

## 4.5 HAZARDS AND HAZARDOUS MATERIALS

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### INTRODUCTION

This section describes hazards and hazardous materials related to development of the project sites that could potentially pose a significant threat to human health or the environment. The project sites have previously been used for agricultural and light industrial purposes, and there is a potential for contamination from those past uses to present a health risk to future construction workers and residents. The “Environmental Setting” section describes existing conditions at the project sites and the “Regulatory Framework” section describes the pertinent federal, state, and local agency laws and regulations related to hazards and hazardous materials. Potentially significant adverse impacts that could result from the proposed project are described and mitigation measures to reduce these impacts to a less-than-significant level are identified, as appropriate.

### ENVIRONMENTAL SETTING

The hazardous materials setting is based on environmental site assessment investigations prepared for the Sares Regis (WEST, 2012) and Raintree sites (Golder, 2002; Treadwell & Rollo, 2012). Additional information is presented related to electromagnetic fields, a potential concern at the Sares Regis site.

### SARES REGIS SITE

The Sares Regis site was used for orchards from the earliest available historical records until the 1960s. Records of pesticides, herbicides, and other chemicals used at the orchards were unavailable, as agricultural chemical use was largely unregulated at that time. Prior to World War II, inorganic pesticides – often containing lead, arsenic, and other metals – were frequently used in agriculture. Following World War II, highly persistent organic pesticides, such as DDT, were commonly used until regulations began to restrict their use in the 1970s. Residues of inorganic and organic agricultural chemical can persist in soils for decades, potentially presenting a health risk to those who may come into contact with soils affected by those chemicals.

In the 1960s, the Sares Regis site was paved and used for parking of recreational vehicles. In the 1980s, the existing building at the site was built and used for semiconductor manufacturing. Performance Semiconductor and Analog Devices used the site for manufacturing between 1993 and 2007. In 2007, hazardous materials storage areas were closed with oversight from the Sunnyvale Department of Public Safety. After 2007, the site remained vacant.

The most recent search of environmental regulatory records for the project site vicinity, conducted in July 2012, identified Analog Devices at 610 East Weddell Drive on the Sares-Regis site (WEST, 2012). Analog Devices was listed as a registered hazardous waste generator and identified as responsible for the release of 100 gallons of liquid hydrogen during an incident in 2006. This

reported release did not result in soil or groundwater contamination, so this listing in government records would not affect future development of the site.

Several environmental investigations have been conducted at the Sares Regis site. In 1985, two groundwater monitoring wells were installed and groundwater samples were collected. No contaminants of concern were identified in the samples (WEST, 2012).

In 1995, four groundwater and eight soil samples were collected from borings at the site. Oil and grease, fluoride, and several volatile organic compounds (VOCs) were detected in soils, and two VOCs, tetrachloroethylene, and Freon-113 were detected in groundwater samples. All concentrations detected were below concentrations of potential concern (WEST, 2012).

In September 2012, soil, soil gas, and groundwater samples were collected and tested for petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PAHs), VOCs, pesticides, and metals. Sampling results were compared to Environmental Screening Levels (ESLs), developed by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) (RWQCB). ESLs are conservative risk-based screening levels that have been established to help expedite the assessments of sites where contaminated soil and groundwater have been identified. Data collected at a site can be directly compared to ESLs for various chemical compounds and the need for additional work can be evaluated.

No organic compounds were detected in soils above ESLs for residential use. Arsenic was identified at concentrations up to 4.77 milligrams per kilogram (mg/kg), which is above the ESL, but the report noted that this concentration was consistent with naturally-occurring concentrations of arsenic in the site vicinity (WEST, 2012). Regulatory agencies do not typically require the remediation of constituents below concentrations that are naturally occurring, as these concentrations are considered to be background for the area.

Soil gas and groundwater samples contained VOCs but all detected concentrations were below ESLs established for residential uses and ecological risk factors. Based on the findings of the September 2012 and earlier investigations, the Sares Regis environmental assessment report concluded that there was no evidence of contamination at the site that would limit future development (WEST, 2012).

In March 2013, the Sares Regis site was enrolled into the Voluntary Cleanup Program (VCP) with the Department of Toxic Substances Control (DTSC). This included a Voluntary Assessment Agreement between the property owner and DTSC, where DTSC was tasked to review the environmental investigation reports and determine if any additional investigation was warranted. DTSC requested that additional soil gas sampling be conducted in areas of the site that were not previously sampled, including within the existing building.

In June 2013, additional soil gas samples were collected from four locations at the site and analyzed for VOCs (WEST, 2013). One location contained a VOC, tetrachloroethylene (PCE), above residential risk thresholds. Additional soil gas samples collected around that location indicated that the source of the PCE was limited to a small volume of soil, estimated at 10 cubic yards, which was proposed to be removed from the site and transported to an appropriate disposal facility (WEST, 2013). Post-excavation soil gas sampling will be conducted to verify that the removal action has mitigated the soil gas issue (WEST, 2013).

## RAINTREE SITE

Like the Sares Regis site, the Raintree site was used for agricultural purposes until the 1960s. The site was developed as a drive-in theater in 1963, and redeveloped between 1976 and 1978 with 15 commercial buildings, which have been used for office and light industrial uses. A 2002 site reconnaissance identified minor chemical use and storage at several tenant spaces, including electro-optics and circuit board manufacturing businesses.

The most recent search of environmental regulatory records for the project site vicinity, conducted in July 2012 for the Sares-Regis site (WEST, 2012), identified Syn Labs at 568 East Weddell Drive on the Raintree site due to its registration as a hazardous waste generator. No chemical releases were reported for this site and therefore this listing in government records would not affect future development of the site.

An environmental investigation was conducted at the site in June 2012. Ten soil borings were installed in areas of the site where potential environmental concerns were noted in the 2002 site assessment. Soil, groundwater, and soil gas samples were collected and the results were compared to ESLs.

Soils contained petroleum hydrocarbons and pesticides at low concentrations, below ESLs for residential land uses. No VOCs were identified in soil samples. Arsenic was identified in soils up to 52 mg/kg, which is above the ESL for residential soils of 0.39 mg/kg, and above the naturally occurring background level, which the report stated was 11 mg/kg (Treadwell & Rollo, 2012). Another metal, vanadium, was identified at concentrations up to 200 mg/kg, above the ESL of 16 mg/kg and the background concentration of up to 129 mg/kg (Treadwell & Rollo, 2012).

Groundwater contained petroleum hydrocarbons in the diesel and motor oil range at concentrations of up to 4.6 milligrams per liter (mg/L), above the ESLs of 0.1 mg/L for groundwater that is a potential drinking water source. Only one VOC, methylene chloride, was detected in one of the samples, but occurred at a concentration below groundwater ESLs. Dissolved metals concentrations were also below ESLs.

Soil gas samples contained several VOCs, but all were below ESLs for residential uses.

No potential source of the petroleum hydrocarbon contamination in groundwater, such as a leaking underground storage tank (UST), is believed to be present on the Raintree site (Treadwell & Rollo, 2012). The investigation report noted several nearby properties that have reported releases from USTs that could have migrated to the Raintree site and could explain the concentrations identified there (Treadwell & Rollo, 2012). The investigation report further noted that the concentrations present at the Raintree site would not likely require remediation, as similar concentrations have been allowed to be left in place at release sites by oversight authorities (Treadwell & Rollo, 2012).

The investigation report concluded that arsenic and vanadium in soils may present a potential risk to future occupants at the project site and could require remediation (Treadwell & Rollo, 2012). The source of vanadium is not known, but the investigation report suggested that the arsenic may be present due to historical use of inorganic pesticides (Treadwell & Rollo, 2012).

Elevated concentrations of arsenic in soils have been identified at another location near the Raintree site. The Morse Park site (1010-1024 Morse Avenue, approximately 250 feet west of the Raintree site) is a former light industrial site proposed to be developed as a public park. Due to elevated concentrations of arsenic in shallow soils, the City of Sunnyvale entered into the State Voluntary Cleanup Program and signed a Voluntary Cleanup Agreement with the California DTSC in August 2011. Under oversight by DTSC, a removal action work plan to remove arsenic contaminated soils was prepared in January 2012; a CEQA Initial Study/Negative Declaration for the removal action was completed in February 2012; and arsenic-affected soils were removed from the site in October 2012 and January 2013 and, disposed of at a permitted landfill (EKI, 2013). An arsenic cleanup level of 17 mg/kg was approved by DTSC, as this concentration has been cited as the naturally occurring concentration of arsenic in the Bay Area (EKI, 2013). The removal action completion report concluded that after completion of the removal action, the Morse Park site is suited for unrestricted land use (EKI, 2013). DTSC approved the removal action completion report and was preparing certification of the site cleanup in April 2013 (DTSC, 2013).

## **ELECTROMAGNETIC FIELDS**

Electromagnetic fields (EMFs) are a potential concern due to the presence of electrical transmission lines to the east of the Sares Regis site and an electrical substation to the north of that site. Occupants of properties near high-voltage electrical transmission lines and substations are exposed to EMFs generated by those sources, in addition to EMFs from electrical distribution lines, building wiring, appliances, and natural phenomena, including lightning or static electricity. The overall strength of EMFs dissipates quickly with distance from the source. Typically, EMFs are measured at "background" levels about 3 to 4 feet away from an electrical appliance, 60 to 200 feet from an electrical distribution line, and about 300 to 1,000 feet from a transmission line or substation (California EMF Program, 1999).

There has been public concern about the potential health effects associated with EMFs from human-made sources, such as transmission lines. Human cells have their own electric fields, and some laboratory studies have shown that these internal fields can be disrupted by exposure to even low-energy EMFs. However, determining what effects, if any, EMFs may have on living tissue over long periods of time has proved to be a difficult scientific challenge.

A comprehensive review of the literature, prepared by the National Institute of Environmental Health Science (NIEHS) in 1999, concluded that "the NIEHS believes that there is weak evidence for possible health effects from EMF exposures, and until stronger evidence changes this opinion, inexpensive and safe reductions in exposure should be encouraged" (NIEHS, 1999). A more recent analysis of the relationship between EMFs and childhood leukemia, reviewing studies conducted since the NIEHS review, similarly concluded that EMFs are possibly carcinogenic but that scientific uncertainties regarding the apparent association remain (Kheifets et al., 2010).

The California EMF Program, a scientific consortium created by the California Public Utilities Commission (PUC) in conjunction with the California Department of Health Services (DHS) and the Public Health Institute, was tasked with looking into the potential health effects of EMFs and presenting policy recommendations for the State of California. It performed independent reviews of available data while it was active between the mid-1990s and mid-2000s. Due to the lack of clear association between EMFs and health risks in the available data, the California EMF Program did not identify any specific policy measures to address potential risks of EMFs, and DHS has made no

policy recommendations. However, the PUC advocates “no and low cost” EMF avoidance measures; this means minimizing EMF exposure when it is easy and inexpensive to do so (California EMF Program, 1999). Although not designed to minimize EMFs, the Sares Regis project design would reduce EMF exposures to future residents by placing a roadway and landscaping immediately adjacent to the transmission line right-of-way, with residences a greater distance away.

As no specific health effects of EMFs have been conclusively demonstrated, there are no health-based or regulatory risk standards for EMF exposure. The assessment of effects of EMFs in this EIR is therefore limited to the qualitative discussion in this subsection, and no impacts related to EMFs are identified.

## **REGULATORY FRAMEWORK**

The following section summarizes the federal, state, and local regulatory framework for hazardous materials and hazardous waste, hazardous building materials that could be encountered during building demolition activities, and worker health and safety.

### **HAZARDOUS MATERIALS AND HAZARDOUS WASTE**

The use, storage, and disposal of hazardous materials, including management of contaminated soils and groundwater, is regulated by numerous local, state, and federal laws and regulations. The United States Environmental Protection Agency (U.S. EPA) is the federal agency that administers hazardous materials and hazardous waste regulations. State and local agencies include the California Environmental Protection Agency (CalEPA), which includes the California DTSC, the State Water Resources Control Board (SWRCB), the California Air Resources Board (CARB), the RWQCB, the Bay Area Air Quality Management District (BAAQMD), the Santa Clara County Department of Environmental Health (SCCDEH), and the City of Sunnyvale Department of Public Safety (DPS).

A brief description of each federal, state, and regional/local agency’s jurisdiction and involvement in the management of hazardous materials and wastes is provided below.

#### *Federal Agencies*

The U.S. EPA is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials and hazardous waste. The federal regulations are primarily codified in Title 40 of the Code of Federal Regulations (40 CFR). The legislation includes the Resource Conservation and Recovery Act of 1976 (RCRA), the Superfund Amendments and Reauthorization Acts of 1986 (SARA), and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The U.S. EPA provides oversight for site investigation and remediation projects, and has developed protocols for sampling, testing, and evaluation of solid wastes.

### *State Agencies*

The following three State of California agencies regulate hazardous materials and waste that may occur on or around the project sites:

- *Department of Toxic Substances Control (DTSC)*. In California, DTSC is authorized by the U.S. EPA to enforce and implement federal hazardous materials laws and regulations. California regulations pertaining to hazardous materials are equal to or exceed the federal regulation requirements. Most State hazardous materials regulations are contained in Title 22 of the California Code of Regulations (CCR). DTSC generally acts as the lead agency for soil and groundwater cleanup projects that affect public health, and establishes cleanup levels for subsurface contamination that are equal to, or more restrictive than, federal levels. DTSC has also developed land disposal restrictions and treatment standards for hazardous waste disposal in California, as well as guidance on soil vapor concentrations that would be protective of inhalation of indoor air.
- *State Water Resources Control Board (SWRCB)*. The SWRCB enforces, among other regulations, those regulations pertaining to implementation of underground storage tank (UST) programs. The SWRCB also enforces the Porter-Cologne Water Quality Act of 1969 through its nine regional boards, including the RWQCB, described below.
- *California Air Resources Board (CARB)*. This agency is responsible for coordination and oversight of state and local air pollution control programs in California, including implementation of the California Clean Air Act of 1988. CARB has developed state air quality standards and is responsible for monitoring air quality in conjunction with the local air districts.

### *Regional and Local Agencies*

The following regional and local agencies have regulatory authority over the proposed projects' management of hazardous materials and waste:

- *San Francisco Bay Regional Water Quality Control Board (RWQCB)*. The RWQCB can act as lead agency to provide oversight of sites where the quality of groundwater or surface waters is threatened, and has the authority to require investigations and remedial actions.
- *Bay Area Air Quality Management District (BAAQMD)*. The BAAQMD has primary responsibility for control of air pollution from sources other than motor vehicles and consumer products (which are the responsibility of U.S. EPA and CARB). The BAAQMD is responsible for preparing attainment plans for non-attainment criteria pollutants, control of stationary air pollutant sources, and the issuance of permits for activities including asbestos demolition and renovation activities (District Regulation 11, Rule 2).
- *Santa Clara County Department of Environmental Health (SCCDEH)*. The SCCDEH Site Mitigation Program administers the Local Oversight Program (LOP) to oversee the investigation and remediation of leaking USTs within the City of Sunnyvale. The Site Mitigation Program also oversees remediation of certain other contaminated sites within the City as part of the State Voluntary Cleanup Program.
- *Sunnyvale Department of Public Safety (DPS) Hazardous Materials Unit*. The routine management of hazardous materials in California is administered under the Unified Program, and most of the City of Sunnyvale's hazardous materials programs are administered and enforced under the Unified Program. These include programs for registration of hazardous waste generators and underground storage tanks. The CalEPA has granted responsibilities to

DPS for implementation and enforcement of hazardous material regulations under the Unified Program as a Certified Unified Program Agency (CUPA). DPS is also responsible for building inspections and other local requirements related to hazardous materials contained in Title 20 of the Sunnyvale Municipal Code.

### **LEAD, ASBESTOS, AND OTHER HAZARDOUS BUILDING MATERIALS**

Prior to 1978, lead compounds were commonly used in exterior and interior paints. Lead is a suspected human carcinogen (i.e., may cause cancer), a known teratogen (i.e., causes birth defects), and a reproductive toxin (i.e., can cause sterility). Prior to the 1980s, building materials often contained asbestos fibers, also a known human carcinogen. Asbestos, used to provide strength and fire resistance, was frequently incorporated into insulation, roofing, and siding, textured paint and patching compounds used on wall and ceiling joints, vinyl floor tiles and adhesives, and water and steam pipes.

Regulations pertaining to demolition and renovation of structures with asbestos-containing materials (ACMs) are promulgated by the U.S. EPA, the U.S. Department of Labor Occupational Safety and Health Administration (OSHA), the Division of Occupational Safety and Health (DOSH), DTSC, and CARB. For the City of Sunnyvale, the BAAQMD, under authority of CARB, would be the lead agency overseeing hazardous air emissions. All friable (crushable by hand) ACMs or non-friable ACMs subject to damage must be abated prior to demolition in accordance with applicable requirements. Friable ACMs must be disposed of as an asbestos waste at an approved facility. Non-friable ACMs may be disposed of as nonhazardous waste at landfills that will accept such wastes. Workers conducting asbestos abatement must be trained in accordance with State and federal OSHA requirements.

Regulations pertaining to demolition and renovation of structures with lead-based paint are promulgated by the U.S. EPA, the U.S. Department of Housing and Urban Development (HUD), DOSH, and DTSC. Loose and peeling lead-based paint must be disposed of as a State and/or federal hazardous waste if the concentration of lead equals or exceeds applicable waste thresholds. State and federal construction worker health and safety regulations require a supervisor who is certified to identify existing and predictable lead hazards to oversee air monitoring and other protective measures during demolition activities where lead-based paint may be present. Special protective measures and notification to DOSH are required for highly hazardous construction tasks related to lead, such as manual demolition, abrasive blasting, welding, cutting, or torch burning of structures where lead-based paint is present.

Fluorescent lighting tubes and ballasts, computer displays, and several other common items containing hazardous materials (including PCBs and mercury, a heavy metal) are regulated as "universal wastes" by the State of California. Universal waste regulations allow common, low-hazard wastes to be managed under less stringent requirements than other hazardous wastes. Management of other hazardous wastes is governed by DTSC hazardous waste rules.

### **WORKER HEALTH AND SAFETY**

Worker health and safety is regulated at the federal level by OSHA. The Federal Occupational Safety and Health Act of 1970 authorizes states (including California) to establish their own safety

and health programs with OSHA approval. Worker health and safety protections in California are regulated by the California Department of Industrial Relations (DIR). The DIR includes the Division of Occupational Safety and Health (DOSH), which acts to protect workers from safety hazards through its California OSHA (Cal-OSHA) program, and provides consultant assistance to employers. California standards for workers dealing with hazardous materials are contained in CCR Title 8 and include practices for all industries (General Industrial Safety Orders), and specific practices for construction, and other industries. Workers at hazardous waste sites (or workers who may be exposed to hazardous wastes that might be encountered during excavation of contaminated soils) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations. Additional regulations have been developed for construction workers potentially exposed to lead and asbestos. Cal-OSHA enforcement units conduct on-site evaluations and issue notices of violation to enforce necessary improvements to health and safety practices.

### **CITY OF SUNNYVALE GENERAL PLAN**

The following policy from the Sunnyvale General Plan applies to the proposed project:

Policy SN-1.5: Promote a living and working environment safe from exposure to hazardous materials.

### **ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

This section analyzes impacts related to hazards and hazardous materials that could result from implementation of the proposed projects. This section begins with the criteria of significance, which establish the thresholds for determining whether an impact is significant. The latter part of this section presents the hazards and hazardous materials impacts that could result from development of the proposed project. Mitigation measures are identified to avoid, minimize or mitigate such impacts, where warranted.

### **SIGNIFICANCE CRITERIA**

For the purposes of this Draft EIR, development of the project sites would present a significant impact related to hazards if the projects would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;

- For a project located within an airport land use plan or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- For a project located within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The Initial Study determined that the final three criteria, regarding private airstrips, emergency response plans, and wildfire hazards, were not applicable to the project. Thus, the EIR focuses on potential public health and safety impacts related to hazardous materials and public airports.

## PROJECT IMPACTS

### **Impact HAZARDS-1: Development of the Raintree site could expose construction workers and future residents to soils containing potentially hazardous concentrations of arsenic and vanadium. (S)**

As described under “Environmental Setting” above, soils at the Raintree site contained arsenic at concentrations up to 52 mg/kg and vanadium at concentrations up to 200 mg/kg. These concentrations are above screening levels for residential land uses, and could potentially pose a risk to construction workers and future residents, who may come into direct contact with those soils. Arsenic is a known human carcinogen (ATSDR, 2007a). Vanadium is associated with lung, gastrointestinal, and neurological effects and is possibly carcinogenic to humans (ATSDR, 2012)

This impact could be mitigated through removal and off-site disposal of arsenic- and vanadium-affected soils, or by the implementation of institutional and engineering controls (IC/EC), such as the placement of the arsenic-affected soils beneath a cap consisting of pavement or a layer of clean soils and implementation of an operation and maintenance plan to ensure that the cap is maintained and no maintenance takes place affecting the affected soils without proper health and safety precautions. Removal actions or IC/EC that would eliminate the potential human exposure to contaminated soils would eliminate the potential health risk and reduce this impact to a less-than-significant level.

*Sares Regis Applicant Proposed Scenario.* Soils at the Sares Regis site were not found to contain vanadium above ESLs or arsenic above naturally occurring concentrations. Therefore, this impact would not apply to this scenario.

*Sares Regis Full Buildout Scenario.* As soils at the Sares Regis site were not found to contain vanadium above ESLs or arsenic above naturally occurring concentrations, this impact would also not apply to this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* As this scenario would develop housing on areas with soils affected by elevated concentrations of arsenic and vanadium, this impact would apply to this scenario.

*Raintree Full Buildout Scenario.* As the potential impact identified is site-specific, this impact would also apply to this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

**Mitigation Measure HAZARDS-1:** *Regulatory oversight shall be initiated to develop and implement measures to eliminate potential health risks related to soils containing elevated levels of arsenic and/or vanadium at the Raintree site. This oversight may be provided by Santa Clara County Department of Environmental Health (SCCDEH), the Regional Water Quality Control Board (RWQCB), or Department of Toxic Substances Control (DTSC) and may require the project applicant to submit an application to the State Site Designation Committee for assignment of an appropriate local or state oversight agency. As a condition of approval for construction, demolition, or grading permits, the applicant shall incorporate measures to ensure that any potential added health risks to construction workers, maintenance and utility workers, site users, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than  $1 \times 10^{-6}$  (one in one million) for carcinogens and a cumulative hazard index of 1.0 for non-carcinogens, or as otherwise required by a regulatory oversight agency. The evaluation of risk would be subject to review and/or approval by regulatory oversight agencies. These agencies could also require additional site investigation to more fully delineate the extent of contaminants of concern at the site.*

*The potential risks to human health in excess of these goals must be reduced either by remediation of the contaminated soils (e.g., excavation and off-site disposal) and/or implementation of institutional controls and engineering controls (IC/EC). If extensive on-site excavation and/or soil off-haul is determined to be the appropriate response action, additional CEQA review may be required to evaluate potential impacts related to air quality, noise, and traffic and to recommend mitigation measures, as necessary. IC/EC may include the use of a Construction Risk Management Plan (for mitigating exposures during construction and maintenance of the project), placement of new fill or pavement over contaminated soils, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program must be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the project. The Operations and Maintenance Program would be subject to review and approval by regulatory oversight agencies. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-2: Development of the Sares Regis site could expose future residents to potentially hazardous concentrations of VOCs migrating to indoor air via soil gases. (S)**

As described under “Environmental Setting” above, a soil gas sample from the Sares Regis site contained PCE above screening levels for residential land uses, and could potentially pose a risk to

future residents, who could be affected if those soil gases migrate to indoor air. PCE, a solvent commonly used in dry cleaning and metal degreasing, is associated with central nervous system, kidney, and liver damage and is a suspected human carcinogen (ATSDR, 2007b)

Based on soil gas sampling conducted in June 2013, the source of the elevated levels of soil gas is a small volume of soil, approximately 10 cubic yards, which is proposed to be removed from the site. Post-removal soil gas sampling will be conducted to verify that VOCs in soil gases are below residential screening levels.

*Sares Regis Applicant Proposed Scenario.* As this scenario would develop housing on areas with elevated concentrations of PCE in soil gases, this impact would apply to this scenario.

*Sares Regis Full Buildout Scenario.* As the potential impact identified is site-specific, this impact would also apply to this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* Soil gas samples from the Raintree site were not found to contain VOCs above ESLs. Therefore, this impact would not apply to this scenario.

*Raintree Full Buildout Scenario.* As soil gas samples from the Raintree site were not found to contain VOCs above ESLs, this impact would also not apply to this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Mitigation Measure HAZARDS-2:* *Occupancy permits for the Sares Regis site shall be contingent upon the site receiving closure with DTSC in the Voluntary Cleanup Program. Currently, remedial action is expected to be limited to excavation and off-site disposal of a small volume of soil. Under Voluntary Cleanup Program guidelines, DTSC shall review the remedial action using its Exemption Evaluation Checklist to determine if any additional CEQA review may be required to evaluate potential impacts related to the remedial action. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-3: Development of the two projects would require the use, transport, and disposal of hazardous materials, which could create a potential hazard to public health or the environment. (S)**

Hazardous materials (e.g., fuels, lubricants, paints, adhesives) would be transported and used on-site for proposed construction and demolition activities. At the Raintree site, materials transported could potentially include soils containing elevated concentrations of arsenic and vanadium. Due to the former industrial land use histories at the sites, there may be a potential for previously undisclosed areas of contaminated soils to be encountered during construction, which should be managed and disposed of in a safe manner in accordance with applicable laws and regulations. In addition, construction vehicles used on-site could accidentally release hazardous materials, such as oils, grease, or fuels. It is likely that the construction contractor(s) would store these hazardous

materials and vehicles on-site during the duration of construction activities. Accidental releases of hazardous materials could affect soil and/or groundwater quality, or could result in adverse health effects to construction workers, the public, and the environment. Implementation of the mitigation measure below would reduce this potential impact to a less-than-significant level.

*Sares Regis Applicant Proposed Scenario.* As this scenario would include construction activities and would require the use of construction equipment and hazardous materials, this impact would apply to the Applicant Proposed Scenario.

*Sares Regis Full Buildout Scenario.* As under the Applicant Proposed Scenario, this impact would apply to the Full Buildout Scenario. The greater density of development under this scenario, requiring additional construction equipment and materials, could result in a slightly greater potential for a hazardous material release but would not affect the significance of the impact identified.

*Raintree Applicant Proposed Scenario.* As this scenario would include construction activities and would require the use of construction equipment and hazardous materials, this impact would apply to the Applicant Proposed Scenario.

*Raintree Full Buildout Scenario.* As under the Applicant Proposed Scenario, this impact would apply to the Full Buildout Scenario. The greater density of development under this scenario, requiring additional construction equipment and materials, could result in a slightly greater potential for a hazardous material release but would not affect the significance of the impact identified.

*Mitigation Measure HAZARDS-3: Construction at the project sites shall be conducted under a project-specific Construction Risk Management Plan (CRMP) to protect construction workers, the general public, and the environment from subsurface hazardous materials previously identified and to address the possibility of encountering unknown contamination or hazards in the subsurface. The CRMP shall summarize soil and groundwater analytical data collected on the project sites during past investigations and during site investigation and remediation activities described in Mitigation Measure HAZARDS-1 for the Raintree site; delineate areas of known soil and groundwater contamination, if applicable; and identify soil and groundwater management options for excavated soil and groundwater, in compliance with local, state, and federal statutes and regulations.*

*The CRMP shall:*

- (1) Provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively.*
- (2) Require the preparation of a project-specific Health and Safety Plan that identifies hazardous materials present, describes required health and safety provisions and training for all workers potentially exposed to hazardous materials in accordance with state and federal worker safety regulations, and designates the personnel responsible for Health and Safety Plan implementation.*
- (3) Require the preparation of a contingency plan that shall be applied should previously unknown hazardous materials be encountered during construction activities. The contingency plan shall include provisions that require collection of soil and/or*

*groundwater samples in the newly discovered affected area by a qualified environmental professional prior to further work, as appropriate. The analytical results of the sampling shall be reviewed by the qualified environmental professional and submitted to the appropriate regulatory agency. The environmental professional shall provide recommendations, as applicable, regarding soil/waste management, worker health and safety training, and regulatory agency notifications, in accordance with local, state, and federal requirements. Work shall not resume in the area(s) affected until these recommendations have been implemented under the oversight of the City or regulatory agency, as appropriate*

(4) *Designate personnel responsible for implementation of the CRMP.*

*The CRMP shall be submitted to the City of Sunnyvale for review and approval prior to the issuance of construction and demolition permits. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-4: Demolition of the existing project site buildings at both the Raintree and Sares Regis sites may result in the release of lead, asbestos, and/or other hazardous materials, which could pose a risk to construction workers, the general public, and the environment. (S)**

Based on the age of the existing buildings, it is likely that lead, asbestos, and other hazardous building materials are present at both project sites. The building at the Sares Regis site was constructed in the 1980s and the buildings at the Raintree site were constructed in the 1970s, during the period when lead and asbestos were commonly used in building materials. Additional hazardous materials, such as PCBs and mercury in fluorescent lighting and thermostats, are also likely to be present. These hazardous materials do not generally pose a health risk in their intact form, but they can be dispersed during building demolition, potentially posing health risks to construction workers and the general public.

Some screening of this potential hazard has been done at each site. At the Sares Regis site, a 2012 pre-demolition survey identified asbestos in black and silver roofing mastic (ProTech, 2012). Lead was identified in tan ceramic wall tile, and low levels of lead in exterior concrete walls and numerous interior components (ProTech, 2012). At the Raintree site, a 1993 survey identified confirmed or suspected asbestos content in floor tile and mastic, roofing felt, window caulking and putty, drywall tape and joint compound, exterior stucco, acoustical ceiling tiles, duct seam tape, and flexible duct connectors (Golder Associates, 2002). Paint chip samples collected in 2002 identified low levels of lead in several interior and exterior painted walls (Golder Associates, 2002).

*Sares Regis Applicant Proposed Scenario.* Demolition of the existing building as part of site development could potentially result a release of lead, asbestos, and other materials from the Sares Regis site, so this impact would apply to this scenario.

*Sares Regis Full Buildout Scenario.* As under the Applicant Proposed Scenario, demolition of the site building would result in the impact. The greater density of development under this scenario would not affect the impact identified.

*Raintree Applicant Proposed Scenario.* Demolition of the existing buildings as part of site development could potentially result a release of lead, asbestos, and other materials from the Raintree site, so this impact would apply to this scenario.

*Raintree Full Buildout Scenario.* As under the Applicant Proposed Scenario, demolition of the site buildings would result in the impact. The greater density of development under this scenario would not affect the impact identified.

***Mitigation Measure HAZARDS-4:** Hazardous building materials surveys shall be conducted by a qualified and licensed professional for all structures that were not previously inspected or abated and that are proposed for demolition or renovation at the project sites. Lead-based paint shall be included in all hazardous material surveys. All loose and peeling lead-based paint and asbestos-containing materials (ACM) shall be abated by certified contractor(s) in accordance with local, state, and federal requirements. All other hazardous materials, such as "universal wastes," shall be removed from buildings prior to demolition in accordance with Division of Occupational Safety and Health (DOSH) regulations. The completion of the abatement activities shall be documented by a qualified environmental professional(s) and submitted to the City of Sunnyvale prior to the issuance of construction and demolition permits. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-5: Operation of the projects would require the use of hazardous materials, which could be released due to improper use, storage, handling, or disposal, creating a potential hazard to public health or the environment. (LTS)**

The operational phase of the proposed projects would involve the storage and use of common hazardous materials used for janitorial, landscaping, and maintenance purposes (e.g., paints, cleaning solvents, and pool maintenance chemicals) on the project sites. All future uses would be subject to existing regulatory programs for hazardous materials, including those hazardous materials programs implemented and enforced by Sunnyvale DPS. These measures would ensure that the proposed project would not result in significant impacts on health and safety from the routine transport, use, storage, or disposal of hazardous materials following construction. This potential impact would therefore be considered less than significant

*Sares Regis Applicant Proposed Scenario.* Small quantities of hazardous materials would be used, stored, and disposed of during operation of the Sares Regis Applicant Proposed Scenario, so this impact would apply to this scenario. However, no mitigation beyond existing laws, regulations, and programs would be necessary to address the potential impact under this scenario.

*Sares Regis Full Buildout Scenario.* As under the Applicant Proposed Scenario, hazardous materials would be used, stored, and disposed of at the Sares Regis site, so this impact would apply to this scenario. The greater density of development under this scenario could potentially require additional use and storage of hazardous materials during operation, but this would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* Small quantities of hazardous materials would be used, stored, and disposed of during operation of the Raintree Applicant Proposed Scenario, so this impact would apply to this scenario. However, no mitigation beyond existing laws, regulations, and programs would be necessary to address the potential impact under this scenario.

*Raintree Full Buildout Scenario.* As under the Applicant Proposed Scenario, hazardous materials would be used, stored, and disposed of at the Raintree site, so this impact would apply to this scenario. The greater density of development under this scenario could potentially require additional use and storage of hazardous materials during operation, but this would not significantly affect the impact identified.

***Mitigation Measure HAZARDS-5: No mitigation would be necessary. (LTS)***

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-6: The projects may involve the handling of hazardous materials within ¼-mile of two schools and therefore have the potential to present a safety hazard to school students and workers. (LTS)**

The San Miguel Elementary School to the southeast of the project sites and Columbia Middle School to the southwest are both located approximately one-quarter mile from the project sites. Lakewood Elementary School is located approximately one-third mile to the east. If hazardous materials are released during construction at the project sites, such as through the release of fugitive dust containing contaminants, there may be a potential to affect nearby schools. Similarly, improper storage, use, or disposal of hazardous materials during operation of the projects could potentially result in a release that could affect nearby schools.

Implementation of the Construction Risk Management Plans required under Mitigation Measure HAZARDS-2 would mitigate potential hazards on schools during construction activities. Existing laws, regulations, and programs, as noted above under Impact HAZARDS-4, would mitigate potential impacts from hazardous materials during project operation. No additional mitigation is required.

*Sares Regis Applicant Proposed Scenario.* As the Sares Regis project would be located less than one-quarter mile from Columbia Middle School and has the potential to release hazardous materials during construction and operation, this impact would apply to the Applicant Proposed Scenario. No additional mitigation, beyond Mitigation Measure HAZARDS-2 and existing laws, regulations, and programs, would be necessary to address the potential impact under this scenario.

*Sares Regis Full Buildout Scenario.* As under the Applicant Proposed Scenario, this potential impact would also apply to this scenario. The greater density of development under this scenario would require additional use and storage of hazardous materials during project construction and operation, but this would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* As the Raintree project would be located less than one-quarter mile from San Miguel Elementary School and has the potential to release hazardous materials during construction and operation, this impact would apply to the Applicant Proposed Scenario. No additional mitigation, beyond Mitigation Measure HAZARDS-2 and existing laws, regulations, and programs, would be necessary to address the potential impact under this scenario.

*Raintree Full Buildout Scenario.* As under the Applicant Proposed Scenario, the potential impact would also apply to this scenario. The greater density of development under this scenario would require additional use and storage of hazardous materials during project construction and operation, but this would not significantly affect the impact identified.

Mitigation Measure HAZARDS-6: *No mitigation would be necessary. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-7: The projects have the potential to present a safety hazard to future residents due to their location within airport land use plans for the Moffett Naval Air Station and San Jose International Airport. (LTS)**

The project sites are located approximately 1.5 miles southeast of the Moffett Naval Air Station (NAS) and approximately 4 miles northwest of San Jose International Airport (SJIA) and are located within the airport land use plans for those airports. Review of those plans indicated that the project sites are not located in the designated safety zones for either Moffett NAS (ALUC, 2012) or SJIA (ALUC, 2013), where development is restricted due to potential safety hazards. Therefore, no safety hazards related to these nearby airports would be anticipated and the project would not result in any significant impact related to aviation hazards.

*Sares Regis Applicant Proposed Scenario.* As the Sares Regis site is not located within a designated safety zone for the Moffett NAS or SJIA, the impact would be less than significant for this scenario.

*Sares Regis Full Buildout Scenario.* As the potential aviation safety impact identified is site-specific, this impact would also be less than significant for this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* As the Raintree site is not located within a designated safety zone for the Moffett NAS or SJIA, the impact would be less than significant for this scenario.

*Raintree Full Buildout Scenario.* As the potential aviation safety impact identified is site-specific, this impact would also be less than significant for this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Mitigation Measure HAZARDS-7: No mitigation would be necessary. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

## CUMULATIVE IMPACTS

Implementation of Mitigation Measures HAZARDS-1, HAZARDS-2, HAZARDS-3, and HAZARDS-4 would reduce potential significant impacts for the projects to a less-than-significant level. Hazards and hazardous materials impacts are generally limited to the immediate vicinity of the use, storage, disposal, or release of the hazardous materials. Although the development of other projects in the Sunnyvale area or surrounding areas (see Table 6-1 in Chapter 6 for a list of potential development projects in the vicinity of the sites) could result in similar hazardous materials impacts, those impacts would not intensify the potential impacts of the proposed projects, and development and operation of the proposed projects would not intensify hazardous materials impacts at other locations in the project site vicinity. Therefore, the cumulative impact of the projects would be less than significant.

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## 4.6 LAND USE AND PLANNING

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### INTRODUCTION

This section of the EIR addresses existing land uses at the project sites for the Sares Regis and Raintree projects and land uses in the immediate surroundings. The projects' compatibility with nearby land uses and with the City's General Plan policies is also evaluated.

### ENVIRONMENTAL SETTING

#### EXISTING LAND USES ON THE PROJECT SITES

The discussion below addresses existing land uses at the two project sites, as well as on-site easements.

##### *Sares Regis Site*

The Sares Regis site is now occupied by one vacant, single-story industrial/commercial/manufacturing building that is approximately 63,000 square feet in size. This building has been vacant for over five years. Ancillary facilities include a paved parking area at the perimeter of the building, on-site landscaping, and attached hazardous materials storage areas that were closed in 2007. This building was built between 1980 and 1983 and most recently contained semiconductor manufacturing facilities and office uses. Access is provided from the end of East Weddell Drive.

Easements on the Sares Regis site are located at the perimeter of the site (see Figure 3-12). A public utilities easement owned by the City of Sunnyvale forms a "bulb" at the project entrance at the termination of East Weddell Drive to allow a turnaround for vehicles. A 10-foot right-of-way branches off of this bulb to allow for an existing PG&E easement that serves the existing building. This easement will be removed with the new project. Other easements at the north, east, and south edges of the site include gas pipeline easements, storm drains, and other utilities.

##### *Raintree Site*

The Raintree site is now occupied by the Fair Oaks Business Park, which includes 15 single-story light manufacturing and office buildings with about 605 surface parking spaces. Landscaping is located throughout the business park and within the surface parking areas. Three driveways on East Weddell Drive provide access to the site.

Easements on the Raintree site are also located at the perimeter of the site, except for a public utilities easement crossing the center of the site, where the land owned by the San Francisco Public Utilities Commission (SFPUC) divides Parcel A from Parcel B (see Figure 3-14). The Hetch Hetchy water transmission pipeline is located within this SFPUC parcel. The easements at the

perimeter of the Raintree site include sanitary sewers, drainage facilities, sidewalks, water mains, and communication equipment.

## **SURROUNDING LAND USES**

### *Sares Regis Site Surroundings*

U.S. Highway 101 (Highway 101) is located directly south of the Sares Regis site. A northbound exit lane from the highway that joins with North Fair Oaks Avenue curves along the southwestern edge of the site. Land uses on the south side of Highway 101 include residential uses (low to high density) and mobile home uses (see Figure 3-2).

The land immediately north of the Sares Regis site is owned by the SFPUC. Within the SFPUC right-of-way is the underground transmission pipeline that brings Hetch Hetchy Reservoir water from the Sierra Nevada to the City and County of San Francisco and its water customers. Any landowner or project sponsor seeking to use the SFPUC property is required to obtain a license or lease from the SFPUC (SFPUC, 2013). Structures within the right-of-way are strictly prohibited, and an adjacent property owner may not use the right-of-way to fulfill the open space, emergency access, or other development requirements (SFPUC, 2013).

Currently, the SFPUC land is occupied partially by a parking lot and is not improved. However, lands to the east and west that are also owned by the SFPUC have been improved for pedestrian and bicycle use and are part of the John W. Christian Greenbelt. This greenbelt is a regional trail managed by the City of Sunnyvale from Orchard Gardens Park (to the west) to Manzano Way (to the east), passing through Lakewood Park. Farther north, on the north side of the SFPUC land, are the Pacific Gas & Electric (PG&E) substation called the Fair Oaks Substation and a mobile home park (El Dorado Mobile Home Park) with access via Avenue A and 1<sup>st</sup> Street. The East Channel Trail, a planned multi-use trail right-of-way owned by Santa Clara Valley Water District and proposed by the City, is located east of the Fair Oaks Substation and will connect the greenbelt to the Fair Oaks light rail train station. In this location the Santa Clara Valley Water District operates the East Channel flood control system, which continues north and south of the project site. Although there are no trail improvements, pedestrians and bicyclists informally use the channel maintenance road.

Also east of the Sares Regis site are the Lakehaven Townhome community (15 townhomes) and the larger Lakewood residential neighborhood, the latter of which includes single-family homes, a park, a neighborhood shopping center, and a school. PG&E maintains electrical transmission lines immediately to the east of the Sares Regis site on land owned by the Lakehaven Townhome community.

As mentioned earlier, a Highway 101 off-ramp is located west of the Sares Regis site. The North Fair Oaks Avenue overpass crosses Highway 101 to the southwest of the site. Farther west of the Highway 101 off-ramp are divided lanes of North Fair Oaks Avenue and the Raintree site (see Figure 3-2), which is described above.

### *Raintree Site Surroundings*

Land uses surrounding the Raintree site include Highway 101, residential uses, institutional uses, and office uses. Similar to the Sares Regis site, the Raintree site is bordered by Highway 101 to the south, with the highway overpass providing access for vehicles, pedestrians, and bicyclists along North Fair Oaks Avenue. A mobile home park and single-family and multi-family homes are located south of Highway 101. Columbia Middle School is set within this residential neighborhood to the south. Lands owned by the SFPUC divide Parcel A from Parcel B within the Raintree site. As stated above, use of such lands requires a license or lease from the SFPUC and specific restrictions apply.

West of the Raintree site are institutional and office buildings with uses such as UPS Freight, the New Hope International Church, Sunnyvale Health & Fitness, and other non-residential uses. A recently completed three-story townhome development is also west of the Raintree site, as is the future Seven Seas Park, currently under design as a 4.3-acre neighborhood park. The park is anticipated for completion in 2014.

The area north and east of the Raintree site has been transitioning from one-story industrial uses to medium- and high-density residential uses. Immediately west and north of East Weddell Drive are three-story townhome buildings constructed in 2007-2008. Other uses north of the site include office buildings, a restaurant, and medium- to high-density residential development.

## **GENERAL PLAN DESIGNATIONS FOR PROJECT SITES AND SURROUNDINGS**

### *Sares Regis Site General Plan Designations*

The existing land use designation for the Sares Regis site in the City's General Plan is "Industry" as shown in **Figure 4.6-1**. This existing designation has corresponding zoning categories of M-S Industrial Service and M-3 General Industrial. There is only one industrial General Plan category in the City's General Plan.

The City's 2011 General Plan states:

*With regard to commercial and industrial space, the adopted 1997 Land Use and Transportation Element of the General Plan would accommodate a total of 49 million square feet more than currently exists. At today's intensity of building use, this would yield a total of about 160,000 jobs. When this figure is compared to the City's 2025 projection of 109,570 jobs for the City, it is apparent that Sunnyvale has more than adequate space for projected job growth.*

The applicant for the Sares Regis project has proposed a General Plan designation of "Residential High Density (27 to 45 dwelling units per acre)." In 2012, the Sunnyvale City Council authorized the study of a range of densities for both the Sares Regis site and the Raintree site. Thus, this EIR addresses the "Applicant Proposed Scenario" General Plan designation of Residential High Density and the City-initiated "Full Buildout Scenario" of maximum development under the General Plan designation of "Residential Very High Density (45 to 65 dwelling units/acre)."

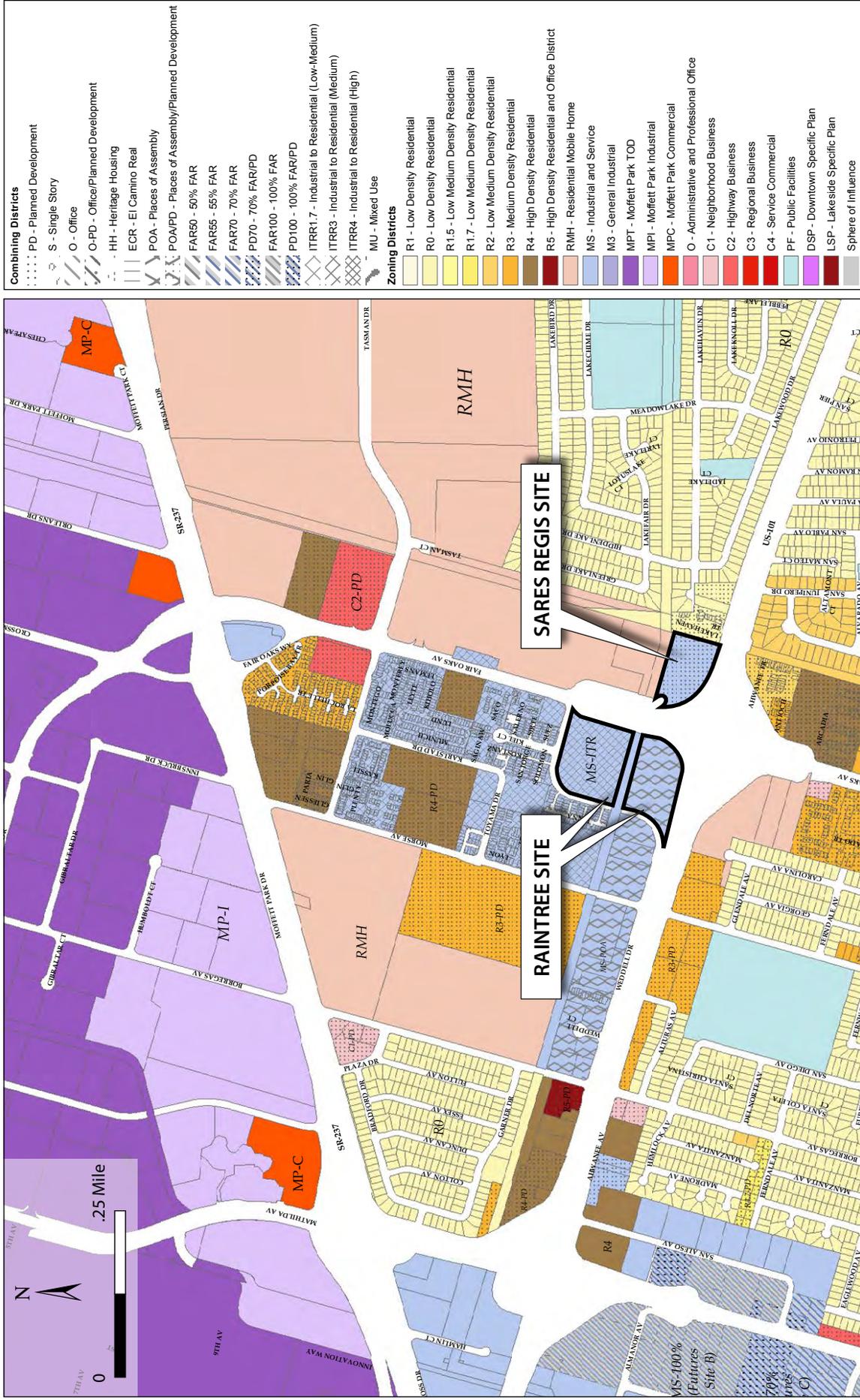


Figure 4.6-2

CITY OF SUNNYVALE ZONING

SOURCE: City of Sunnyvale, 2013



### *Raintree Site Zoning*

The Raintree site has two zoning designations as shown in Figure 4.6-2. Parcel A at the north end of the Raintree site is zoned as M-S/ITR/R-3/PD (Industrial and Service/Industrial-to-Residential/Medium Density Residential/Planned Development). Parcel B at the south end of the Raintree site (south of the SFPUC right-of-way) is zoned M-S/POA (Industrial and Service/Place of Assembly).

The Parcel A zoning allows similar uses to what is discussed above for the M-S zoning that applies to the Sares Regis site. The ITR zoning allows industrial, office, commercial, and residential uses to exist within the same zoning district and enables industrial, office, or commercial uses to gradually convert to residential use (Section 19.26.090 of the City's Zoning Code). The R-3 zoning for Parcel A is medium-density residential zoning in which not more than 24 dwelling units per acre are allowed. The PD zoning is described above for the Sares Regis site.

The Parcel B zoning allows the same M-S uses discussed above. The Place of Assembly (POA) combining designation is to allow uses that may include sensitive populations that are otherwise not permitted in the M-S zoning district.

### *Surrounding Zoning*

The zoning districts adjacent to the Sares Regis site include Residential Mobile Home (R-MH) to the north and Low Density Residential (R-O) to the east (see Figure 4.6-2). The R-O district allows residential units at a density of not more than seven dwelling units per acre. Highway 101 is to the south of the Sares Regis site, and a variety of residential zoning districts are located on the south side of Highway 101. To the east is the Raintree site which is discussed above.

Zoning districts adjacent to the Raintree site include M-S/ITR/R-4 to the north and northeast. This combining district allows residential uses at a density of up to 36 dwelling units per acre. West of the Raintree site, the land is zoned as M-S/POA, which is described above and which matches the zoning of Parcel B of the Raintree site. Highway 101 is south of the Raintree site, and zoning districts on the south side of the highway include Residential Mobile Home and Medium Density Residential.

## **REGULATORY FRAMEWORK**

### **CITY OF SUNNYVALE GENERAL PLAN**

The City of Sunnyvale General Plan was consolidated in 2011. This plan outlines goals and policies that together provide a comprehensive, long-term plan for physical development within the city. Individual development projects within the city must demonstrate general consistency with the goals and policies outlined within the General Plan. The land use designations of the City of Sunnyvale General Plan are shown in Figure 4.6-1 for the area of the project sites and their surroundings.

## **CITY OF SUNNYVALE ZONING CODE**

The City's Zoning Code (Title 19 of the Municipal Code) implements the General Plan and provides location-specific regulation, such as use restrictions and building height limitations. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless the proposed action conforms to the Zoning Code.

## **SAN FRANCISCO PUBLIC UTILITIES COMMISSION REQUIREMENTS**

The San Francisco Public Utilities Commission (SFPUC) regulates the land between Parcel A and Parcel B on the Raintree site and the land immediately north of the Sares Regis site. Specific licenses and leases from the SFPUC are required before any of these lands can be used and specific restrictions apply. For example, no structures are allowed within the right-of-way and specific restrictions on landscaping also apply (SFPUC, 2013).

## **ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

### **SIGNIFICANCE CRITERIA**

For the purposes of this EIR, development of the project sites would present a significant land use impact if the projects would:

- Physically divide an established community;
- Conflict with applicable land use plans or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or nature community conservation plan.

The Initial Study determined that the first and third criteria above were not applicable to the projects. Thus, the EIR focuses on the potential for the projects to conflict with applicable plans, policies, and regulations.

### **PROJECT IMPACTS**

**Impact LAND-1: The projects could conflict with policies of the City of Sunnyvale General Plan related to compatibility with existing land uses, proximity to services, and potential environmental impacts. (LTS)**

Conflicts with adopted policies are not necessarily significant in and of themselves because General Plan policies are adopted for multiple purposes and may conflict. For example, a policy to protect natural resources may conflict with policies to encourage new housing or new employment. In addition, it is the responsibility of the decision-makers to determine how to evaluate policy consistency. When policies are related to potential environmental impacts, however, such policies should be evaluated in an environmental analysis, as clarified in the identified significance criteria addressed throughout this EIR.

**Table 4.6-1** summarizes the projects' consistency with relevant policies of the City of Sunnyvale General Plan. The relationships of the various scenarios to the policies are addressed in more detail below.

*Sares Regis Applicant Proposed Scenario.* The Sares Regis project would be a more intense residential development than the residential uses to the north and east. In addition, the project would be about one-third mile from everyday commercial needs (grocery, pharmacy, etc.). In terms of environmental issues, the analysis of potential air and noise impacts associated with the site's proximity to Highway 101 found that residents of the Sares Regis project could be significantly affected by air toxins associated with diesel particulate (DPM) and by noise associated with nearby traffic; mitigation measures were recommended to reduce the impacts to less-than-significant levels.

*Sares Regis Full Buildout Scenario.* The Full Buildout Scenario for the Sares Regis project would result in an increased incompatibility with existing residential uses to the north and east due to the increased building height that would result. The distance to everyday commercial needs would be about one-third mile. In terms of environmental issues, potential air and noise impacts would be similar to those identified for the Applicant Proposed Scenario.

*Raintree Applicant Proposed Scenario.* As described for the Sares Regis project, the Raintree project would result in residential uses slightly more intense than existing residential uses to the north. However, recently constructed residential uses north and east of the Raintree site are at a density that would be generally compatible with the new Raintree development and the new Raintree development would further the expansion of residential uses in this portion of the city. The distance to everyday commercial needs would be approximately one-third mile. In terms of environmental issues, the analysis of potential air and noise impacts associated with the Raintree site's proximity to Highway 101 found that residents of the Raintree project could be significantly affected by air toxins associated with diesel particulate (DPM) and by noise associated with nearby traffic; mitigation measures were recommended to reduce the impacts to less-than-significant levels.

*Raintree Full Buildout Scenario.* Under the Full Buildout Scenario, the Raintree project would be less compatible with existing, recently constructed homes to the north and west. Buildings would be as high as six stories, in comparison to the two- and three-story residential buildings to the north and west. The distance to everyday commercial needs would be approximately one-third mile. In terms of environmental issues, potential air and noise impacts would be similar to those identified for the Applicant Proposed Scenario.

*Mitigation Measure LAND-1:* *No mitigation would be necessary. Refer to other sections of the EIR as related to potential environmental impacts, specifically air quality and noise. (LTS)*

- Applies to Sares Regis Likely Buildout Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Likely Buildout Scenario:
- Applies to Raintree Full Buildout Scenario:

**Table 4.6-1 Projects Relationship to City of Sunnyvale General Plan Policies**

Goal/Policy	Applicant Proposed Scenario Relationship to Policy	Full Buildout Scenario Relationship to Policy
<p><b>Goal LT-2 Attractive Community</b> – Preserve and enhance an attractive community, with a positive image and a sense of place, that consists of distinctive neighborhoods, pockets of interest, and human-scale development.</p> <ul style="list-style-type: none"> <li>▪ <b>Policy LT-2.1</b> Recognize that the City is composed of residential, industrial and commercial neighborhoods, each with its own individual character; and allow change consistent with reinforcing positive neighborhood values.</li> <li>▪ <b>Policy LT-2.2</b> Encourage nodes of interest and activity, such as parks, public open spaces, well planned development, mixed-use projects, and other desirable uses, locations and physical attractions.</li> </ul>	<p>The Sares Regis and Raintree projects would both replace commercial/industrial developments with new residential development. Existing commercial/industrial buildings would be removed and replaced with new multi-story residential buildings, landscaping, parking areas, and new utility improvements. This conversion from industrial uses to residential uses has been occurring in various locations of Sunnyvale and would enhance the residential character of this portion of the city on the north side of Highway 101. The two projects would both abut the highway (on the south), and the Sares Regis development would adjoin the SFPUC right-of-way and the Fair Oaks PG&amp;E substation to the north and northeast, respectively. The secondary land use impact issues of these proximate land uses are addressed in the air quality, hazards, noise, and other sections of the EIR.</p> <p>The Sares Regis development would be similar in use to the residential mobile home park to the north and the residential uses to the east; however, the density and type of the new development would be significantly different from the mobile home park to the north and lower-density residential development to the east.</p> <p>The Raintree development would be adjacent to recently constructed residential development to the north in an area that has been transitioning from one-story industrial uses to medium- and high-density residential uses over the past few years. The new Raintree development would complement this adjoining residential area in both type and density of use. To the west of the Raintree site, there are institutional, office, and commercial uses separated from the Raintree site by East Weddell Drive. While these are non-residential, the types of uses are not expected to conflict with the Raintree project.</p> <p>The two projects (Sares Regis and Raintree) would enhance each other on either side of North Fair Oaks Avenue. However, North Fair Oaks Avenue is a wide, 4-lane arterial, and freeway exit/entrance lanes would also separate the Sares Regis site from the Raintree site. The proposed improvements to the SFPUC</p>	<p>The relationship of the Full Buildout Scenario to these policies would be similar to the Applicant Proposed Scenario. However, the intensity of development would be greater and the scale of the on-site buildings would be increased, potentially increasing incompatibility with the scale of surrounding development. The Sares Regis site plan would be unchanged, but the building would be increased from four stories to five stories, and the parking garage would be increased from four stories to five stories (see Figure 3-5). The most significant impact of this increased building height would be noticeable for the single-story mobile home park to the north and the low-density residential development to the east.</p> <p>For the Raintree project, both one-story and two-story additions to the original site plan buildings would occur (see Figure 3-6). The increased density would result in six-story buildings next to North Fair Oaks Avenue. Five story buildings would be required on the north side of the site next to East Weddell Drive and the south side of the site near Highway 101. The scale of development would be significantly greater than that of the surroundings.</p>

**Table 4.6-1 Projects Relationship to City of Sunnyvale General Plan Policies**

Goal/Policy	Applicant Proposed Scenario Relationship to Policy	Full Buildout Scenario Relationship to Policy
<p><b>Goal LT-3 Appropriate Housing</b> – Ensure ownership and rental housing options in terms of style, size, and density that are appropriate and contribute positively to the surrounding area.</p> <ul style="list-style-type: none"> <li>▪ <b>Policy LT-3.1</b> Provide land use categories for and maintenance of a variety of residential densities to offer existing and future residents of all income levels, age groups and special needs sufficient opportunities and choices for locating in the community.</li> <li>▪ <b>Policy LT-3.2</b> Encourage the development of ownership housing to maintain a majority of housing in the city for ownership choice.</li> <li>▪ <b>Policy LT-3.3</b> Maintain lower density residential development areas where feasible.</li> <li>▪ <b>Policy LT-3.4</b> Determine appropriate density for housing based on site planning opportunities and proximity to services.</li> </ul>	<p>right-of-way may enhance this “node of activity” for both project sites.</p> <p>In terms of Policy LT-3.1, the two residential projects would provide medium- and high-density housing in an area of the city that is easily accessible from Highway 101. In addition, affordable units are proposed for both projects as a means of obtaining a higher density per the State’s Density Bonus Law. The units would include studios, one-bedroom units, and two-bedroom units to meet the varied housing needs of the community.</p> <p>Both the Sares Regis and Raintree units would be rental units; thus, the projects would not meet Policy LT-3.2 related to encouraging ownership housing.</p> <p>As related to Policies LT-3.3 and 3-4, the projects would not affect lower-density residential development as both projects would occur where existing industrial/office uses are now located.</p> <p>The base density of the Sares Regis and Raintree developments would be 36.3 dwelling units per acre. Commercial services are not available in the immediate vicinity or within walking distance of either the Sares Regis or Raintree site. Commercial services are generally available to the north and the south along North Fair Oaks Avenue.</p>	<p>The relationship to the Full Buildout Scenario to these policies would be similar to the Applicant Proposed Scenario.</p> <p>The density of the projects under the Full Buildout Scenario would be 45 units per acre for Parcel A of the Raintree site and 65 units per acre for Parcel B of the Raintree site and the Sares Regis site. The higher densities of the Full Buildout Scenario would be less compatible with existing residential development in the vicinity of both sites. However, site constraints would not be expected to influence the proposed density for either site.</p> <p>The increased intensity of development may not be considered appropriate in this area of the city, given the lack of immediately adjacent services for everyday needs. The nearest commercial services are approximately one-third mile north of the site, which would be greater than the standard one-quarter mile considered “walkable” for most neighborhoods.</p>
<p><b>GOAL LT-4 Quality Neighborhoods and Districts</b> – Preserve and enhance the quality character of Sunnyvale’s industrial, commercial, and residential neighborhoods by promoting land use patterns and related transportation opportunities that are supportive of the neighborhood concept.</p> <ul style="list-style-type: none"> <li>▪ <b>Policy LT-4.1</b> Protect the integrity of the City’s neighborhoods; whether residential, industrial, or commercial.</li> <li>▪ <b>Policy LT-4.2</b> Require new development to be compatible with the neighborhood, adjacent land uses, and the</li> </ul>	<p>The Raintree residential project would occur in an area that has historically been industrial in nature but that has begun transitioning to residential use. For example, the area immediately north and west of the Raintree site has been converted from one-story industrial uses to two- and three-story residential uses.</p> <p>The Sares Regis site was a previous industrial use set in a portion of the city that has predominantly been residential, including mobile home parks and low-density residential uses.</p> <p>This larger “neighborhood” of the city is set within a “triangle” bordered by Highway 237 to the north and Highway 101 to the south (see Figures 4.6-1 and 4.6-2). This triangular area, south of</p>	<p>The relationship to the Full Buildout Scenario to these policies would be similar to the Applicant Proposed Scenario. However, the increased building heights needed to accommodate the increased density would be out of character with the residential uses north of both the Sares Regis and Raintree sites.</p>

**Table 4.6-1 Projects Relationship to City of Sunnyvale General Plan Policies**

Goal/Policy	Applicant Proposed Scenario Relationship to Policy	Full Buildout Scenario Relationship to Policy
<p>transportation system.</p> <ul style="list-style-type: none"> <li>▪ <b>Policy LT-4.4</b> Preserve and enhance the high quality character of residential neighborhoods.</li> <li>▪ <b>Policy LT-4.6</b> Safeguard industry’s ability to operate effectively, by limiting the establishment of incompatible uses in industrial areas.</li> <li>▪ <b>Policy LT-4.9</b> Allow industrial, residential, commercial, and office uses in the Industrial to Residential (ITR) Futures sites (Sites 4a, 4b, 6a, 6b, 7, 8, and 10).</li> </ul>	<p>Moffett Park, includes a mixture of low- and medium-density residential uses, high-density residential uses, industrial uses, and highway business uses. Thus, the transition in use from office/industrial to residential use would not undermine the overall integrity of the neighborhood.</p> <p>In terms of compatibility with adjacent land uses (Policy LT-4.2) and the transportation system, the Raintree development would have more compatibility with the residential uses to the north while the Sares Regis development may not be as compatible with the PG&amp;E substation to the north. Potential conflicts are addressed in more detail under in the hazards, noise, and other sections of the EIR. Both sites are very close to the heavy traffic noise of Highway 101, which is assessed in the noise section of this EIR. A strong transportation system of collectors, arterials, and highways serve both sites and both sites are about one-third mile south of the light rail station at North Fair Oaks Avenue and Tasman Drive.</p> <p>In terms of Policy LT-4.4, both projects would enhance the residential quality of the overall neighborhood by introducing new multi-story residential uses with landscaping and other amenities.</p> <p>Policy LT-4.6 addresses protection of industry’s ability to operate effectively. The Sares Regis project would not affect nearby industrial uses as the proposed rezoning and General Plan amendment would leave the site adjoining residential uses (with the exception of the PG&amp;E substation, which is located in an area zoned for mobile home use). The Raintree project would remain adjacent to industrially zoned land to the southwest, but residential uses exist to the north and west. The Raintree site, which is partially (Parcel A) within the M-S/ITR zone, would allow residential uses as per Policy LT-4.9.</p>	
<p><b>GOAL LT-6 Supportive Economic Development Environment</b> – Sustain a strong local economy that contributes fiscal support for desired City Services and</p>	<p>In terms of Goal LT-6 and supporting policies, the proposed projects would not be associated with jobs and commercial opportunities. Both projects would remove existing</p>	<p>The relationship of the Full Buildout Scenario to these policies would be similar to the Applicant Proposed Scenario.</p>

**Table 4.6-1 Projects Relationship to City of Sunnyvale General Plan Policies**

Goal/Policy	Applicant Proposed Scenario Relationship to Policy	Full Buildout Scenario Relationship to Policy
<p>provides a mix of jobs and commercial opportunities.</p> <ul style="list-style-type: none"> <li>▪ <b>Policy LT-6.1</b> Maintain a diversity of commercial enterprises and industrial uses to sustain and bolster the local economy.</li> <li>▪ <b>Policy LT-6.2</b> Balance land use and transportation system carrying capacity necessary to support a vital and robust local economy.</li> <li>▪ <b>Policy LT-6.3</b> Consider the needs of businesses as well as residents when making land use and transportation decisions.</li> </ul>	<p>commercial/industrial lands and convert these sites to medium- and high-density residential uses. Parcel A of the Raintree site has already been zoned as part of this “transitional” land use whereby certain areas of Sunnyvale are being converted from industrial and service/industrial use to residential use. Parcel B and the Sares Regis site have been historically zoned for industrial/service use and would be rezoned for residential use.</p>	
<p><b>GOAL CC-1 Distinguished City Image</b> – Promote Sunnyvale’s image by maintaining, enhancing, and creating physical features, including functional and decorative art, which distinguish Sunnyvale from surrounding communities and by preserving historic buildings, special districts and residential neighborhoods which make the City unique.</p> <ul style="list-style-type: none"> <li>▪ <b>Policy CC-1.3</b> Ensure that new development is compatible with the character of special districts and residential neighborhoods.</li> <li>▪ <b>Policy CC-1.7</b> Encourage neighborhood patterns that encourage social interaction and avoid isolation.</li> </ul>	<p>As related to Goal CC-1 and associated policies, the proposed Sares Regis and Raintree projects would not affect historic buildings or special districts. The two projects would enhance the overall neighborhoods by adding three- to four-story residential buildings and new landscaping in areas that have historically been used for industrial and office uses.</p> <p>In terms of Policy CC-1.7, the two sites are solely residential in nature and on-site recreational facilities would only be for the use of occupants. Social interaction may be encouraged within each site by the provision of on-site amenities, but would not serve the larger neighborhood. The two sites are a fair distance (one-third mile) from commercial uses that would encourage social interaction such as neighborhoods with restaurants, coffee houses, and everyday commercial needs (grocery, pharmacy, etc.).</p>	<p>The relationship of the Full Buildout Scenario to these policies would be similar to the Applicant Proposed Scenario.</p>
<p><b>GOAL CC-3 Well-Designed Sites and Buildings</b> – Private Development: Ensure that buildings and related site improvements for private development are well designed and compatible with surrounding properties and districts.</p> <ul style="list-style-type: none"> <li>▪ <b>Policy CC-3.1</b> Place a priority on quality architecture and site design, which will enhance the image of Sunnyvale and create a vital and attractive environment for</li> </ul>	<p>Aesthetic impacts are addressed in the aesthetics section of this EIR. Overall, no significant conflicts with Policy CC-3.1 would be expected given the proposed designs and on-site landscaping amenities.</p>	<p>Under the Full Buildout Scenario, buildings up to five and six stories in height could be developed which would be significantly higher than mobile homes and two-story residential buildings in the vicinity, as well as higher than one-story industrial buildings nearby.</p>

**Table 4.6-1 Projects Relationship to City of Sunnyvale General Plan Policies**

Goal/Policy	Applicant Proposed Scenario Relationship to Policy	Full Buildout Scenario Relationship to Policy
<p>businesses, residents and visitors, and be reasonably balanced with the need for economic development to assure Sunnyvale's economic prosperity.</p> <ul style="list-style-type: none"> <li>▪ <b>Policy CC-3.2</b> Ensure site design is compatible with the natural and surrounding built environment.</li> </ul>		
<p><b>GOAL HE-1 Adequate Housing</b> – Assist in the provision of adequate housing to meet the diverse needs of Sunnyvale's households of all income levels. <i>(Adopted in 2009)</i></p> <ul style="list-style-type: none"> <li>▪ <b>Policy HE-1.1</b> Encourage diversity in the type, size, price, and tenure of residential development in Sunnyvale, including single-family homes, townhomes, apartments, mixed-use housing, transit-oriented development, and live-work housing. <i>(Housing Policy A.1)</i></li> <li>▪ <b>Policy HE-1.2</b> Facilitate the development of affordable housing through regulatory incentives and concessions, and/or financial assistance. <i>(Housing Policy A.2)</i></li> <li>▪ <b>Policy HE-1.3</b> Utilize the Below Market Rate (BMR) Housing requirements as a tool to integrate affordable units within market rate developments, and increase the availability of affordable housing throughout the community. <i>(Housing Policy A.3)</i></li> </ul>	<p>In terms of Policy HE-1.1, the two projects would both provide a mixture of apartment units. Studios and 1-bedroom, 2-bedroom, and 3-bedroom units would be provided at a variety of rental levels. Affordable units (with attached restrictions) would also be provided assuming that the requested density bonuses are granted by the City.</p>	<p>The relationship of the Full Buildout Scenario to these policies would be similar to the Applicant Proposed Scenario.</p>
<p><b>GOAL HE-4 Adequate Housing Sites</b> – Provide adequate sites for the development of new housing through appropriate land use and zoning to address the diverse needs of Sunnyvale's residents and workforce. <i>(Housing Goal D / Adopted in 2009)</i></p> <ul style="list-style-type: none"> <li>▪ <b>Policy HE-4.1</b> Provide site opportunities for development of housing that responds to diverse community needs in terms of density, tenure type, location, and cost.</li> <li>▪ <b>Policy HE-4.2</b> Continue to direct new residential development into specific plan areas, near transit, and close to employment and activity centers.</li> </ul>	<p>Both projects would comply with Policy HE-4.1 by allowing rezoning of industrial/service sites to residential uses. A range of unit sizes would be provided for a range of associated rental rates.</p> <p>In terms of Policy HE-4.2, both sites would be within an urbanized portion of the City of Sunnyvale, within one-third mile of a light rail station, and with easy access to arterials and highways for nearby employment centers.</p> <p>For Policy HE-4.3, both projects would build to at least 75 percent of the maximum zoning density (see Table 3-3 of Chapter 3), except for Parcel A of the Raintree site where the Applicant Proposed Scenario would be only 66 percent of the total allowable</p>	<p>The relationship of the Full Buildout Scenario to these policies would be similar to the Applicant Proposed Scenario.</p>

## 4.5 HAZARDS AND HAZARDOUS MATERIALS

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### INTRODUCTION

This section describes hazards and hazardous materials related to development of the project sites that could potentially pose a significant threat to human health or the environment. The project sites have previously been used for agricultural and light industrial purposes, and there is a potential for contamination from those past uses to present a health risk to future construction workers and residents. The “Environmental Setting” section describes existing conditions at the project sites and the “Regulatory Framework” section describes the pertinent federal, state, and local agency laws and regulations related to hazards and hazardous materials. Potentially significant adverse impacts that could result from the proposed project are described and mitigation measures to reduce these impacts to a less-than-significant level are identified, as appropriate.

### ENVIRONMENTAL SETTING

The hazardous materials setting is based on environmental site assessment investigations prepared for the Sares Regis (WEST, 2012) and Raintree sites (Golder, 2002; Treadwell & Rollo, 2012). Additional information is presented related to electromagnetic fields, a potential concern at the Sares Regis site.

### SARES REGIS SITE

The Sares Regis site was used for orchards from the earliest available historical records until the 1960s. Records of pesticides, herbicides, and other chemicals used at the orchards were unavailable, as agricultural chemical use was largely unregulated at that time. Prior to World War II, inorganic pesticides – often containing lead, arsenic, and other metals – were frequently used in agriculture. Following World War II, highly persistent organic pesticides, such as DDT, were commonly used until regulations began to restrict their use in the 1970s. Residues of inorganic and organic agricultural chemical can persist in soils for decades, potentially presenting a health risk to those who may come into contact with soils affected by those chemicals.

In the 1960s, the Sares Regis site was paved and used for parking of recreational vehicles. In the 1980s, the existing building at the site was built and used for semiconductor manufacturing. Performance Semiconductor and Analog Devices used the site for manufacturing between 1993 and 2007. In 2007, hazardous materials storage areas were closed with oversight from the Sunnyvale Department of Public Safety. After 2007, the site remained vacant.

The most recent search of environmental regulatory records for the project site vicinity, conducted in July 2012, identified Analog Devices at 610 East Weddell Drive on the Sares-Regis site (WEST, 2012). Analog Devices was listed as a registered hazardous waste generator and identified as responsible for the release of 100 gallons of liquid hydrogen during an incident in 2006. This

reported release did not result in soil or groundwater contamination, so this listing in government records would not affect future development of the site.

Several environmental investigations have been conducted at the Sares Regis site. In 1985, two groundwater monitoring wells were installed and groundwater samples were collected. No contaminants of concern were identified in the samples (WEST, 2012).

In 1995, four groundwater and eight soil samples were collected from borings at the site. Oil and grease, fluoride, and several volatile organic compounds (VOCs) were detected in soils, and two VOCs, tetrachloroethylene, and Freon-113 were detected in groundwater samples. All concentrations detected were below concentrations of potential concern (WEST, 2012).

In September 2012, soil, soil gas, and groundwater samples were collected and tested for petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PAHs), VOCs, pesticides, and metals. Sampling results were compared to Environmental Screening Levels (ESLs), developed by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) (RWQCB). ESLs are conservative risk-based screening levels that have been established to help expedite the assessments of sites where contaminated soil and groundwater have been identified. Data collected at a site can be directly compared to ESLs for various chemical compounds and the need for additional work can be evaluated.

No organic compounds were detected in soils above ESLs for residential use. Arsenic was identified at concentrations up to 4.77 milligrams per kilogram (mg/kg), which is above the ESL, but the report noted that this concentration was consistent with naturally-occurring concentrations of arsenic in the site vicinity (WEST, 2012). Regulatory agencies do not typically require the remediation of constituents below concentrations that are naturally occurring, as these concentrations are considered to be background for the area.

Soil gas and groundwater samples contained VOCs but all detected concentrations were below ESLs established for residential uses and ecological risk factors. Based on the findings of the September 2012 and earlier investigations, the Sares Regis environmental assessment report concluded that there was no evidence of contamination at the site that would limit future development (WEST, 2012).

In March 2013, the Sares Regis site was enrolled into the Voluntary Cleanup Program (VCP) with the Department of Toxic Substances Control (DTSC). This included a Voluntary Assessment Agreement between the property owner and DTSC, where DTSC was tasked to review the environmental investigation reports and determine if any additional investigation was warranted. DTSC requested that additional soil gas sampling be conducted in areas of the site that were not previously sampled, including within the existing building.

In June 2013, additional soil gas samples were collected from four locations at the site and analyzed for VOCs (WEST, 2013). One location contained a VOC, tetrachloroethylene (PCE), above residential risk thresholds. Additional soil gas samples collected around that location indicated that the source of the PCE was limited to a small volume of soil, estimated at 10 cubic yards, which was proposed to be removed from the site and transported to an appropriate disposal facility (WEST, 2013). Post-excavation soil gas sampling will be conducted to verify that the removal action has mitigated the soil gas issue (WEST, 2013).

## RAINTREE SITE

Like the Sares Regis site, the Raintree site was used for agricultural purposes until the 1960s. The site was developed as a drive-in theater in 1963, and redeveloped between 1976 and 1978 with 15 commercial buildings, which have been used for office and light industrial uses. A 2002 site reconnaissance identified minor chemical use and storage at several tenant spaces, including electro-optics and circuit board manufacturing businesses.

The most recent search of environmental regulatory records for the project site vicinity, conducted in July 2012 for the Sares-Regis site (WEST, 2012), identified Syn Labs at 568 East Weddell Drive on the Raintree site due to its registration as a hazardous waste generator. No chemical releases were reported for this site and therefore this listing in government records would not affect future development of the site.

An environmental investigation was conducted at the site in June 2012. Ten soil borings were installed in areas of the site where potential environmental concerns were noted in the 2002 site assessment. Soil, groundwater, and soil gas samples were collected and the results were compared to ESLs.

Soils contained petroleum hydrocarbons and pesticides at low concentrations, below ESLs for residential land uses. No VOCs were identified in soil samples. Arsenic was identified in soils up to 52 mg/kg, which is above the ESL for residential soils of 0.39 mg/kg, and above the naturally occurring background level, which the report stated was 11 mg/kg (Treadwell & Rollo, 2012). Another metal, vanadium, was identified at concentrations up to 200 mg/kg, above the ESL of 16 mg/kg and the background concentration of up to 129 mg/kg (Treadwell & Rollo, 2012).

Groundwater contained petroleum hydrocarbons in the diesel and motor oil range at concentrations of up to 4.6 milligrams per liter (mg/L), above the ESLs of 0.1 mg/L for groundwater that is a potential drinking water source. Only one VOC, methylene chloride, was detected in one of the samples, but occurred at a concentration below groundwater ESLs. Dissolved metals concentrations were also below ESLs.

Soil gas samples contained several VOCs, but all were below ESLs for residential uses.

No potential source of the petroleum hydrocarbon contamination in groundwater, such as a leaking underground storage tank (UST), is believed to be present on the Raintree site (Treadwell & Rollo, 2012). The investigation report noted several nearby properties that have reported releases from USTs that could have migrated to the Raintree site and could explain the concentrations identified there (Treadwell & Rollo, 2012). The investigation report further noted that the concentrations present at the Raintree site would not likely require remediation, as similar concentrations have been allowed to be left in place at release sites by oversight authorities (Treadwell & Rollo, 2012).

The investigation report concluded that arsenic and vanadium in soils may present a potential risk to future occupants at the project site and could require remediation (Treadwell & Rollo, 2012). The source of vanadium is not known, but the investigation report suggested that the arsenic may be present due to historical use of inorganic pesticides (Treadwell & Rollo, 2012).

Elevated concentrations of arsenic in soils have been identified at another location near the Raintree site. The Morse Park site (1010-1024 Morse Avenue, approximately 250 feet west of the Raintree site) is a former light industrial site proposed to be developed as a public park. Due to elevated concentrations of arsenic in shallow soils, the City of Sunnyvale entered into the State Voluntary Cleanup Program and signed a Voluntary Cleanup Agreement with the California DTSC in August 2011. Under oversight by DTSC, a removal action work plan to remove arsenic contaminated soils was prepared in January 2012; a CEQA Initial Study/Negative Declaration for the removal action was completed in February 2012; and arsenic-affected soils were removed from the site in October 2012 and January 2013 and, disposed of at a permitted landfill (EKI, 2013). An arsenic cleanup level of 17 mg/kg was approved by DTSC, as this concentration has been cited as the naturally occurring concentration of arsenic in the Bay Area (EKI, 2013). The removal action completion report concluded that after completion of the removal action, the Morse Park site is suited for unrestricted land use (EKI, 2013). DTSC approved the removal action completion report and was preparing certification of the site cleanup in April 2013 (DTSC, 2013).

## **ELECTROMAGNETIC FIELDS**

Electromagnetic fields (EMFs) are a potential concern due to the presence of electrical transmission lines to the east of the Sares Regis site and an electrical substation to the north of that site. Occupants of properties near high-voltage electrical transmission lines and substations are exposed to EMFs generated by those sources, in addition to EMFs from electrical distribution lines, building wiring, appliances, and natural phenomena, including lightning or static electricity. The overall strength of EMFs dissipates quickly with distance from the source. Typically, EMFs are measured at "background" levels about 3 to 4 feet away from an electrical appliance, 60 to 200 feet from an electrical distribution line, and about 300 to 1,000 feet from a transmission line or substation (California EMF Program, 1999).

There has been public concern about the potential health effects associated with EMFs from human-made sources, such as transmission lines. Human cells have their own electric fields, and some laboratory studies have shown that these internal fields can be disrupted by exposure to even low-energy EMFs. However, determining what effects, if any, EMFs may have on living tissue over long periods of time has proved to be a difficult scientific challenge.

A comprehensive review of the literature, prepared by the National Institute of Environmental Health Science (NIEHS) in 1999, concluded that "the NIEHS believes that there is weak evidence for possible health effects from EMF exposures, and until stronger evidence changes this opinion, inexpensive and safe reductions in exposure should be encouraged" (NIEHS, 1999). A more recent analysis of the relationship between EMFs and childhood leukemia, reviewing studies conducted since the NIEHS review, similarly concluded that EMFs are possibly carcinogenic but that scientific uncertainties regarding the apparent association remain (Kheifets et al., 2010).

The California EMF Program, a scientific consortium created by the California Public Utilities Commission (PUC) in conjunction with the California Department of Health Services (DHS) and the Public Health Institute, was tasked with looking into the potential health effects of EMFs and presenting policy recommendations for the State of California. It performed independent reviews of available data while it was active between the mid-1990s and mid-2000s. Due to the lack of clear association between EMFs and health risks in the available data, the California EMF Program did not identify any specific policy measures to address potential risks of EMFs, and DHS has made no

policy recommendations. However, the PUC advocates “no and low cost” EMF avoidance measures; this means minimizing EMF exposure when it is easy and inexpensive to do so (California EMF Program, 1999). Although not designed to minimize EMFs, the Sares Regis project design would reduce EMF exposures to future residents by placing a roadway and landscaping immediately adjacent to the transmission line right-of-way, with residences a greater distance away.

As no specific health effects of EMFs have been conclusively demonstrated, there are no health-based or regulatory risk standards for EMF exposure. The assessment of effects of EMFs in this EIR is therefore limited to the qualitative discussion in this subsection, and no impacts related to EMFs are identified.

## **REGULATORY FRAMEWORK**

The following section summarizes the federal, state, and local regulatory framework for hazardous materials and hazardous waste, hazardous building materials that could be encountered during building demolition activities, and worker health and safety.

### **HAZARDOUS MATERIALS AND HAZARDOUS WASTE**

The use, storage, and disposal of hazardous materials, including management of contaminated soils and groundwater, is regulated by numerous local, state, and federal laws and regulations. The United States Environmental Protection Agency (U.S. EPA) is the federal agency that administers hazardous materials and hazardous waste regulations. State and local agencies include the California Environmental Protection Agency (CalEPA), which includes the California DTSC, the State Water Resources Control Board (SWRCB), the California Air Resources Board (CARB), the RWQCB, the Bay Area Air Quality Management District (BAAQMD), the Santa Clara County Department of Environmental Health (SCCDEH), and the City of Sunnyvale Department of Public Safety (DPS).

A brief description of each federal, state, and regional/local agency’s jurisdiction and involvement in the management of hazardous materials and wastes is provided below.

#### *Federal Agencies*

The U.S. EPA is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials and hazardous waste. The federal regulations are primarily codified in Title 40 of the Code of Federal Regulations (40 CFR). The legislation includes the Resource Conservation and Recovery Act of 1976 (RCRA), the Superfund Amendments and Reauthorization Acts of 1986 (SARA), and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The U.S. EPA provides oversight for site investigation and remediation projects, and has developed protocols for sampling, testing, and evaluation of solid wastes.

### *State Agencies*

The following three State of California agencies regulate hazardous materials and waste that may occur on or around the project sites:

- *Department of Toxic Substances Control (DTSC)*. In California, DTSC is authorized by the U.S. EPA to enforce and implement federal hazardous materials laws and regulations. California regulations pertaining to hazardous materials are equal to or exceed the federal regulation requirements. Most State hazardous materials regulations are contained in Title 22 of the California Code of Regulations (CCR). DTSC generally acts as the lead agency for soil and groundwater cleanup projects that affect public health, and establishes cleanup levels for subsurface contamination that are equal to, or more restrictive than, federal levels. DTSC has also developed land disposal restrictions and treatment standards for hazardous waste disposal in California, as well as guidance on soil vapor concentrations that would be protective of inhalation of indoor air.
- *State Water Resources Control Board (SWRCB)*. The SWRCB enforces, among other regulations, those regulations pertaining to implementation of underground storage tank (UST) programs. The SWRCB also enforces the Porter-Cologne Water Quality Act of 1969 through its nine regional boards, including the RWQCB, described below.
- *California Air Resources Board (CARB)*. This agency is responsible for coordination and oversight of state and local air pollution control programs in California, including implementation of the California Clean Air Act of 1988. CARB has developed state air quality standards and is responsible for monitoring air quality in conjunction with the local air districts.

### *Regional and Local Agencies*

The following regional and local agencies have regulatory authority over the proposed projects' management of hazardous materials and waste:

- *San Francisco Bay Regional Water Quality Control Board (RWQCB)*. The RWQCB can act as lead agency to provide oversight of sites where the quality of groundwater or surface waters is threatened, and has the authority to require investigations and remedial actions.
- *Bay Area Air Quality Management District (BAAQMD)*. The BAAQMD has primary responsibility for control of air pollution from sources other than motor vehicles and consumer products (which are the responsibility of U.S. EPA and CARB). The BAAQMD is responsible for preparing attainment plans for non-attainment criteria pollutants, control of stationary air pollutant sources, and the issuance of permits for activities including asbestos demolition and renovation activities (District Regulation 11, Rule 2).
- *Santa Clara County Department of Environmental Health (SCCDEH)*. The SCCDEH Site Mitigation Program administers the Local Oversight Program (LOP) to oversee the investigation and remediation of leaking USTs within the City of Sunnyvale. The Site Mitigation Program also oversees remediation of certain other contaminated sites within the City as part of the State Voluntary Cleanup Program.
- *Sunnyvale Department of Public Safety (DPS) Hazardous Materials Unit*. The routine management of hazardous materials in California is administered under the Unified Program, and most of the City of Sunnyvale's hazardous materials programs are administered and enforced under the Unified Program. These include programs for registration of hazardous waste generators and underground storage tanks. The CalEPA has granted responsibilities to

DPS for implementation and enforcement of hazardous material regulations under the Unified Program as a Certified Unified Program Agency (CUPA). DPS is also responsible for building inspections and other local requirements related to hazardous materials contained in Title 20 of the Sunnyvale Municipal Code.

### **LEAD, ASBESTOS, AND OTHER HAZARDOUS BUILDING MATERIALS**

Prior to 1978, lead compounds were commonly used in exterior and interior paints. Lead is a suspected human carcinogen (i.e., may cause cancer), a known teratogen (i.e., causes birth defects), and a reproductive toxin (i.e., can cause sterility). Prior to the 1980s, building materials often contained asbestos fibers, also a known human carcinogen. Asbestos, used to provide strength and fire resistance, was frequently incorporated into insulation, roofing, and siding, textured paint and patching compounds used on wall and ceiling joints, vinyl floor tiles and adhesives, and water and steam pipes.

Regulations pertaining to demolition and renovation of structures with asbestos-containing materials (ACMs) are promulgated by the U.S. EPA, the U.S. Department of Labor Occupational Safety and Health Administration (OSHA), the Division of Occupational Safety and Health (DOSH), DTSC, and CARB. For the City of Sunnyvale, the BAAQMD, under authority of CARB, would be the lead agency overseeing hazardous air emissions. All friable (crushable by hand) ACMs or non-friable ACMs subject to damage must be abated prior to demolition in accordance with applicable requirements. Friable ACMs must be disposed of as an asbestos waste at an approved facility. Non-friable ACMs may be disposed of as nonhazardous waste at landfills that will accept such wastes. Workers conducting asbestos abatement must be trained in accordance with State and federal OSHA requirements.

Regulations pertaining to demolition and renovation of structures with lead-based paint are promulgated by the U.S. EPA, the U.S. Department of Housing and Urban Development (HUD), DOSH, and DTSC. Loose and peeling lead-based paint must be disposed of as a State and/or federal hazardous waste if the concentration of lead equals or exceeds applicable waste thresholds. State and federal construction worker health and safety regulations require a supervisor who is certified to identify existing and predictable lead hazards to oversee air monitoring and other protective measures during demolition activities where lead-based paint may be present. Special protective measures and notification to DOSH are required for highly hazardous construction tasks related to lead, such as manual demolition, abrasive blasting, welding, cutting, or torch burning of structures where lead-based paint is present.

Fluorescent lighting tubes and ballasts, computer displays, and several other common items containing hazardous materials (including PCBs and mercury, a heavy metal) are regulated as "universal wastes" by the State of California. Universal waste regulations allow common, low-hazard wastes to be managed under less stringent requirements than other hazardous wastes. Management of other hazardous wastes is governed by DTSC hazardous waste rules.

### **WORKER HEALTH AND SAFETY**

Worker health and safety is regulated at the federal level by OSHA. The Federal Occupational Safety and Health Act of 1970 authorizes states (including California) to establish their own safety

and health programs with OSHA approval. Worker health and safety protections in California are regulated by the California Department of Industrial Relations (DIR). The DIR includes the Division of Occupational Safety and Health (DOSH), which acts to protect workers from safety hazards through its California OSHA (Cal-OSHA) program, and provides consultant assistance to employers. California standards for workers dealing with hazardous materials are contained in CCR Title 8 and include practices for all industries (General Industrial Safety Orders), and specific practices for construction, and other industries. Workers at hazardous waste sites (or workers who may be exposed to hazardous wastes that might be encountered during excavation of contaminated soils) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations. Additional regulations have been developed for construction workers potentially exposed to lead and asbestos. Cal-OSHA enforcement units conduct on-site evaluations and issue notices of violation to enforce necessary improvements to health and safety practices.

### **CITY OF SUNNYVALE GENERAL PLAN**

The following policy from the Sunnyvale General Plan applies to the proposed project:

Policy SN-1.5: Promote a living and working environment safe from exposure to hazardous materials.

### **ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

This section analyzes impacts related to hazards and hazardous materials that could result from implementation of the proposed projects. This section begins with the criteria of significance, which establish the thresholds for determining whether an impact is significant. The latter part of this section presents the hazards and hazardous materials impacts that could result from development of the proposed project. Mitigation measures are identified to avoid, minimize or mitigate such impacts, where warranted.

### **SIGNIFICANCE CRITERIA**

For the purposes of this Draft EIR, development of the project sites would present a significant impact related to hazards if the projects would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;

- For a project located within an airport land use plan or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- For a project located within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The Initial Study determined that the final three criteria, regarding private airstrips, emergency response plans, and wildfire hazards, were not applicable to the project. Thus, the EIR focuses on potential public health and safety impacts related to hazardous materials and public airports.

## PROJECT IMPACTS

### **Impact HAZARDS-1: Development of the Raintree site could expose construction workers and future residents to soils containing potentially hazardous concentrations of arsenic and vanadium. (S)**

As described under “Environmental Setting” above, soils at the Raintree site contained arsenic at concentrations up to 52 mg/kg and vanadium at concentrations up to 200 mg/kg. These concentrations are above screening levels for residential land uses, and could potentially pose a risk to construction workers and future residents, who may come into direct contact with those soils. Arsenic is a known human carcinogen (ATSDR, 2007a). Vanadium is associated with lung, gastrointestinal, and neurological effects and is possibly carcinogenic to humans (ATSDR, 2012)

This impact could be mitigated through removal and off-site disposal of arsenic- and vanadium-affected soils, or by the implementation of institutional and engineering controls (IC/EC), such as the placement of the arsenic-affected soils beneath a cap consisting of pavement or a layer of clean soils and implementation of an operation and maintenance plan to ensure that the cap is maintained and no maintenance takes place affecting the affected soils without proper health and safety precautions. Removal actions or IC/EC that would eliminate the potential human exposure to contaminated soils would eliminate the potential health risk and reduce this impact to a less-than-significant level.

*Sares Regis Applicant Proposed Scenario.* Soils at the Sares Regis site were not found to contain vanadium above ESLs or arsenic above naturally occurring concentrations. Therefore, this impact would not apply to this scenario.

*Sares Regis Full Buildout Scenario.* As soils at the Sares Regis site were not found to contain vanadium above ESLs or arsenic above naturally occurring concentrations, this impact would also not apply to this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* As this scenario would develop housing on areas with soils affected by elevated concentrations of arsenic and vanadium, this impact would apply to this scenario.

*Raintree Full Buildout Scenario.* As the potential impact identified is site-specific, this impact would also apply to this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

**Mitigation Measure HAZARDS-1:** *Regulatory oversight shall be initiated to develop and implement measures to eliminate potential health risks related to soils containing elevated levels of arsenic and/or vanadium at the Raintree site. This oversight may be provided by Santa Clara County Department of Environmental Health (SCCDEH), the Regional Water Quality Control Board (RWQCB), or Department of Toxic Substances Control (DTSC) and may require the project applicant to submit an application to the State Site Designation Committee for assignment of an appropriate local or state oversight agency. As a condition of approval for construction, demolition, or grading permits, the applicant shall incorporate measures to ensure that any potential added health risks to construction workers, maintenance and utility workers, site users, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than  $1 \times 10^{-6}$  (one in one million) for carcinogens and a cumulative hazard index of 1.0 for non-carcinogens, or as otherwise required by a regulatory oversight agency. The evaluation of risk would be subject to review and/or approval by regulatory oversight agencies. These agencies could also require additional site investigation to more fully delineate the extent of contaminants of concern at the site.*

*The potential risks to human health in excess of these goals must be reduced either by remediation of the contaminated soils (e.g., excavation and off-site disposal) and/or implementation of institutional controls and engineering controls (IC/EC). If extensive on-site excavation and/or soil off-haul is determined to be the appropriate response action, additional CEQA review may be required to evaluate potential impacts related to air quality, noise, and traffic and to recommend mitigation measures, as necessary. IC/EC may include the use of a Construction Risk Management Plan (for mitigating exposures during construction and maintenance of the project), placement of new fill or pavement over contaminated soils, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program must be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the project. The Operations and Maintenance Program would be subject to review and approval by regulatory oversight agencies. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-2: Development of the Sares Regis site could expose future residents to potentially hazardous concentrations of VOCs migrating to indoor air via soil gases. (S)**

As described under “Environmental Setting” above, a soil gas sample from the Sares Regis site contained PCE above screening levels for residential land uses, and could potentially pose a risk to

future residents, who could be affected if those soil gases migrate to indoor air. PCE, a solvent commonly used in dry cleaning and metal degreasing, is associated with central nervous system, kidney, and liver damage and is a suspected human carcinogen (ATSDR, 2007b)

Based on soil gas sampling conducted in June 2013, the source of the elevated levels of soil gas is a small volume of soil, approximately 10 cubic yards, which is proposed to be removed from the site. Post-removal soil gas sampling will be conducted to verify that VOCs in soil gases are below residential screening levels.

*Sares Regis Applicant Proposed Scenario.* As this scenario would develop housing on areas with elevated concentrations of PCE in soil gases, this impact would apply to this scenario.

*Sares Regis Full Buildout Scenario.* As the potential impact identified is site-specific, this impact would also apply to this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* Soil gas samples from the Raintree site were not found to contain VOCs above ESLs. Therefore, this impact would not apply to this scenario.

*Raintree Full Buildout Scenario.* As soil gas samples from the Raintree site were not found to contain VOCs above ESLs, this impact would also not apply to this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Mitigation Measure HAZARDS-2: Occupancy permits for the Sares Regis site shall be contingent upon the site receiving closure with DTSC in the Voluntary Cleanup Program. Currently, remedial action is expected to be limited to excavation and off-site disposal of a small volume of soil. Under Voluntary Cleanup Program guidelines, DTSC shall review the remedial action using its Exemption Evaluation Checklist to determine if any additional CEQA review may be required to evaluate potential impacts related to the remedial action. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-3: Development of the two projects would require the use, transport, and disposal of hazardous materials, which could create a potential hazard to public health or the environment. (S)**

Hazardous materials (e.g., fuels, lubricants, paints, adhesives) would be transported and used on-site for proposed construction and demolition activities. At the Raintree site, materials transported could potentially include soils containing elevated concentrations of arsenic and vanadium. Due to the former industrial land use histories at the sites, there may be a potential for previously undisclosed areas of contaminated soils to be encountered during construction, which should be managed and disposed of in a safe manner in accordance with applicable laws and regulations. In addition, construction vehicles used on-site could accidentally release hazardous materials, such as oils, grease, or fuels. It is likely that the construction contractor(s) would store these hazardous

materials and vehicles on-site during the duration of construction activities. Accidental releases of hazardous materials could affect soil and/or groundwater quality, or could result in adverse health effects to construction workers, the public, and the environment. Implementation of the mitigation measure below would reduce this potential impact to a less-than-significant level.

*Sares Regis Applicant Proposed Scenario.* As this scenario would include construction activities and would require the use of construction equipment and hazardous materials, this impact would apply to the Applicant Proposed Scenario.

*Sares Regis Full Buildout Scenario.* As under the Applicant Proposed Scenario, this impact would apply to the Full Buildout Scenario. The greater density of development under this scenario, requiring additional construction equipment and materials, could result in a slightly greater potential for a hazardous material release but would not affect the significance of the impact identified.

*Raintree Applicant Proposed Scenario.* As this scenario would include construction activities and would require the use of construction equipment and hazardous materials, this impact would apply to the Applicant Proposed Scenario.

*Raintree Full Buildout Scenario.* As under the Applicant Proposed Scenario, this impact would apply to the Full Buildout Scenario. The greater density of development under this scenario, requiring additional construction equipment and materials, could result in a slightly greater potential for a hazardous material release but would not affect the significance of the impact identified.

*Mitigation Measure HAZARDS-3: Construction at the project sites shall be conducted under a project-specific Construction Risk Management Plan (CRMP) to protect construction workers, the general public, and the environment from subsurface hazardous materials previously identified and to address the possibility of encountering unknown contamination or hazards in the subsurface. The CRMP shall summarize soil and groundwater analytical data collected on the project sites during past investigations and during site investigation and remediation activities described in Mitigation Measure HAZARDS-1 for the Raintree site; delineate areas of known soil and groundwater contamination, if applicable; and identify soil and groundwater management options for excavated soil and groundwater, in compliance with local, state, and federal statutes and regulations.*

*The CRMP shall:*

- (1) Provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively.*
- (2) Require the preparation of a project-specific Health and Safety Plan that identifies hazardous materials present, describes required health and safety provisions and training for all workers potentially exposed to hazardous materials in accordance with state and federal worker safety regulations, and designates the personnel responsible for Health and Safety Plan implementation.*
- (3) Require the preparation of a contingency plan that shall be applied should previously unknown hazardous materials be encountered during construction activities. The contingency plan shall include provisions that require collection of soil and/or*

*groundwater samples in the newly discovered affected area by a qualified environmental professional prior to further work, as appropriate. The analytical results of the sampling shall be reviewed by the qualified environmental professional and submitted to the appropriate regulatory agency. The environmental professional shall provide recommendations, as applicable, regarding soil/waste management, worker health and safety training, and regulatory agency notifications, in accordance with local, state, and federal requirements. Work shall not resume in the area(s) affected until these recommendations have been implemented under the oversight of the City or regulatory agency, as appropriate*

(4) *Designate personnel responsible for implementation of the CRMP.*

*The CRMP shall be submitted to the City of Sunnyvale for review and approval prior to the issuance of construction and demolition permits. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-4: Demolition of the existing project site buildings at both the Raintree and Sares Regis sites may result in the release of lead, asbestos, and/or other hazardous materials, which could pose a risk to construction workers, the general public, and the environment. (S)**

Based on the age of the existing buildings, it is likely that lead, asbestos, and other hazardous building materials are present at both project sites. The building at the Sares Regis site was constructed in the 1980s and the buildings at the Raintree site were constructed in the 1970s, during the period when lead and asbestos were commonly used in building materials. Additional hazardous materials, such as PCBs and mercury in fluorescent lighting and thermostats, are also likely to be present. These hazardous materials do not generally pose a health risk in their intact form, but they can be dispersed during building demolition, potentially posing health risks to construction workers and the general public.

Some screening of this potential hazard has been done at each site. At the Sares Regis site, a 2012 pre-demolition survey identified asbestos in black and silver roofing mastic (ProTech, 2012). Lead was identified in tan ceramic wall tile, and low levels of lead in exterior concrete walls and numerous interior components (ProTech, 2012). At the Raintree site, a 1993 survey identified confirmed or suspected asbestos content in floor tile and mastic, roofing felt, window caulking and putty, drywall tape and joint compound, exterior stucco, acoustical ceiling tiles, duct seam tape, and flexible duct connectors (Golder Associates, 2002). Paint chip samples collected in 2002 identified low levels of lead in several interior and exterior painted walls (Golder Associates, 2002).

*Sares Regis Applicant Proposed Scenario.* Demolition of the existing building as part of site development could potentially result a release of lead, asbestos, and other materials from the Sares Regis site, so this impact would apply to this scenario.

*Sares Regis Full Buildout Scenario.* As under the Applicant Proposed Scenario, demolition of the site building would result in the impact. The greater density of development under this scenario would not affect the impact identified.

*Raintree Applicant Proposed Scenario.* Demolition of the existing buildings as part of site development could potentially result a release of lead, asbestos, and other materials from the Raintree site, so this impact would apply to this scenario.

*Raintree Full Buildout Scenario.* As under the Applicant Proposed Scenario, demolition of the site buildings would result in the impact. The greater density of development under this scenario would not affect the impact identified.

*Mitigation Measure HAZARDS-4: Hazardous building materials surveys shall be conducted by a qualified and licensed professional for all structures that were not previously inspected or abated and that are proposed for demolition or renovation at the project sites. Lead-based paint shall be included in all hazardous material surveys. All loose and peeling lead-based paint and asbestos-containing materials (ACM) shall be abated by certified contractor(s) in accordance with local, state, and federal requirements. All other hazardous materials, such as "universal wastes," shall be removed from buildings prior to demolition in accordance with Division of Occupational Safety and Health (DOSH) regulations. The completion of the abatement activities shall be documented by a qualified environmental professional(s) and submitted to the City of Sunnyvale prior to the issuance of construction and demolition permits. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-5: Operation of the projects would require the use of hazardous materials, which could be released due to improper use, storage, handling, or disposal, creating a potential hazard to public health or the environment. (LTS)**

The operational phase of the proposed projects would involve the storage and use of common hazardous materials used for janitorial, landscaping, and maintenance purposes (e.g., paints, cleaning solvents, and pool maintenance chemicals) on the project sites. All future uses would be subject to existing regulatory programs for hazardous materials, including those hazardous materials programs implemented and enforced by Sunnyvale DPS. These measures would ensure that the proposed project would not result in significant impacts on health and safety from the routine transport, use, storage, or disposal of hazardous materials following construction. This potential impact would therefore be considered less than significant

*Sares Regis Applicant Proposed Scenario.* Small quantities of hazardous materials would be used, stored, and disposed of during operation of the Sares Regis Applicant Proposed Scenario, so this impact would apply to this scenario. However, no mitigation beyond existing laws, regulations, and programs would be necessary to address the potential impact under this scenario.

*Sares Regis Full Buildout Scenario.* As under the Applicant Proposed Scenario, hazardous materials would be used, stored, and disposed of at the Sares Regis site, so this impact would apply to this scenario. The greater density of development under this scenario could potentially require additional use and storage of hazardous materials during operation, but this would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* Small quantities of hazardous materials would be used, stored, and disposed of during operation of the Raintree Applicant Proposed Scenario, so this impact would apply to this scenario. However, no mitigation beyond existing laws, regulations, and programs would be necessary to address the potential impact under this scenario.

*Raintree Full Buildout Scenario.* As under the Applicant Proposed Scenario, hazardous materials would be used, stored, and disposed of at the Raintree site, so this impact would apply to this scenario. The greater density of development under this scenario could potentially require additional use and storage of hazardous materials during operation, but this would not significantly affect the impact identified.

Mitigation Measure HAZARDS-5: No mitigation would be necessary. (LTS)

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-6: The projects may involve the handling of hazardous materials within ¼-mile of two schools and therefore have the potential to present a safety hazard to school students and workers. (LTS)**

The San Miguel Elementary School to the southeast of the project sites and Columbia Middle School to the southwest are both located approximately one-quarter mile from the project sites. Lakewood Elementary School is located approximately one-third mile to the east. If hazardous materials are released during construction at the project sites, such as through the release of fugitive dust containing contaminants, there may be a potential to affect nearby schools. Similarly, improper storage, use, or disposal of hazardous materials during operation of the projects could potentially result in a release that could affect nearby schools.

Implementation of the Construction Risk Management Plans required under Mitigation Measure HAZARDS-2 would mitigate potential hazards on schools during construction activities. Existing laws, regulations, and programs, as noted above under Impact HAZARDS-4, would mitigate potential impacts from hazardous materials during project operation. No additional mitigation is required.

*Sares Regis Applicant Proposed Scenario.* As the Sares Regis project would be located less than one-quarter mile from Columbia Middle School and has the potential to release hazardous materials during construction and operation, this impact would apply to the Applicant Proposed Scenario. No additional mitigation, beyond Mitigation Measure HAZARDS-2 and existing laws, regulations, and programs, would be necessary to address the potential impact under this scenario.

*Sares Regis Full Buildout Scenario.* As under the Applicant Proposed Scenario, this potential impact would also apply to this scenario. The greater density of development under this scenario would require additional use and storage of hazardous materials during project construction and operation, but this would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* As the Raintree project would be located less than one-quarter mile from San Miguel Elementary School and has the potential to release hazardous materials during construction and operation, this impact would apply to the Applicant Proposed Scenario. No additional mitigation, beyond Mitigation Measure HAZARDS-2 and existing laws, regulations, and programs, would be necessary to address the potential impact under this scenario.

*Raintree Full Buildout Scenario.* As under the Applicant Proposed Scenario, the potential impact would also apply to this scenario. The greater density of development under this scenario would require additional use and storage of hazardous materials during project construction and operation, but this would not significantly affect the impact identified.

Mitigation Measure HAZARDS-6: *No mitigation would be necessary. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

**Impact HAZARDS-7: The projects have the potential to present a safety hazard to future residents due to their location within airport land use plans for the Moffett Naval Air Station and San Jose International Airport. (LTS)**

The project sites are located approximately 1.5 miles southeast of the Moffett Naval Air Station (NAS) and approximately 4 miles northwest of San Jose International Airport (SJIA) and are located within the airport land use plans for those airports. Review of those plans indicated that the project sites are not located in the designated safety zones for either Moffett NAS (ALUC, 2012) or SJIA (ALUC, 2013), where development is restricted due to potential safety hazards. Therefore, no safety hazards related to these nearby airports would be anticipated and the project would not result in any significant impact related to aviation hazards.

*Sares Regis Applicant Proposed Scenario.* As the Sares Regis site is not located within a designated safety zone for the Moffett NAS or SJIA, the impact would be less than significant for this scenario.

*Sares Regis Full Buildout Scenario.* As the potential aviation safety impact identified is site-specific, this impact would also be less than significant for this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Raintree Applicant Proposed Scenario.* As the Raintree site is not located within a designated safety zone for the Moffett NAS or SJIA, the impact would be less than significant for this scenario.

*Raintree Full Buildout Scenario.* As the potential aviation safety impact identified is site-specific, this impact would also be less than significant for this scenario. The greater density of development under this scenario would not significantly affect the impact identified.

*Mitigation Measure HAZARDS-7: No mitigation would be necessary. (LTS)*

- Applies to Sares Regis Applicant Proposed Scenario:
- Applies to Sares Regis Full Buildout Scenario:
- Applies to Raintree Applicant Proposed Scenario:
- Applies to Raintree Full Buildout Scenario:

## CUMULATIVE IMPACTS

Implementation of Mitigation Measures HAZARDS-1, HAZARDS-2, HAZARDS-3, and HAZARDS-4 would reduce potential significant impacts for the projects to a less-than-significant level. Hazards and hazardous materials impacts are generally limited to the immediate vicinity of the use, storage, disposal, or release of the hazardous materials. Although the development of other projects in the Sunnyvale area or surrounding areas (see Table 6-1 in Chapter 6 for a list of potential development projects in the vicinity of the sites) could result in similar hazardous materials impacts, those impacts would not intensify the potential impacts of the proposed projects, and development and operation of the proposed projects would not intensify hazardous materials impacts at other locations in the project site vicinity. Therefore, the cumulative impact of the projects would be less than significant.

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