that development located within fire threat areas implement measures that reduce the risk of structural and human loss due to wildfire.

- **Policy S-3.7: Fire Resistant Construction.** Require all new, remodeled, or rebuilt structures to meet current ignition resistance construction codes and establish and enforce reasonable and prudent standards that support retrofitting of existing structures in high fire threat areas.
• **Policy S-4.2: Coordination to Minimize Fuel Management Impacts.** Consider comments from CAL FIRE, U.S. Forest Service, local fire districts, and wildlife agencies for recommendations regarding mitigation for impacts to habitat and species into fuel management projects.

• **Policy S-6.1: Water Supply.** Ensure that water supply systems for development are adequate to combat structural and wildland fires.

• **Policy S-6.3: Funding Fire Protection Services.** Require development to contribute its fair share towards funding the provision of appropriate fire and emergency medical services as determined necessary to adequately serve the project.

• **Policy S-6.4: Fire Protection Services for Development.** Require that development demonstrate that fire services can be provided that meet the minimum travel times identified in Table S-1 (Travel Time Standards from Closest Fire Station) (20 minutes in RL-40 and RL-80; 5 minutes in the VR-2 to VR-30, SR-0.5 and SR-1).

• **Policy S-6.5: Concurrency of Fire Protection Services.** Ensure that fire protection staffing, facilities and equipment required to serve development are operating prior to, or in conjunction with, the development. Allow incremental growth to occur until a new facility can be supported by development.

• **Policy S-11.1: Land Use Location.** Require that land uses involving the storage, transfer, or processing of hazardous materials be located and designed to minimize risk and comply with all applicable hazardous materials regulations.

• **Policy S-11.3: Hazards Sensitive Uses.** Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected. Similarly, avoid locating sensitive uses near established hazardous materials users or High Impact Industrial areas where incompatibilities would result.

• **Policy S-11.4: Contaminated Lands.** Require areas of known or suspected contamination to be assessed prior to reuse. The reuse shall be in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.

• **Policy S-11.5: Development Adjacent to Agricultural Operations.** Require development adjacent to existing agricultural operations in Semi-Rural and Rural Lands to adequately buffer agricultural areas and ensure compliance with relevant safety codes where pesticides or other hazardous materials are used.
2.8 Hazards and Hazardous Materials

2.8.3 Analysis of Project Effects and Determination as to Significance

2.8.3.1 Wildfire Hazards

Guidelines for the Determination of Significance

For purposes of this EIR, the County’s Guidelines for Determining Significance and Report Format and Content Requirements – Wildland Fire and Fire Protection (County of San Diego 2010c) applies to the direct, indirect, and cumulative impact analysis. A significant impact would result if:

a. The project cannot demonstrate compliance with all applicable fire codes.

b. A comprehensive Fire Protection Plan has been accepted, and the project is inconsistent with its recommendations.

c. The project does not meet the emergency response objective identified in the Public Facilities Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives.

Analysis

Emergency Response

The Project Facility Availability Form (see Appendix N) provided by the DSFPD Fire Chief provides Fire Department input regarding travel time.

Dudek conducted a GIS-based travel time coverage modeling effort to determine if the project meets the General Plan’s 5 minute travel time standard applicable to the project. Following compilation of all necessary data layers received from project applicants and acquired via publicly available sources, Dudek verified that all data layers were in the California State Plane Zone 6 coordinate system with units in feet. A network data set was then created using ESRI’s Network Analyst extension in the Arc Catalog module. The data set was created by merging the existing centerline street layer, acquired from SANGIS, with the proposed project centerline street data, provided by project applicant, and assigning parameters to the created data set. Several parameters are available during the creation of a network data set and include elevation constraints, U-turn capabilities, curb approach direction and travel impedance. Full analysis methodology is provided in the project’s FPP (EIR, Appendix N).

In summary, initial fire response for the improved portions of the project Site would be provided by DSFPD’s Station 12 due to its ability to provide 5-minute travel times to all improved areas. In addition to Station 12, Stations 11 and 13 can also respond within 10 minutes to support the effective firefighting force. In addition, the San Marcos Fire
Protection District and Escondido Fire Department, as well as other North County fire agencies, are parties to automatic aid or mutual aid agreements. These agreements provide additional resources during emergency conditions. Wildland areas adjacent the project Site are the responsibility of CAL FIRE due to their State Responsibility Area designation. DSFPD, along with other area agencies, respond simultaneously with CAL FIRE to wildland fires through a coordinated local agency response system.

Therefore, the proposed project would meet the fire emergency response time objective and impacts would be less than significant. For discussion regarding adequacy of fire facilities, refer to Section 3.5, Public Services, of this EIR.

Sierra Farms

Based on the Sierra Farms location in relation to existing fire stations, travel time to the Site for the first responding engine from SMFD Station 1 is 7.6 minutes to the park entrance on Sarver Lane. The DSFPD engine from Fire Station 12 would have a travel time of within 4 minutes. Secondary response from a SMFD engine would arrive in approximately 10 minutes. Based on these calculations, emergencies within the project can be responded to by first arriving units from two fire stations in accordance with the City’s standard (i.e., average maximum initial response of no more than 8 minutes for fire apparatus and 9 minutes for ambulance, 90 percent of calls). Sierra Farms does not include a large number of persons who are on site permanently, and there are no residential units planned for this area. Therefore, the Sierra Farms portion of the proposed project would result in less than significant impacts to emergency response time objectives.

Fire Hazard

Although a wildfire has not occurred on the project Site in recorded history, the Site would, under favorable weather conditions, facilitate wildfire spread, especially given the vegetation and topographical characteristics of the area, along with the off-site wildland fuels to the north and east and the ignition source presented by I-15. The most common type of fire anticipated in the vicinity of the project Site is a wind-driven fire from the north/northeast during the fall that ignites from a vehicle-related incident along I-15. Flame lengths can reach 110 feet long in certain small, isolated fuel pockets with an average flame length under worst case conditions of 67 feet.

The proposed project is situated in an area that, due to its steep terrain, heavy fuels, adjacent ignition sources, and fire history, is subject to periodic wildfire. The project Site and the nearby communities of Castle Creek, Hidden Meadows, and Lawrence Welk Resort are all located in a Very High Fire Hazard Severity Zone, as designated by CAL FIRE (EIR, Appendix N). Wildland fires are a common natural hazard in most of San Diego County and southern California.
Provisions for modified fuel areas separating wildland fuels from structures have reduced the number of fuel-related structure losses, by providing separation between structures and heat generated by wildland fuels. As such, most of the primary components of the layered fire protection system incorporated into the proposed project are required by DSFPD and County codes. These requirements have been proven effective for minimizing structural vulnerability to wildfire. In addition, interior fire sprinklers, which would be provided in all structures (now required by code), have a track record of extinguishing up to 95 percent of interior fires and significantly reducing fire damage. Although not designed for wildland fire defense, should embers succeed in entering a structure, sprinklers provide an additional layer of life safety and structure protection.

Even though these measures are now required by the latest Building and Fire Codes, at one time, they were used as mitigation measures for buildings in wildland urban interface areas, because they were known to reduce structure vulnerability to wildfire. These measures performed so well, they were adopted into the code. The following project features are required for new development in wildland urban interface areas and form the basis of the system of protection necessary to minimize structural ignitions and provide adequate access by emergency responders:

- Application of the latest adopted ignition resistant building codes.
- Exterior wall coverings that are non-combustible or ignition resistant.
- Multi-pane glazing with a minimum of one tempered pane.
- Ember-resistant vents.
- Interior, automatic fire sprinklers to code for occupancy type.
- Modern infrastructure, access roads, and water delivery system.
- Maintained fuel modification areas.
- Fire apparatus access roads throughout the project.

The project’s FPP (EIR, Appendix N), which already has been incorporated into project design, demonstrates that the proposed project would be in compliance with applicable portions of the County of San Diego 2017 Consolidated Fire Code and the Deer Springs Fire Protection District’s Ordinance Number 2013-01. The project’s FPP was approved by the County of San Diego on May 15, 2015 and DSFPD on May 18, 2015. The proposed project would also be consistent with the 2013 California Building Code, Chapter 7A, 2013 California Fire Code, Chapter 49, as adopted by San Diego County. Chapter 7A of the California Building Code focuses primarily on preventing ember penetration into homes, a leading cause of structure loss from wildfires. Thus, it is an important component of the requirements of the project’s FPP given the project’s wildland urban interface location (the proposed project is within an area statutorily
Hazards and Hazardous Materials

designated a Very High Fire Hazard Severity Zone by CAL FIRE). Fire hazard designations are based on topography, vegetation, and weather, among other factors with more hazardous sites including steep terrain, unmaintained fuels/vegetation, and wildland urban interface locations. As described in the project’s FPP (Appendix N), the project would meet or exceed all applicable Code requirements, with the exception of three lots. These lots will provide non-standard fuel modification zones (described below and shown in Figure 2.8-1, Fire Walls).

The following are several examples of the proposed project meeting or exceeding code requirements:

- Site access will comply with the requirements of the San Diego County Consolidated Fire Code and DSFPD (SDCCFC Sections 503.1 and 503.2).
- The project will provide roadways throughout each neighborhood and three potential ingress/egress ways.
- Interior circulation roads will include all roadways that are considered common or primary roadways for traffic flow through the Site and for fire department access and serving in excess of two structures. Any dead-end roads serving new buildings that are longer than 150 feet will have approved provisions for fire apparatus turnaround.
- All new structures will be constructed to DSFPD and San Diego County standards. Each of the proposed buildings will comply with the enhanced ignition-resistant construction standards of the latest County Building Code (Chapter 7A). These requirements address roofs, eaves, exterior walls, vents, appendages, windows, and doors, and result in hardened structures that have been proven to perform at high levels (resist ignition) during the typically short duration of exposure to burning vegetation from wildfires.
- All residential units will have electric-powered, hard-wired smoke detectors in compliance with County of San Diego Consolidated Fire Code. Hard-wired smoke alarms are to be equipped with battery backup.
- Provision of substantial fuel modification zones (FMZs) that are designed to gradually reduce fire intensity and flame lengths from advancing fire by placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of all structures and adjacent open space areas, beyond what is typically required of projects.
- Vegetation management requirements will be implemented at commencement and throughout the construction phase.

As previously mentioned, due to constraints associated with portions of three lots located in the extreme western portion of the project Site (EIR, Figure 2.8-1), the available area for FMZ is limited. Two of the lots achieve 150-plus feet of FMZ for most of their perimeter, but this width is reduced to 60 to 80 feet for a small percentage of their FMZ. The third lot is constrained to as
little as 56 to approximately 80 feet wide FMZ due to the project boundary that encroaches on
the lot and would otherwise require an off-site FMZ easement. Therefore, for these specific lots,
impacts related to wildfire hazards would be potentially significant (Impact HZ-1).

In addition, up to 170 lots cannot provide a full 30 feet of setback from top of slope for two-story
homes (Figure 2.8-1), as required by Section 4907.1.3 of the San Diego County Consolidated
Fire Code. Therefore, for these specific lots, impacts related to wildfire hazards would be
potentially significant (Impact HZ-2).

As indicated in the proposed project’s FPP (EIR, Appendix N), the FMZs and additional fire
protection measures provide equivalent wildfire buffer. The FMZs are based on a variety of
analysis criteria including predicted flame length, fire intensity, Site topography and vegetation,
extreme and typical weather, position of structures on pads, position of roadways, adjacent fuels,
fire history, current vs. proposed land use, neighboring communities relative to the proposed
project, and type of construction.

Additionally, as required by the project’s FPP, an evacuation plan has been prepared for the
project (Appendix N) that indicates how the project would evacuate during a wildfire emergency.
The evacuation plan has been prepared in coordination with DSFPD and San Diego County such
that it does not conflict with existing evacuation and pre-plans. The evacuation plan does not
interfere with the countywide Operational Area Emergency Plan, as it was reviewed by County
staff to ensure consistency with other applicable/overlapping emergency plans. In addition, the
Newland Sierra Homeowner’s Association (HOA) would provide ongoing resident education
outreach regarding wildfire safety, the “Ready, Set, Go!” pre-planning model, and the project’s
FPP requirements. Informational handouts, facility website page, mailers, fire safe council
participation, inspections, and seasonal reminders are some methods that would also be used to
disseminate wildfire and relocation awareness information. The HOA would coordinate with
DSFPD regarding wildfire educational material/programs before printing and distribution.

The intent of the evacuation plan is to guide implementation of an evacuation procedure such
that the process of evacuating people from the Site is facilitated in an efficient manner and
according to a pre-defined, practiced evacuation protocol. The evacuation plan (see Appendix N)
also provides a contingency option for temporary refuge, if evacuation is considered less safe. It
is estimated that the minimum amount of time needed to move the Newland Sierra population to
urbanized and/or designated evacuation areas may require up to 4 hours after notification to
evacuate is given. The available evacuation routes for the project are: (1) egress to the south via
Mesa Rock Road, (2) egress to the south on Sarver Lane, and (3) egress to the west via Camino
Mayor. The evacuation plan requires adjustment and continued coordination by the Newland
Sierra HOA and/or developer and DSFPD/Law enforcement agencies during each of the
construction phases. With each phase, the evacuation routes may be subject to changes with the addition of both primary and secondary evacuation routes.

Therefore, for all other portions of the proposed project, the proposed project would comply with all applicable fire codes as described in the project’s FPP, wildfire hazards would be less than significant.

Sierra Farms

As the Sierra Farms is located within the City of San Marcos and in the jurisdiction of the SMFD and served by the SMFD, a separate FPP was prepared for this portion of the proposed project to provide fire safety design consistent with the requirements of the SMFPD (EIR, Appendix O). The project’s FPP for Sierra Farms was approved by SMFPD on June 7, 2016. The project’s FPP demonstrates that this portion of the proposed project would be in compliance with applicable portions of the City of San Marcos (City) Municipal Code, Chapter 17.64, Fire Code, and City Ordinance 2014-1385. Sierra Farms would also be consistent with the 2013 California Building Code, Chapter 7A, 2013 CFC, Chapter 49, as adopted by the City. Chapter 7A of the California Building Code focuses primarily on preventing ember penetration into structures, a leading cause of structure loss from wildfires.

Sierra Farms would meet or exceed applicable code requirements, except for FMZs around Community building and maintenance shed that do not achieve standard 150-foot FMZ widths. The fuel modification on the north side of the Community building would be constrained to between 58 and 86 feet to the property boundary. The storage shed in the maintenance area is constrained to between 87 and 115 feet of FMZ on the west and east sides, respectively. Therefore, impacts related to wildfire hazards within Sierra Farms at these specific buildings would be potentially significant (Impact HZ-3).

I-15 Interchange Improvements

The I-15 interchange improvements would not require the preparation of a Fire Protection Plan, as no habitable structure would be included as part of the improvements, and would therefore not be inconsistent with County General Plan response time standards.

2.8.3.2 Hazardous Materials

Guidelines for the Determination of Significance

For purposes of this EIR, the County’s Guidelines for Determining Significance and Report Format and Content Requirements – Hazardous Materials and Existing Contamination (County
of San Diego 2007a) - applies to both the direct/indirect impact analysis and the cumulative impact analysis. A project would generally be considered to have a significant effect if:

a. The project is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the Health and Safety Code (H&SC), generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC, and the project will not be able to comply with applicable hazardous substance regulations.

b. The project is a business, operation, or facility that would handle regulated substances subject to CalARP risk management plan requirements that in the event of a release could adversely affect children’s health due to the presence of a school or day care within one-quarter mile of the facility.

c. The project is located on or within one-quarter mile from a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.519 or is otherwise known to have been the subject of a release of hazardous substances, and as a result the project may result in a significant hazard to the public or the environment.

d. The project proposes structure(s) for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burnsites) and as a result, the project would create a significant hazard to the public or the environment.

e. The project is proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash); and as a result, the project would create a significant hazard to the public or the environment.

f. The project is proposed on or within 1,000 feet of a FUDS [Formerly Used Defense Site] and it has been determined that it is probable that munitions or other hazards are located on site that could represent a significant hazard to the public or the environment.

g. The project could result in human or environmental exposure to soils or groundwater that exceed EPA Region 9 PRG’s, CalEPA CHHSL’s, or Primary state or federal maximum contaminant levels for applicable contaminants and the exposure would represent a hazard to the public or the environment.

h. The project will involve the demolition of commercial, industrial or residential structures that may contain ACM [asbestos-containing material], LBP [lead-based paint], and/or other hazardous materials and as a result, the project would represent a significant hazard to the public or the environment.
Analysis

Significance Guidelines A and B

The project would result in development of 2,135 residential units, 81,000 square feet of general commercial retail space, a school, and parks and trail facilities. The proposed project would involve the transport of fuels, lubricants, and various other liquids needed for operation of construction equipment at the Site via service trucks. Workers would likely commute to the project Site via private vehicles, and would operate construction vehicles/equipment within and around the project Site. Materials hazardous to humans, wildlife, and sensitive environments would be present during construction of the proposed project. These materials include fuels, equipment fluids, cleaning solutions and solvents, and lubricants.

As to project construction, direct impacts to human health and the environment from accidental spills of small amounts of hazardous materials from construction activities would potentially occur. However, compliance with federal, state, and local regulations, including the California Division of Occupational Safety and Health and the San Diego County Department of Environmental Health requirements that provide safety and control measures for those materials handled on-site, would ensure that potentially significant impacts would not occur.

As to project operation, the proposed land uses do not typically handle large quantities of hazardous materials. Potential hazardous materials present during operation would be limited to commercially available products, oils, and pesticides. Although a portion of the project Site would be within 0.25 mile of the proposed school, the quantities and type of hazardous materials handled during operation would be minimal and would not present substantial potential for adverse effects. The design, capacity, and other details regarding the school site are unknown at this time; prior to development of the proposed school site, additional environmental review would likely be required subsequent to this EIR.

CEQA Guidelines Section 15186 outlines additional requirements for siting of school facilities and potential for existing nearby hazardous materials sites or sources. According to CEQA Guidelines Section 15186(c)(1), the following information must be included in the EIR prior to certification:

- CEQA Section 15186(c)(1)(A): The proposed school site is not located on a current or former hazardous waste or solid waste disposal facility (refer to Section 2.8.1 and Appendix L).
- CEQA Section 15186(c)(1)(B): The proposed school site is not located on a hazardous materials release site identified by the Department of Toxic Substances Control in a current list adopted pursuant to Section 25356 of the Health and Safety Code for removal or
remedial action pursuance to Chapter 6.8 of Division 20 of the Health and Safety Code (refer to Section 2.8.1 and Appendix L).

The proposed school site is located approximately 1,200 feet of the off-site ARCO gas station, which was identified on the following databases: (1) the RCRA Small Quantity Generator, (2) the Facility Index System, (3) the LUST, (4) the Hazardous Waste Manifest (HAZNET), (5) the Toxics and Criteria Pollutant Emissions Data (EMI), (6) the UST, and (7) the Recovered Government Archive LUST. However, as discussed under Significance Guidelines C through H, the potential for contaminated soils within the project Site resulting from the ARCO station do not pose a risk to human health. Further, a Health Risk Assessment, which analyzes potential for toxic air contaminants impacts to the proposed school resulting from operation of the ARCO station, concluded that risks to human health at the school would be below significance thresholds (refer to Section 2.3, Air Quality, and Appendix G).

- CEQA Section 15186(c)(1)(C): The proposed school site does not contain one or more buried or above ground hazardous materials pipelines as defined by Division 20 of the Health and Safety Code (refer to Section 2.8.1 and EIR, Appendix L).

- CEQA Section 15186(c)(1)(D): The proposed school site is located approximately 570 feet from I-15. However, a Health Risk Assessment, which analyzes potential for toxic air contaminants impacts to the proposed school resulting from traffic on freeways and high-volume roadways, concluded that risks to human health at the school would be below significance thresholds (refer to Section 2.3, Air Quality, and Appendix G).

CEQA Guidelines Sections 15186(c)(2) and 15186(c)(3) also call for the identification of facilities within 0.25 mile of the proposed school site that might reasonably be anticipated to emit hazardous emissions or handle hazardous materials. As described previously, the ARCO station and I-15 would constitute such facilities and have been assessed as part of the Health Risk Assessment prepared for the proposed project and is included as Appendix G. As discussed under Significance Guidelines C through H, the potential for contaminated soils within the project Site resulting from the ARCO station do not pose a risk to human health. The Health Risk Assessment concluded that risks to human health at the school resulting from potential toxic emissions from the ARCO station and I-15 would be below significance thresholds and would not pose a risk to human health (refer to Section 2.3, Air Quality, and Appendix G). Therefore, impacts related to hazardous materials handling would be less than significant.
Significance Guidelines C through H

The following potential hazards were identified within the project Site, which includes hazardous materials sites found on regulatory databases compiled pursuant to Government Code Section 65962.519:

- Evidence of staining and discolored soils was observed associated with the abandoned aboveground storage tank (which was removed in February 2015).

- Spent shotgun shell casings (approximately 500) and 22 bullet casings were noted northeast of the abandoned private airstrip in the northwest area of the subject Site. The four soil samples in the immediate area of the shotgun shells have been impacted with lead at concentrations between 240 milligrams of lead per kilogram of soil (mg/kg) and 2,740 mg/kg, of which samples have total lead above the California standard for hazardous waste of 1,000 mg/kg for total lead, and 5 milligrams per liter for soluble lead and RCRA standard for hazardous waste.

- The adjacent Arco located at 26915 Mesa Rock Road has been issued closure by the regulatory agencies; however residual groundwater contamination remains in place. This would be a potential source of vapor encroachment in the southeastern portion of the subject Site.

The USTs within the property were removed and the case was closed and there is low potential for adverse effects to the project.

A Focused Soil and Soil Vapor Screening Survey (EIR, Appendix L) was conducted to screen for the potential presence of hazardous substances and/or petroleum substances in (1) sites identified as illegal shooting sites involving lead contaminated soil, (2) aboveground storage tank containing used oil and surrounding stained soil, (3) soils bordering along the ARCO gas station on Mesa Rock Road, and (4) areas of historic agricultural use.

With the exception of arsenic and lead, metals were not detected at concentrations exceeding the EPA Region 9 Regional Screening Levels. Arsenic levels were below California background concentrations. Total lead exceeded 80 mg/kg in three samples. The lead regional screening level exceedances in the illegal shooting areas appear to be scattered and limited to shallow soil. The results of the laboratory analyses suggest that the lead exceedances detected could be directly related to sampling bias from minute pieces of lead projectile in specific samples. However, dependent on final grading and construction plans, the extent of the lead contamination may result in adverse effects. Therefore, impacts would be potentially significant (Impact HZ-4).

The abandoned AST and surrounding stained soil was removed and disposed of in accordance with the requirements of the DEH Hazardous Materials Division, and a report was submitted to DEH dated April 30, 2015 (see EIR, Appendix L). The County has approved no further action in this area.
With the exception of benzene, no VOCs or total petroleum hydrocarbons (TPH) were detected in soil vapor samples near the Arco gas station on Mesa Rock Road. Soil vapor analytical results for benzene were compared to residential California Human Health Screening Levels and applied to the SAM Vapor Intrusion Model, and indicated that benzene was not detected at concentrations that would pose a significant human health risk in a residential setting (see EIR, Appendix L).

The project would not develop structures for human occupancy within 1,000 feet of an open, abandoned, or closed landfill. No evidence suggests that the project Site has been used for historic waste disposal or burning of trash. The nearest Formerly Used Defense Site is located approximately 5 miles from the project Site and has low potential to adversely affect the project. With the exception of the potential lead contaminated soils discussed above, impacts would be less than significant.

2733 Sarver Lane

This specific property was not listed in records searches, and none of the identified sites off-site would be likely to adversely affect the project. The subject site was used as a residence from 1955 to the present. A workshop (carport), shed, and detached garage were also constructed in 1955. The guest house was constructed in 1975. Due to the age of the on-site structures, asbestos and lead-based paint are likely to exist within the buildings. Therefore, impacts would be potentially significant (Impact HZ-5).

I-15 Interchange Improvements

The I-15 interchange improvements are not expected to result in the handling or underground storage of regulated hazardous substances, are not within 1,000 feet of a landfill, within 250 feet of a parcel identified as containing burn ash, or within 1,000 feet of a FUDS site, and are not within one-quarter mile of a site identified by the Cortese List pursuant to Government Code Section 65962.519. There is an existing ARCO gas station near the I-15 interchange location which has the potential for vapor penetration and/or groundwater plumes. Caltrans can and should ensure any demolition materials be disposed of or reused after an investigation as appropriate for hazardous materials or contamination issues. Caltrans can and should perform, or cause to be performed, such investigation by or through a qualified and licensed inspector either prior to removal of the material, and/or when materials are removed from the site for disposal or reuse.

2.8.3.3 Emergency Response Plans

Guidelines for the Determination of Significance

For purposes of this EIR, the County’s Guidelines for Determining Significance and Report Format and Content Requirements – Emergency Response Plans (County of San Diego 2007b) -
applies to both the direct/indirect impact analysis and the cumulative impact analysis. A project would generally be considered to have a significant effect if:

a. The project proposes one of the following unique institutions in a dam inundation zone as identified on the inundation map prepared by the dam owner:
   1. Hospital
   2. School
   3. Skilled nursing facility
   4. Retirement home
   5. Mental health care facility
   6. Care facility with patients that have disabilities
   7. Adult and childcare facility
   8. Jails/detention facility
   9. Stadium, arena, amphitheater
   10. Any other use that would involve concentrations of people that could be exposed to death in the event of a dam failure

b. The project proposes a structure or tower 100 feet or greater in height on a peak or other location where no structures or towers of similar height already exist and as a result, the project could cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.

Analysis

The proposed project is not located within a dam inundation zone. No structure or towers 100 feet or greater are proposed. Therefore, impacts would be **less than significant**. Refer to EIR Section 2.8.3.1, Wildfire Hazards, for discussion of the project’s evacuation plan. As required by the project’s FPP, an evacuation plan has been prepared for the project (Appendix N) that indicates how the project would evacuate during a wildfire emergency. The evacuation plan has been prepared in coordination with the County such that it does not conflict with existing evacuation and operational pre-plans. The evacuation plan is consistent with the policies, guidance, and procedures of the Unified San Diego County Emergency Services Organization, the County of San Diego Operational Area Emergency Plan, Annex Q – Evacuation, and the County Multi-Jurisdictional Hazard Mitigation Plan.
2.8.3.4 Vectors

Guidelines for the Determination of Significance

For the purposes of this EIR, the County’s Guidelines for Determining Significance and Report Format and Content Requirements, Vectors (County of San Diego 2007c), applies to the direct and indirect impact analysis and the cumulative impact analysis. A project would generally be considered to have a significant effect if:

a. The project proposes a BMP for stormwater management or construction of a wetland, pond or other wet basin that could create sources of standing water for more than 72 hours, and as a result, could substantially increase human exposure to vectors, such as mosquitoes, that are capable of transmitting significant public health diseases or creating nuisances.

b. The project proposes a use that involves the production, use and/or storage of manure or proposes a composting operation or facility and as a result, could substantially increase human exposure to vectors that are capable of transmitting significant public health diseases or creating nuisances.

c. The project would result in a substantial increase in the number of residents located within one-quarter mile of a significant off-site vector breeding source; including standing water (e.g., agricultural ponds, reservoirs) and sources of manure generation or management activities (e.g., confined animal facilities, horse keeping operations, composting operations).

Analysis

The potential for vectors associated with implementation of the proposed project is primarily centered around the proposed Saddleback Park and Sierra Farms. Saddleback Park would include parking for approximately five horse trailers and 12 vehicles, picnic areas, equestrian facilities, a public restroom area, a trail head, and two detention basins. This facility is a day use only equestrian park, with no boarding capabilities. The facility would be monitored and maintained by a third-party entity through the Homeowner’s Association, and there would be no full-time staff on site. Saddleback Park is a potential source of vectors. Sierra Farms would include a composting area for landscaping waste generated by the HOA and is a potential source of vectors/pests.

Saddleback Park

The proposed project includes two bioretention basins to provide flow control for Saddleback Park. These basins could result in vector production through the pooling or ponding of water for time sufficient to permit the emergence of adult mosquitoes. To prevent such infestation, that captured water would be discharged within 48 hours, which is too short for mosquitoes to
complete their breeding cycle. Other methods typically include making the habitat less suitable for mosquito breeding such as vegetative management, as necessary.

The following design features have been incorporated into the project, as stated in Vector Management Plan (Appendix M):

**Manure Management and Disposal**

- The corrals will be cleaned weekly, with immediate disposal to a covered commercial dumpster.
- Covered commercial dumpsters will be placed onto impervious surfaces with appropriate berming.
- Dumpsters will be emptied once a week and taken to the landfill or recycling area of the landfill.
- Prior to the known rainy seasons (September through March), cleaning efforts will be made to remove any accumulations of manure from premises to prevent fly breeding and reduce storm-water runoff. Good drainage is to be maintained to prevent standing pools of water and mosquito breeding.

**Water Management Methods**

- Non-leak valves will be used on all water devices.
- Earthen surfaces in corrals and hitching post areas will be properly graded for drainage.
- To prevent the breeding of mosquitoes, water will not be allowed to stand for more than 72 hours.
- Leaks in water troughs will be prevented. Regulating water flow with an on/off cycle will be considered to help eliminate the moisture problem. Drip pans under water troughs will be used if necessary. These pans will divert water from the manure and will be emptied as needed.
- Facility users will be requested to report all water leaks to prevent unnecessary wet manure areas or mosquito breeding areas.
- Feed mangers and bins will not be located near water sources, because wet, spilled feed attracts flies and makes a good breeding site.
- Regular weekly inspections by maintenance personnel will ensure that all watering devices are working, have proper air-gap back-flow prevention and are not breeding mosquitoes. At this time there are no watering ponds or large water storage containers proposed. However, should ponds or areas of standing water be considered in the future, use of mosquito fish would be incorporated to control mosquito breeding.
General Sanitation Management Methods

- Damp or spilled feed will be removed from around facility.
- All garbage, fruit and vegetable wastes, and pet droppings will be stored in tight-lid containers. Fruit and vegetable waste, as well as pet droppings, will be collected in the manure management bins for removal to an off-site landfill or recycling area. Trash and garbage will be stored in tight lid containers until off-grounds disposal is possible.
- Maintenance personnel will control weeds to improve sun penetration and air movement so that the grounds remain dry and to avoid breeding of flies, rodents, mosquitoes and other potential pests (e.g., by removing breeding habitats).
- Yellow jacket and fly traps will be used if those insects are attracted to the garbage.

Feed Storage

- Feed and supplement storage will not be allowed on site.

Rodent Control

- No rodent poisons are proposed, as they are dangerous to the animals. Snap traps or live traps will be used as necessary. If rodent baits are used in the future, they shall be contained in approved tamper resistant bait stations and used according to the label. If severe rodent problems occur a licensed Private Pest Control Operator would be employed.

Pesticides and Larvicides

- No use of pesticides is planned in the equestrian park except for an insecticide (Py-Tech or similar product) to reduce fly and mosquito breeding, which will be applied by a licensed professional company. Hydrated lime may be used in some areas to reduce odors, which may also be effective in reducing fly breeding.

Bioretention Basins Management Practices

As stated in the Vector Management Plan (Appendix M), the basins would be designed to either exclude vectors from enclosed sources of standing water; or for rapid discharge, completely draining within 72 hours to prevent basins from becoming sources for vectors. As necessary, should standing water for longer than 72 hours be required, a third option is to make the breeding habitat less suitable. Mosquito larvicides may be applied within the basins to deter mosquito breeding. The EPA reports that, when used properly, mosquito larvicides are of no concern for human health threats and do not pose risks to wildlife or the environment.
With the incorporation of the above listed project design features, impacts resulting from vectors associated with Saddleback Park would be less than significant.

Sierra Farms

The proposed Sierra Farms would include a composting area within the maintenance yard for landscaping waste generated by the HOA (no food scraps). These landscape trimmings would be chipped and ground into either mulch or compost and used to return organic matter and nutrients to the project landscape areas. The composting area would potentially attract pests/vectors such as rats, flies, and other various insects. To minimize potential attraction of pests, the composting area would consist of enclosed composting bins with lids. Signage would provide instructions for proper use (i.e., closing lids to ensure protection from pests). The composting area would be managed by the HOA, to include regular inspections of the bins. The composting area would also be required to comply with The County of San Diego Department of Environmental Health Solid Waste Local Enforcement Agency requirements as they relate to composting. Therefore, impacts resulting from vectors and pests associated with Sierra Farms would be less than significant.

I-15 Interchange Improvements

Relative to vectors, the interchange improvements would comply with all applicable permit requirements including discharging any standing water within 72 hours. The interchange improvements would not produce, use or store manure, and would not result in additional residences. Therefore, impacts resulting from vectors and pests associated with the I-15 Interchange Improvements would be less than significant.

2.8.3.5 Consistency with Applicable Plans, Policies, and Ordinances

The proposed project would be consistent with Policy LU-6.10, Protection from Hazards, and LU-6.11, Protection from Wildfires and Unmitigable Hazards, through preparation of hazardous materials site assessments, project’s FPP (included as EIR Appendix N), and through the planning and development process required by CEQA and County plans, policies, and ordinances.

The proposed project would be consistent with applicable fire safety policies of the County General Plan, including Policies S-1.1, S-3.1, S-3.3 S-3.7, S-4.2, and S-6.1 through S-6.5, by preparing required FPPs in coordination with DSFPD, SMFD, and the County. The project’s FPP (EIR, Appendix N), which already has been incorporated into the project design, demonstrates that the proposed project would be in compliance with applicable portions of the County’s 2014 Consolidated Fire Code and the SDFPD’s Ordinance Number 2013-01. The project’s FPP was approved by the County on May 15, 2015, and DSFPD on May 18, 2015. The project’s FPP pertaining to Sierra Farms was approved by SMFPD on June 7, 2016. The project’s FPP
demonstrates that the Sierra Farms portion of the proposed project would be in compliance with applicable portions of the City of San Marcos (City) Municipal Code, Chapter 17.64, Fire Code, and City Ordinance 2014-1385. The proposed project would also be consistent with the 2013 California Building Code, Chapter 7A, 2013 California Fire Code, Chapter 49, as adopted by the County. The project’s FPP prepared for the project demonstrate adequate defensible space, project siting, access, construction materials, fuel management, water supply, emergency response times and adequate staffing, and overall coordination with DSFPD and SMFD.

The project would be consistent with hazardous materials policies, including Policies S-11.1 and S-11.3 through S-11.5. The project does not include land uses that would typically require handling or disposal of acutely hazardous materials. As discussed in Section 2.8.3.2, the proposed school site would not be exposed to health risks associated with off-site hazardous emitters (gas station and I-15). Additionally, Phase I and II Environmental Site Assessments have been prepared for the project and have informed analysis of potential environmental impacts, as discussed in Section 2.8.3.2 of this EIR. Any areas of suspected contamination will be evaluated and, if necessary, remediated according to all applicable federal, state, and local regulations, including County of San Diego DEH and U.S. EPA Region 9 standards.

For additional discussion on the proposed project’s consistency with applicable land use plans and policies, see Section 3.3, Land Use and Planning.

2.8.4 Cumulative Impact Analysis

Wildfire Hazards

As discussed above, the project Site is susceptible to wildland fires. The potential for wildland fires resulting in the loss of life or property is generally unique to each site. All cumulative projects are subject to the fire codes and regulations and, with some projects, the preparation of FPPs to determine the potential risk for wildland fires. Larger cumulative projects similar to the proposed project, such as Lilac Hills Ranch and Campus Park West, are required to include such features as FMZs, fire access roads, and fire hydrants to reduce the risk of potential wildland fires. Any project in a given area cannot be approved unless the project is determined to meet the fire codes and regulations for the fire authority having jurisdiction over the cumulative projects.

However, the proposed project, along with cumulative projects, would result in an increased population in wildland interface and urbanized areas, thereby potentially increasing the risk of wildland fires through factors such as human carelessness, arson, and vehicle fires. However, the best available technologies for fire protection have been included in project design, and its FPP further demonstrates that the fire spread rate would be sufficiently reduced for adequate response by the fire authority having jurisdiction. Through the proposed project’s and cumulative projects’
compliance with the numerous fire-related regulations, and incorporation of fire protection features, the potential cumulative impacts from wildland fires would be **less than significant.**

**Hazardous Materials and Hazardous Material Sites**

Construction of cumulative projects would require the handling of hazardous materials similar to that of the proposed project. As noted in the analysis above, the project would not result in a significant impact from the transport of hazardous materials as the project would comply with federal, state, and local laws related to the transport and handling of hazardous materials. With each of the identified cumulative projects also complying with these laws, the cumulative impact related to the release of hazardous materials would be **less than significant.**

The Environmental Site Assessments (EIR, Appendix L) performed for the proposed project evaluated identified sites in the vicinity of the project that are listed on governmental databases for their potential or actual releases of hazardous substances to the environment, and none of these sites were identified to present a potential source of migration of hazardous substances to soil or groundwater beneath the site. Where potential hazards on site are identified, mitigation is provided. These impacts would be mitigated by testing specific areas of the Site for hazardous materials and remediating in accordance with local, state, and federal laws, if necessary. Similar compliance would be required by other nearby cumulative projects with potentially hazardous existing contamination, which would be handled on a project-by-project basis. Therefore, a cumulative impact would not occur and the project’s contribution would be **less than significant.**

**Emergency Response Plans**

The proposed project is not located within a dam inundation zone. No structure or towers 100 feet or greater are proposed. Therefore, the project would not impact dam inundation evacuation or air response traffic. Although other cumulative projects may result in such development, the proposed project would **not result in a cumulatively considerable impact.**

The evacuation plan has been prepared in coordination with DSFPD and San Diego County such that it does not conflict with existing evacuation and operational pre-plans. The evacuation plan would not interfere with the countywide Operational Area Emergency Plan or the County Multi-Jurisdictional Hazard Mitigation Plan, as it has been reviewed by County staff to ensure consistency with other applicable/overlapping emergency plans. Other cumulative projects in the area, and specifically large residential projects similar to the proposed project (such as Lilac Hills Ranch, Campus Park West, and Meadowood), that require the preparation of evacuation plans would be coordinated with the Office of Emergency Services and applicable emergency service districts to ensure that conflicts do not occur. Therefore, the proposed project would **not result in a cumulatively considerable impact.**
2.8 Hazards and Hazardous Materials

Vectors

The North County Environmental Recycling Facility on Mesa Rock Road is a nearby project that may attract vectors. This project, and others that would reasonably attract vectors, are required to demonstrate that such design measures would remove opportunities for vector breeding (e.g., standing water, stockpile management), similar to measures implemented by the project. Therefore, existing regulations regarding vectors, and implementation of project design features, would ensure that the proposed project would not result in a cumulatively considerable impact.

2.8.5 Significance of Impacts Prior to Mitigation

Wildfire Hazards

Impact HZ-1 Impacts related to wildfire hazards would be potentially significant for three lots on the western portion of the project Site, as shown in Figure 2.8-1.

Impact HZ-2 Up to 170 lots cannot provide a full 30 feet of setback from top of slope for two-story homes (Figure 2.8-1). Therefore, for these specific lots, impacts related to wildfire hazards would be potentially significant.

Impact HZ-3 Sierra Farms would meet or exceed applicable code requirements, except for FMZs around the Community building and maintenance shed that do not achieve standard 150-foot FMZ widths. Therefore, for these specific buildings, impacts related to wildfire hazards would be potentially significant.

Hazards and Hazardous Material Sites

Impact HZ-4 Depending upon final grading and construction plans, the extent of the lead contamination from the illegal use of the project Site for weapons firing may result in adverse effects. Therefore, impacts would be potentially significant.

Impact HZ-5 Due to the age of the on-site structures at 2733 Sarver Lane, asbestos containing materials and lead-based paint are likely to exist within the buildings. Therefore, impacts would be potentially significant.

2.8.6 Mitigation Measures

Wildfire Hazards

M-HZ-1 Prior to approval of the Landscape Plan and Final Map, the project applicant shall show that the entire area from the structures to the property boundary is mapped as Zone 1 irrigated on project plans. A heat deflecting wall shall be placed at the top of
the slope. Should an off-site fuel modification easement to extend a minimum of 36 feet (to provide 100 feet of FMZ) be agreed to, then that option would be implemented in lieu of the heat deflecting wall.

Heat deflecting walls shall comply with Chapter 7A of the California Building Code and meet the approval of the Deer Springs Fire Protection District.

M-HZ-2 Prior to approval of the Landscape Plan and Final Map, the project applicant shall show that all lots that cannot provide a full 30 feet of setback from the top of slope for two-story homes have the following on the project plans:

- An extended fuel modification zone (2.5 times the required 100 feet); and

M-HZ-3 Prior to the approval of the Landscape Plan and Final Map, the project applicant shall show that the following fire measures have been incorporated into the Sierra Farms portion of the proposed project:

- Constructing 2 hour rated exterior walls per latest California Building Code and California Fire Code standards. The storage shed shall be required to have all four sides of the structure built to the 2 hour rated exterior wall standards. All doors for the shed would be non-combustible or be a fire rated door approved by the City of San Marcos Fire Department’s Fire Marshal.
  
- The Community building shall have the north side wall built to the 2 hours rate exterior wall standards with the fire rate wall wrapping around 5 feet on either side of the building.
  
- Windows on all sides of the storage shed and the north side of the Community building shall be dual pane, both panes tempered.

Hazards and Hazardous Material Sites

M-HZ-4 Upon completion of grading plans and prior to the start of any construction or earth moving activities, the project applicant or its designee shall segregate and evaluate soils in the general vicinity of the lead contaminated soils as identified in the Focused Soil and Soil Vapor Screening Survey prepared by Leighton and Associates, Inc. in July 2015, and subject to approval by the County of San Diego Department of Environmental Health. Soils shall be evaluated and, if necessary, remediated
according to all applicable federal, state, and local regulations, including County of San Diego Department of Environmental Health and U.S. Environmental Protection Agency Region 9 standards.

**M-HZ-5**  
Prior to demolition of the existing structures at 2733 Sarver Lane, the project applicant or its designee shall complete a hazardous building material survey to determine the presence, if any, of lead-based paint or asbestos-containing materials. The project applicant or its designee shall retain a certified lead and asbestos abatement contractor to prepare a comprehensive lead paint and asbestos containing material survey for all areas to be demolished. The survey shall be submitted for review and approval to the County of San Diego Department of Environmental Health. Based on the survey, the certified lead and asbestos contractor shall prepare an abatement work plan in compliance with local, state, and federal regulations for any necessary removal and disposal of such materials. The work plan shall include a monitoring plan to be conducted by a qualified consultant during abatement activities to ensure compliance with the work plan requirements and abatement contractor specifications. Demolition plans and contract specifications shall incorporate any necessary abatement measures for the removal of materials containing lead-based paint and asbestos. The measures shall be consistent with the abatement work plan prepared for the project and conducted by a certified lead and asbestos abatement contractor. Following removal, lead paint and asbestos containing materials shall be disposed of properly in accordance with all federal, state, and local regulations.

While the final configuration and design of the Caltrans interchange improvements are not known at this time, to ensure potential impacts to hazards and hazardous materials resources remain less than significant, this EIR recommends the following measure:

**M-HZ-6**  
Pursuant to California Public Resources Code Section 21081(a)(2), in coordination with the I-15 interchange improvement project, which is within the responsibility and jurisdiction of Caltrans, Caltrans can and should require demolition materials be disposed of, or reused, after an investigation as appropriate for hazardous materials or contamination issues. Caltrans can and should prepare, or cause to be prepared, such investigation by or through a qualified and licensed inspector either prior to removal of the material, and/or when materials are removed from the site for disposal or reuse.
2.8.7 Conclusion

Wildfire Hazards

Impacts related to wildfire hazards would be potentially significant for three lots on the western portion of the project Site, as shown in Figure 2.8-1 (Impact HZ-1). In addition, up to 170 lots cannot provide a full 30 feet of setback from top of slope for two-story homes (Figure 2.8-1). Therefore, for these specific lots, impacts related to wildfire hazards would be potentially significant (Impact HZ-2). With the incorporation of modified or extended FMZs and provisions of heat deflecting walls (M-HZ-1 and M-HZ-2), which provide equivalent wildfire protection as standard setbacks, impacts would be reduced to less than significant.

Impacts related to wildfire hazards would be potentially significant at the Community building and storage shed within Sierra Farms (Impact HZ-3). With the incorporation of additional structural fire “hardening” measures as recommended by the City of San Marcos Fire Marshal (M-HZ-3), which provide functional equivalency for fire protection, impacts would be reduced to less than significant.

Hazards and Hazardous Material Sites

Depending upon final grading and construction plans, the extent of the lead contamination from the illegal use of the project Site for weapons firing may result in adverse effects. Therefore, impacts would be potentially significant (Impact HZ-4). Additional soil evaluation for potential lead contamination complying with County of San Diego Department of Environmental Health and U.S. EPA Region 9 standards (M-HZ-4) would reduce impacts to less than significant.

Due to the age of the on-site structures at 2733 Sarver Lane, asbestos and lead-based paint are likely to exist within the buildings. Therefore, impacts would be potentially significant (Impact HZ-5). Performing a hazardous materials building survey and, pending results of the survey, implementing an abatement work plan (M-HZ-5), would reduce impacts to less than significant.
### Table 2.8-1
Deer Springs Fire Protection District Fire and Emergency Medical Delivery System

<table>
<thead>
<tr>
<th>Fire Station</th>
<th>Address</th>
<th>Staffing</th>
<th>Apparatus</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 (Headquarters)</td>
<td>8709 Circle R Drive Escondido, CA 92026 760.749.8001</td>
<td>Three firefighters; with one Medic; plus two private medics on ambulance</td>
<td>One Type I and One Reserve Type I engine, and one medic ambulance</td>
</tr>
<tr>
<td>12</td>
<td>1321 Deer Springs Road Escondido, CA 92069 760.741.5512</td>
<td>Three firefighters; with one Medic</td>
<td>One Type I and one Type III engine</td>
</tr>
<tr>
<td>13</td>
<td>10308 Meadow Glen Way East Escondido, CA 92026 760.751.0820</td>
<td>Three firefighters; with one Medic</td>
<td>One Type I and one Reserve Type I engine</td>
</tr>
</tbody>
</table>

Note: The CAL FIRE Miller Station located at 9127 West Lilac Road includes 1 Type III engine staffed by 3 EMTs for most of the year and 2 EMTs during the Amador period, but it is not a DSFPD station.

Source: Appendix N

### Table 2.8-2
San Marcos Fire Department Stations Summary

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>Equipment</th>
<th>Staffing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station 1</td>
<td>180 W. Mission Road San Marcos, California</td>
<td>Paramedic Engine Co. Paramedic Truck Co. Type 3 Engine Paramedic Ambulance</td>
<td>On duty: 8</td>
</tr>
<tr>
<td>Station 3</td>
<td>404 Woodland Pkwy San Marcos, California</td>
<td>Paramedic Engine Co. Type 3 Engine Paramedic Ambulance</td>
<td>On-duty: 5</td>
</tr>
</tbody>
</table>

* Distance measured to entrance of the proposed Sierra Farms Park on Sarver Lane.
** Assumes travel to the park entrance, a 35 mph travel speed, and does not include turnout time

Source: Appendix O
FIGURE 2.8-1
Fire Wall Locations

Deer Springs Road
Twin Oaks Valley Road
Camino
Mayor

Knoll
Mesa
Valley
Hillside
Terraces
Summit
TOWN CENTER

Potential Heat Deflecting Walla Locations
Fuel Modification Setback
Heat Deflecting Walla Locations
Top of Slope Setback
Project Site

SOURCE: Fuscoe 2016

Newland Sierra Environmental Impact Report