4.9 HAZARDS AND HAZARDOUS MATERIALS

This section addresses potential hazards and hazardous material impacts at the Project site and in the surrounding area that may result from implementation of the proposed Project. Pertinent information and findings from the following reports are summarized in this section:

- *Phase I Environmental Site Assessment, 20621 Lake Forest Drive, Lake Forest, California 92630* (Hillman Consulting 2018b)
- *Limited Phase II Subsurface Investigation Report, 20621 Lake Forest Drive, Lake Forest, California* (Hillman Consulting 2018a)
- *Updated Geologic and Environmental Hazards Assessment Report, Nakase Elementary School* (Placeworks 2019d).
- *Soil Characterization Assessment* (ENGEO 2016)
- *Nakase Elementary School EMF Study and Exemption Request* (Placeworks 2019a)
- *Nakase Elementary School Health Risk Assessment* (PlaceWorks 2019b)
- *Nakase Elementary School Water Pipeline and Tank Safety Hazard Assessment* (PlaceWorks 2019c)

The complete reports are included in Appendix H.

4.9.1 Scoping Process

The City of Lake Forest (City) received 28 comment letters during the public review period of the Initial Study/Notice of Preparation (IS/NOP). For copies of the IS/NOP comment letters, refer to Appendix A of this Environmental Impact Report (EIR). Three comment letters included comments related to hazards and hazardous materials.

The letter from the OC Fire Authority (July 31, 2018) suggested that the significance conclusion related to wildland fire hazards be revised to reflect that a Fuel Modification Conceptual Plan and a Fire Protection Plan with Ember Mitigation have been approved for the proposed Project. The letter from Charles Larson (August 4, 2018) expressed concern regarding the proximity of the potential school site to the gas station across Rancho Parkway.

4.9.2 Existing Environmental Setting

The approximately 122-acre (ac) Project Site is currently operating as an agricultural wholesale plant nursery and has been used for agricultural production (orchards) and/or a nursery since the late 1930s. In 2018, a Phase I Environmental Site Assessment (ESA) (Hillman Consulting 2018b) was conducted for the Project site to determine if any Recognized Environmental Conditions (RECs) were associated with the Project site. A REC is defined by the American Society of Testing Materials (ASTM) as the presence or likely presence of any hazardous substances or petroleum products in,

on, or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

The 2018 Phase I ESA included the following:

- A non-invasive visual reconnaissance of the Property and adjoining properties in accordance with ASTM guidelines for evidence of RECs
- Interviews of past and present owners and occupants as well as State and local government officials seeking information related to the potential presence of RECs at the Property
- A review of standard physical record sources for available topographic, geologic, and groundwater data
- A review of standard historic record sources (e.g., fire insurance maps, city directories, aerial photographs, prior reports and interviews) to determine prior uses of the Property from the present back to the Property's first developed use or back to 1940, whichever is earlier
- A review of standard environmental record sources, including federal and State environmental databases (provided by Environmental Data Resources [EDR]), and additional environmental record sources, to identify potential regulator concerns with the Property, adjoining properties, and properties located within the surrounding area

Notable environmental conditions identified in the 2018 Phase I ESA are listed below:

- A National Priority List (NPL) site is located within 1 mile (mi) of the Property. The site is described as Marine Corps Air Station (MCAS) El Toro, which is approximately 4,736 feet (ft) northwest of the Project site and cross-gradient relative to the Project site. In 1985, trichloroethylene (TCE) was found in a portion of the groundwater basin beneath the former MCAS EL Toro and Central Irvine. TCE is a volatile organic compound (VOC) that was widely used as a solvent for aircraft cleaning. Prior to the 1970s, the disposal of cleaning solvents was not regulated. As a result of past disposal practices, a 1 x 3 mi plume of groundwater contamination extended west of MCAS El Toro. Based on a review of the EDR report and published groundwater plume maps, the TCE contaminant plume is about 450 ft deep and located over 2 mi from the boundary of the Project site. In addition, the groundwater flow at the plume is toward the west and migrates away from the Project site. MCAS El Toro has been under federal facility remedial investigation since the 1990s. Considering its current status, the Project site's distance from the TCE plume and respective downgradient location (i.e., groundwater at MCAS El Toro flows away from the Project site), this listing is not considered to be a REC in connection with the Project site.
- Seven pole-mounted transformers were observed on the northeast side of the Project site. No signs of leaking or staining were observed in the area of the transformers.

- Two 25-gallon (gal) drums containing grease and two 55 gal drums containing tractor fluid were observed in the maintenance garage. No staining or leaking was noted in the areas of the drums.

- Five aboveground storage tanks (ASTs) containing diesel and gasoline as well as large quantities of pesticides are stored on the adjoining property to the southeast, are not part of the Project site, and were not assessed.

- Rancho Parkway Shell #07, located at 26721 Rancho Parkway is located on the underground storage tank (UST) and EDR Historic Auto databases. This site adjoins the Project site to the north-northeast and is upgradient of the Project site (i.e., groundwater at the gas station flows toward the Project site). The UST listing indicates a UST is registered as being on the Project site. Considering a lack of reported spills or releases, this listing is not considered to be a REC in connection with the Project site.

- The Home Depot at 20021 Lake Forest Drive is located on the RCRA-SQG (federal Resource Conservation and Recovery Act-Small Quantity Generator), FINDS, and ECHO databases. This site adjoins the Project site to the northeast and is upgradient of the Project site. The RCRA-SQG listing indicates the site is registered as a small-quantity generator of hazardous waste with no reported violations. The FINDS listing indicates the site is on the California Hazardous Waste Tracking System – Datamart, RCRA, and State Master databases. The site is in the RCRA program with no reported spills or violations. Due to a lack of reported spills or violations, these listings are not considered to be RECs in connection with the Project site.

- The Project site appears to have been historically utilized as orchards and/or a nursery since circa 1938. There is the potential for soil contamination due to historic application of pesticides; however, based on the *Soil Characterization Assessment* (ENGEO 2016) indicating no impact on the soil from organochlorine pesticides, these are not considered to be a REC in connection with the Project site.

Other information documented in the 2018 Phase I ESA included:

- Fifty-five gallon storage drums were observed around the Project site during a previous Phase I ESA site reconnaissance (2016) that contained various hazardous materials (e.g., herbicides and pesticides), but no leaks were noted. Several ASTs containing fertilizers and petroleum products (i.e., gasoline and diesel) were noted on the Project site. A historical diesel UST was also documented on the Project site.

- The *Soil Characterization Assessment* (ENGEO 2016) documented that soil test results found that lead and arsenic concentrations were within the range of expected background concentrations.

- The *Soil Characterization Assessment* (ENGEO 2016) found that the site soils are suitable for future residential development, but recommended additional testing at the historical UST location.

- Asbestos-containing materials (ACMs), lead-based paint, and polychlorinated biphenyls (PCBs) may be present in structures on the Project site.

- The Project Site is in a low risk area for radon.

Additional testing was conducted at the historical UST location as part of the Limited Phase II ESA (Hillman Consulting 2018a). Four soil gas probes were installed in accessible locations at the UST site. Results from soil gas sampling indicated no detectable levels of VOCs, thereby indicating no significant vapor intrusion threat potential. No additional testing at this location was recommended.

The *Updated Geologic and Environmental Hazards Assessment Report* (Placeworks 2019d) for the Project site focused on hazards pertinent to proposed school sites. This report determined there were no chemical pipelines on the Project site, or pressurized sewer lines, high-pressure natural gas pipelines, or fuel ASTs on or within 1,500 ft of the Project site. In addition, the Project site is not a former hazardous waste disposal site or solid waste disposal site. The nearest oil or gas well to the Project site is 1.38 mi to the southwest. The State of California Division of Oil, Gas, and Geothermal Resources (DOGGR) lists the well status as plugged and abandoned.

As discussed in the *Updated Geologic and Environmental Hazards Assessment Report* (Placeworks 2019d), there currently are SCE 66 kV double-circuit overhead transmission lines that are within a 20 ft wide SCE easement along the south side of Bake Parkway that run parallel to the northwestern boundary of the proposed school site. The southern edge of the SCE easement would be the school's northwestern property line. As part of the Project, these 66 kV lines would be undergrounded prior to construction of the proposed school on the Project site.

4.9.3 Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste as well as the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The Governor's Office of Emergency Services (Cal OES) established and updates the Standardized Emergency Management System (SEMS) as needed in accordance with the California Emergency Services Act for emergency response and evacuation. SEMS facilitates response prioritization, interagency cooperation, and the efficient flow of resources and information.

SEMS incorporates the following:

- Incident Command System (field-level emergency response system)
- Interagency coordination for allocation of resources
- Mutual aid (providing emergency resources from non-affected jurisdictions)
- Operational Area Concept (coordinate damage information, resource requests and emergency response within the affected area)

Local agencies involved in emergency response and evacuation include the Orange County Sheriff's Department (OCSD), Orange County Fire Authority (OCFA), and City of Lake Forest Police Department.

4.9.3.1 Federal Regulations

The primary federal laws regulating hazardous materials are the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) (42 United States Code [USC] Section 9601 et seq.) and the Resource Conservation and Recovery Act of 1976 (RCRA) 42 USC Section 6901 et seq.). The purpose of CERCLA, often referred to as "Superfund," is to identify and clean up abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for "cradle-to-grave" regulation of hazardous waste generated by operating entities. Other federal laws applicable to the project site are listed below.

- The Clean Air Act (CAA) (42 USC Section 7401 et seq.) protects the public from exposure to airborne contaminants known to be hazardous to human health. Under the CAA, the United States Environmental Protection Agency (EPA) established National Emissions Standards for Hazardous Air Pollutants.

- The Clean Water Act – National Pollutant Discharge Elimination System (Section 402[p]) (33 USC Section 1342[p]) regulates discharges and spills of pollutants, including hazardous materials to surface waters and groundwater.

- The Safe Drinking Water Act (42 USC Section 300(f) et seq.) regulates discharges of pollutants to underground aquifers and establishes standards for drinking water quality.

- The Toxic Substances Control Act (15 USC Section 2601 et seq.) regulates manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials.

- The Federal Insecticide, Fungicide, and Rodenticide Act (7 USC Section 136 and 40 Code of Federal Regulations [CFR] Parts 152–171) regulates the manufacturing, distribution, sale, and use of pesticides.

- The Hazardous Materials Transportation Act (49 USC Section 5101 et seq. and 49 CFR, Parts 101, 106, 107, and 171–180) regulates the transport of hazardous materials by motor vehicles, marine vessels, and aircraft.

- The Hazardous Materials Transportation Uniform Safety Act of 1990 (Public Law 101-615) regulates the safe transport of hazardous material intrastate, interstate, and for foreign commerce.

- The Emergency Planning and Community Right to Know Act (42 USC Section 11001 et seq. and 40 CFR, Parts 350.1 et seq.) regulates facilities that use hazardous materials in quantities that require reporting to emergency response officials.

4.9.3.2 State Regulations

The State of California has established many laws and regulations that expand on federal laws. Laws and regulations applicable to the project site are listed below.

- The California Public Resources Code (PRC) Section 21151.4 requires the lead agency to consult with any school district with jurisdiction over a school within 0.25 mi of the project about potential effects on the school if the project might reasonably be anticipated to emit hazardous air emissions or handle an extremely hazardous substance or a mixture containing an extremely hazardous substance.

- The Porter-Cologne Water Quality Control Act (California Water Quality Code, Section 13000 et seq.) regulates water quality through the State Water Resources Control Board and the Regional Water Quality Control Boards, including oversight of water monitoring and contamination cleanup and abatement.

- The Hazardous Materials Release Response Plans and Inventory Law (California Health and Safety Code, Section 25500 et seq.) requires facilities using hazardous materials to prepare Hazardous Materials Business Plans.

- The Hazardous Waste Control Act (California Health and Safety Code, Section 25100 et seq.) regulates the identification, generation, transportation, storage, and disposal of materials deemed hazardous by the State of California.

- The Safe Drinking Water and Toxic Enforcement Act (Proposition 65, California Health and Safety Code, Section 25249.5 et seq.) regulates the discharge of contaminants to groundwater.

- Cortese List Statute (California Government Code, Section 65962.5) requires the Department of Toxic Substances Control (DTSC) to compile and maintain lists of potentially contaminated sites throughout the state, and includes the Hazardous Waste and Substances Sites List.

- The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (California Environmental Protection Agency [CalEPA] 2012) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments implement the standards. These local implementing agencies are called Certified Unified Program Agencies (CUPA).

- State of California Division of Oil, Gas, and Geothermal Resources Regulatory Program (DOGGR) supervises the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells throughout the State. The regulatory program set forth by DOGGR for the management of these resources emphasizes the appropriate development of oil, natural gas, and geothermal resources in the State through sound engineering practices that protect the environment, prevent pollution, and ensure public safety.

4.9.3.3 School Sites

PRC Section 21151.8 (School Sites and Hazardous Materials); CEQA Guidelines, Section 15186 (School Facilities). CEQA prohibits lead agencies from approving environmental documents for any project involving the purchase of a school site or the construction of a new school unless the following conditions occur:

- The EIR identifies whether the property to be purchased or to be constructed upon is a current or former hazardous waste site or a site that contains underground or aboveground pipelines carrying hazardous substances. The lead agency notifies in writing and consults with the administrative agency in which the school site is located, and with the local air pollution control district, to identify facilities within 0.25 mi of the school site that may reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste.

- If facilities within a 0.25 mi radius of the school site that may reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste are identified, the school district's governing board must make one of the following findings:

    - The health risks from the identified facilities do not and will not constitute an actual or potential endangerment of public health to persons who attend or are employed at the school; or

    - Corrective measures required under order by another agency having jurisdiction over the facilities will, before the school is occupied, result in the mitigation of all chronic or accidental air emissions to levels that do not constitute an actual or potential endangerment of public health to persons who would attend or be employed at the proposed school. If this finding is made, the board shall make a subsequent finding, prior to occupancy at the school, that the emissions have been so mitigated.

Education Code, Sections 17213.1, 17213.2, and 17268. These statutes require extensive DTSC involvement in the environmental review process for projects that will receive State funding. Prior to acquiring a school site or approving a school construction project, school districts must contract for the preparation of a Phase I ESA.

The Phase I ESA must contain sufficient information to determine whether there is a potential for exposure to hazardous materials and must conclude that either (1) a further investigation of the site is not required, or (2) a Preliminary Endangerment Assessment (PEA) is necessary. If the Phase I ESA concludes, or DTSC determines, that a PEA must be conducted, a school district has two options: it can either proceed to contract with a qualified environmental assessor to conduct a PEA of the property under DTSC oversight, or it can drop the school site from further consideration.

If a school district chooses to proceed with a PEA, it must enter into an Environmental Oversight Agreement with DTSC to oversee preparation of the PEA. DTSC must then assist the district with scoping the work plan for the PEA investigation. Sampling could include soil gas, soil matrix, groundwater, and other sampling and calculation of cancer risks and non-cancer risks. Based on

information developed during the PEA and a conservative human and ecological risk evaluation, the DTSC would then make a decision regarding potential risks posed by the site. Possible outcomes of the DTSC's decision include the following:

- The potential requirement for further investigation through the Remedial Investigation/ Feasibility Study process if the site is found to be significantly impacted by hazardous materials.

- The need to perform a removal action if localized hazardous impacts are found.

- Issuance of a "No Further Action" finding if the site is found not to be significantly impacted and risks to human health and the environment are found to be within acceptable levels based on the conservative screening level human health risk assessment. Any human health risk assessment must be quantitative for both residential and school-based receptors. The effort entails data aggregation, selection of chemicals of potential concern, exposure assessment, toxicity assessment, and risk characterization.

A school district can choose to enter into a Voluntary Cleanup Agreement (VCA) with DTSC if the district elects to perform the removal action to prepare the site for use as a school site. Before a site's school buildings can be occupied, DTSC must certify that all necessary response actions have been completed to ensure that hazardous materials at the school site no longer pose a significant risk to children and adults, except for the operation and maintenance activities.

Education Code, Section17215. Before acquiring title to property for a new school site, the governing board of the school district is required to give the California Department of Education (CDE) written notice of the proposed acquisition if the proposed site is within 2 mi of an airport runway or a potential runway is included in an airport master plan that is nearest to the site. CDE must then notify the California Department of Transportation (Caltrans), which in turn would investigate the proposed site and submit a written report of its findings, including recommendations concerning acquisition of the site. As part of the investigation, the owner and operator of the airport would be granted the opportunity to comment upon the proposed school site. If the written report does not favor the acquisition of the property for a school site, State funds or local funds cannot be used for acquisition of, or school construction at, the subject site.

Education Code, Section 17251; CDE Regulations, 5 California Code of Regulations (CCR) Section 14010 (Standards for School Site Selection). Section 17251 requires CDE to establish standards for use by school districts in assessing school sites. The CDE regulations adopted pursuant to Section 17251 contain the following standards for school sites, among others:

- For power lines and transmission lines, the property line of a proposed school site shall be at least: (1) 100 ft from the edge of an easement for a 50- to 133-kilovolt (kV) line; (2) 150 ft from the edge of an easement for a 220 to 230 kV line; and (3) 350 ft from the edge of an easement for a 500 to 550 kV line (5 CCR Section 4010[c]).

- For railroads, the proposed site shall be a sufficient distance from a railroad track easement. If the proposed school site is within 1,500 ft of a railroad track easement, a safety study shall be

completed by a competent professional. An analysis of the following safety factors shall be completed: (1) distance from the track easement to the site; (2) identification of whether tracks are mainline or spur; (3) type of cargo to be transported; (4) projected train speed; (5) frequency/schedule of rail traffic compared to school schedules; (6) distance of grade, curve, bridge, signal, or other track features to the proposed school; (7) requirements for sound and safety barriers; (8) pedestrian/vehicle safety near track crossing; and (9) proximity of rail easement to high-pressure gas lines (5 CCR Section 14010[d]).

- The site shall not be adjacent to a road or freeway that any site-related traffic studies have determined will have safety problems (5 CCR Section 14010[e]).

- The site shall not be located near an aboveground water or fuel storage tank or within 1,500 ft of the easement of an aboveground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional, which may include certification from a local public utility commission (5 CCR Section14010[h]).

- Existing or proposed zoning of the surrounding properties shall be compatible with schools in that it would not pose a potential health or safety risk to students or staff in accordance with Education Code Section 17213 and Government Code Section 65402 and available studies of traffic surrounding the site (5 CCR Section 14010[m]).

- If the proposed site is on or within 2,000 ft of a significant disposal of hazardous waste, the school district shall contact the DTSC for a determination of whether the property should be considered a Hazardous Waste Property or a Border Zone Property (5 CCR Section 14010[t]).

- The site shall be conveniently located for public services, including fire protection and police protection whenever feasible (5 CCR Section 14010[p]).

- CDE School Facilities Planning Division, School Site Selection and Approval Guide) outlines the requirements of the CDE regulations for site selection that are described above and includes recommendations designed to ensure a safe school environment and facilitate State approval of sites.[1] The guide helps school districts determine compliance with the requirements of CDE Regulations Section 14010 et seq. and Education Code Section 17213 et seq.

4.9.3.4 Regional Regulations

The Orange County Health Care Agency (HCA) is the CUPA for the County of Orange and the City of Lake Forest, and has jurisdiction over the following six programs:

- Hazardous Materials Disclosure
- Business Emergency Plan
- Hazardous Waste
- Underground Storage Tank

[1] School Site Selection, and Approval Guide. https://www.cde.ca.gov/ls/fa/sf/schoolsiteguide.asp (accessed May 21, 2019)

- Aboveground Petroleum Storage Tank
- California Accidental Release Prevention

OCFA is the administering agency for the chemical inventory and business emergency plan regulations for the City. OCFA's disclosure activities are coordinated with the HCA. OCFA's Hazardous Materials Services Section (HMSS) is staffed with technical and administrative personnel who are assigned implementation and management of the disclosure program.

Orange County Hazardous Materials Area Plan (Hazardous Materials Area Plan). The Hazardous Materials Area Plan was prepared by the OCFA to assist agencies and businesses in Orange County in their pre-emergency planning and emergency response role. The Hazardous Materials Area Plan also serves to provide the public with information about facilities that may pose a threat or potential hazard to the community health and safety. Furthermore, this plan is designed to assist in the prevention or mitigation of the damage to the health and safety of persons and the environment from the release or threatened release of hazardous materials into the workplace or environment. The jurisdictions covered by the Hazardous Materials Area Plan include the unincorporated areas of the Orange County, those cities contracted with the OCFA, and the City of Laguna Beach. Lake Forest is currently contracted to and served by the OCFA.

An objective of the Hazardous Materials Area Plan is to prescribe procedures for the effective and economical allocation of resources in time of hazardous materials emergency. This is done by establishing an emergency organization, assigning tasks, specifying policy and general procedures, and providing coordination of planning for all phases of emergency planning for a hazardous materials incident or emergency.

4.9.3.5 Local Regulations

City of Lake Forest Municipal Code. Chapter 6.16 of the City of Lake Forest Municipal Code addresses hazardous materials. [1]The intent of this chapter is to:

- Enable emergency service personnel in the City to know of the use and dangers of hazardous materials in the community in order to plan for and respond to potential emergencies and exposure to such materials;

- Provide basic information on the location, type, and health risks of hazardous materials used or stored in the City to firefighters, health officials, planners, elected officials, and other emergency response personnel; and

- Implement the community's right and need for basic information on the use and disposal of hazardous materials in the City and provide for an orderly system for the provision of such information.

City of Lake Forest Emergency Preparedness Plan. The City of Lake Forest Emergency Preparedness Plan was developed to: (a) help City staff determine the actions needed to prevent disasters where

[1] City of Lake Forest Municipal Code. Website: http://qcode.us/codes/lakeforest/ (accessed May 21, 2019).

possible; (b) reduce the vulnerability of residents to any disasters that cannot be prevented; (c) establish capabilities for protecting citizens from the effects of disasters; (d) respond effectively to the actual occurrence of disasters; and (e) provide for recovery in the aftermath of any emergency involving extensive damage or other debilitating influence on the normal pattern of life within the community.

Emergency response to accidents in Lake Forest that are associated with hazards and hazardous waste material is typically undertaken by the OCFA. In addition, the fire service in Orange County supports an effective system of mutual aid and automatic aid between neighboring jurisdictions for the sharing of common resources. However, depending on the situation and location of a hazardous waste incident, agencies other than the City and County Fire Departments would also help provide emergency response. The planning basis for response to a hazardous material incident in Lake Forest is the Orange County Hazardous Materials Area Plan, as described above.

The OCFA actively enforces codes and ordinances to ensure that a reasonable degree of fire safety exists in facilities and occupancies to minimize the threat to life and property. This activity is ongoing and conducted daily. Comprehensive pre-emergency planning, fire protection engineering, and training programs are currently in place and are designed to ensure the Department's ability to meet future service demands.

4.9.4 Methodology

The analysis in this section indicates whether potential hazards or hazardous materials impacts are present due to past or present use of the Project site and/or properties in the immediate vicinity of the Project site. This section analyzes the potential impacts of the proposed Project as compared to existing conditions based on the setting described in the technical reports listed in the first paragraph of this section.

4.9.5 Thresholds of Significance

The thresholds for hazards and hazardous materials impacts used in this analysis are consistent with Appendix G of the State CEQA Guidelines and the City's *CEQA Significance Thresholds Guide* (March 2009). The proposed Project may be deemed to have a significant impact with respect to hazards and hazardous materials if it would:

Threshold 4.9.1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Threshold 4.9.2: 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.

Threshold 4.9.3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Threshold 4.9.4: 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, it would create a significant hazard to the public or the environment.

Threshold 4.9.5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area.

Threshold 4.9.6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Threshold 4.9.7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

The Initial Study, included as Appendix A, substantiates that there would be no impacts associated with Thresholds 4.9.5 and 4.9.7; therefore, these thresholds will not be addressed in the following analysis.

4.9.6 Project Impacts

Threshold 4.9.1: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Potentially Significant Impact.

Construction. Construction of the proposed Project would temporarily increase the regional transport, use, and disposal of construction-related hazardous materials and petroleum products (e.g., diesel fuel, lubricants, paints and solvents, and cement products containing strong basic or acidic chemicals). These materials are commonly used at construction sites, and the construction activities would be required to comply with applicable State and federal regulations for proper transport, use, storage, and disposal of excess hazardous materials and hazardous construction waste. In addition, Regulatory Compliance Measures WQ-1 and WQ-4 (refer to Section 4.10 of this EIR) requires compliance with the waste discharge permit requirements to avoid potential impacts to water quality due to spills or runoff from hazardous materials used during construction.

Hazardous waste might also be generated during demolition, excavation, or other activities that require the removal of potential hazardous building materials (e.g., ACMs, lead-based paint, mercury, and PCBs) or unknown hazardous materials. The demolition of structures containing hazardous building materials requires specialized procedures and equipment and appropriately certified personnel. Procedures for handling and disposal of hazardous building materials is specified in Mitigation Measure 4.9.1, Demolition Plan. The plan will specify how to appropriately contain, remove, and dispose of hazardous building materials to protect human health and the environment. Any suspect hazardous materials unearthed during construction would require work be stopped as well as notification to OCFA for evaluation, which could

require testing, removal, and disposal at appropriate facilities in accordance with State and federal regulations. Procedures for handling suspect or unknown hazardous materials are specified in Mitigation Measure 4.9.2, Construction Contingency Plan. Therefore, with implementation of Mitigation Measures 4.9.1 and 4.9.2, impacts related to the routine transport, use, or disposal of hazardous materials during construction would be less than significant.

Operation. Operation and maintenance of the Project would involve transport, use, and disposal of small quantities of hazardous materials or wastes associated with routine maintenance of residential and school facilities. The City of Lake Forest, County of Orange, and contracted solid waste disposal providers are required to ensure that hazardous materials are disposed of at appropriate facilities. Provision of educational pamphlets and special pickups/disposal sites for household hazardous waste and electronic waste provided by these entities minimizes the potential for improper disposal of these substances. Therefore, impacts related to the routine transport, use, or disposal of hazardous materials during operation and maintenance would be less than significant, and no mitigation is required.

Threshold 4.9.2: Would the Project 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?

Potentially Significant Impact. Reasonably foreseeable upset and accident conditions have the potential to occur during demolition and excavation activities because of the amount of construction activity and ground disturbance. Residential and school development on the Project site would not result in substantial reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment because these land uses do not involve the use or handling of substantial quantities of hazardous materials or acutely hazardous materials.

As discussed in the Threshold 4.9.1 analysis, a Demolition Plan and procedures for handling unknown hazardous materials during construction are specified in Mitigation Measures 4.9.1 and 4.9.2, respectively. Therefore, with implementation of Mitigation Measures 4.9.1 and 4.9.2, impacts related to reasonably foreseeable upset and accident conditions would be less than significant with mitigation incorporated.

Threshold 4.9.3: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Potentially Significant Impact. As discussed in the Initial Study, as part of the Project, the Project Applicant/Developer would offer land to the Saddleback Valley Unified School District (SVUSD) for construction of an elementary school with a capacity of 1,000 students on the Project site. The elementary school would be located on the corner of Bake Parkway and Rancho Parkway, at the northwestern portion of the Project site. In addition, five other schools are within or just outside of a 0.5 mi radius of the Project site.

Construction. There is the potential for hazardous emissions during demolition and excavation activities as discussed in the Threshold 4.9.1 analysis. There is no plan to use acutely hazardous materials during construction or operation. As discussed in the Threshold 4.9.1 analysis, specific steps to comply with regulatory requirements for use, storage, and disposal of hazardous materials and waste would be addressed through implementation of a Demolition Plan and a Construction Contingency Plan during construction (Mitigation Measures 4.9.1 and 4.9.2, respectively). Therefore, with implementation of Mitigation Measures 4.9.1 and 4.9.2, impacts related to hazardous emissions or handling of hazardous materials during construction would be less than significant for the Project site and nearby schools.

Section 4.9.2 summarizes the findings of the Phase I and Phase II ESAs (Hillman Consulting 2018a,b) conducted on the site, which indicate there are potential hazardous building materials (e.g., ACMs, lead-based paint, mercury, PCBs) on the Project site that would need to be evaluated and removed prior to demolition (required by Mitigation Measure 4.9.1). However, there are no current RECs associated with the Project site. Therefore, the 2018 Phase I and Phase II ESAs did not identify any further investigation required for development of the Project site with residential structures.

Operation. As discussed in the Threshold 4.9.1 analysis, operation and maintenance of the Project site would involve the use and disposal of small quantities of hazardous materials or wastes associated with routine maintenance of residential and school facilities. Existing regulations and procedures are in place to minimize impacts related to use and disposal of household hazardous waste associated with the proposed facilities, and no mitigation is required.

However, as discussed in Section 4.9.3, there are State Education Code requirements related to the screening of future school sites for the presence of hazardous materials that must be overseen by the DTSC, and the DTSC must make a determination that “No Further Action” is required prior to approval of a site for school development that receives State funding. It is expected that the Saddleback Valley Unified School District would apply for State funding for the new elementary school.

In order to gain approval for development of a school at the Project site that would receive State funding, previous Phase I and II ESAs (Hillman Consulting 2018a, 2018b; ENGEO 2016) would need to be submitted to the DTSC for review, and the DTSC would determine whether or not additional sampling and analysis, preparation of a Preliminary Endangerment Assessment (PEA), site remediation, and public review of reports are required in order to obtain a finding of “No Further Action”. Mitigation Measure 4.9.3, DTSC Oversight of School Site, includes the outline of the process for a DTSC finding of “No Further Action”; therefore, with implementation of Mitigation Measure 4.9.3, impacts related to hazardous emissions or hazardous materials within 0.25 mi of a school would be less than significant.

Electromagnetic Field. As discussed in Section 4.9.2, there currently are SCE 66 kV double-circuit overhead transmission lines that are within a 20 ft wide SCE easement along the south side of Bake Parkway that run parallel to the northwestern boundary of the proposed school site. The

southern edge of the SCE easement would be the school's northwestern property line. As part of the Project, these 66 kV lines would be undergrounded prior to construction of the proposed school on the Project site. CCR, Title 5, Section 14010(c) specifies a distance setback requirement of 25 ft from 50 kV to 130 kV underground power lines for proposed school sites.

CDE allows an exemption to measure the setback distance from the centerline of the transmission line instead of the edge of the easement if it can reasonably be assumed that the utility would not place the utility line closer to the school site within the easement. Because the SCE easement is relatively narrow at this location (i.e., 20 ft wide), it is reasonable to assume that the undergrounded transmission lines would be placed in the center of the easement to maximize the space needed by SCE for future maintenance and repairs. Assuming the undergrounded lines are in the center of the SCE easement, the 25 ft setback zone would encroach 15 ft onto the northwestern portion of the school site.

The CDE Power Line Setback Exemption Guidance Policy requires an electromagnetic field (EMF) study and an exemption request to be prepared for limited activity uses (i.e., landscaping, parking lots, driveways) within any setback zone. SVUSD would prepare the final proposed school site plan and would be responsible for confirming that hardcourts and a grass playfield are not located within the setback zone. These uses are considered unrestricted uses, and CDE would require preparation of an EMF Management Plan for the school site if unrestricted uses (classrooms, athletic fields, and joint-use facilities) are proposed within the setback zone. Conformance with existing regulations and CDE requirements would ensure that impacts related to EMF would be less than significant. No mitigation is required.

Threshold 4.9.4: Would the Project 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, would it create a significant hazard to the public or the environment?

No Impact. The 2018 Phase I ESA (Hillman Consulting 2018b) determined the Project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and there are no current RECs associated with the Project site. Therefore, the Project site is not a hazardous materials site that would create a significant hazard to the public or the environment.

Threshold 4.9.6: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Potentially Significant Impact.

Construction. Development of the proposed Project would require excavation of the site; delivery of materials, equipment, and personnel; demolition of the 1,744-square-foot (sf) existing structure on the Project site; undergrounding of utilities; construction of the buildings; and installation of landscaping. The proposed Project would be implemented over an estimated period of 67 months (approximately 5.5 years). Demolition and site preparation would span approximately 3 months, and grading would span approximately 12 months. Paving and infrastructure would take approximately 4 months and 12 months, respectively, and would

occur concurrently. Building construction would be implemented over an estimated period of 46 months.

Construction activities have the potential to affect emergency access by requiring partial lane closures during street improvements and utility installation or by increasing emergency vehicle response times. Mitigation Measure 4.16.1 requires that a Construction Traffic Management Plan (CTMP) be prepared for the proposed Project to ensure that emergency vehicles would be able to navigate through streets adjacent to the Project site that may experience congestion due to construction activities. Mitigation Measure 4.16.1 also requires that all emergency access to the Project site and adjacent areas be kept clear and unobstructed during all phases of demolition and construction. Traffic management personnel (flag persons), required as part of the CTMP, would be trained to assist in emergency response by restricting or controlling the movement of traffic that could interfere with emergency vehicle access. If a partial street closure (i.e., a lane closure) would be required, notice would be provided to the Orange County Sheriff's Department, and flag persons would be used to facilitate the traffic flow until construction is complete. With implementation of Mitigation Measure 4.16.1, potential impacts related to emergency access during construction would be less than significant. No additional mitigation is required.

Operation. The proposed Project would take access from three existing intersections (one traffic signal on Bake Parkway, one unsignalized intersection on Bake Parkway, and one traffic signal on Rancho Parkway). The access analysis presented in the *Nakase Property Traffic Impact Analysis* (Urban Crossroads 2019c) demonstrates that each of these intersections is anticipated to operate at a satisfactory level of service (LOS). Existing routes for emergency vehicles would not be impeded by the Project, and emergency vehicles would have multiple routes to access the Project site. Further, as part of the Project approval process, emergency access to/from the site would be required to meet all applicable City codes and standards. OCFA approved a conceptual Fire Master Plan (refer to Figure 4.19.1) in February 2018, a conceptual Fire Protection Plan with Ember Mitigation (refer to Figure 4.19.2) in January 2018, and a conceptual Fuel Modification Plan (refer to Figure 4.19.3) in March 2018. The Fire Master Plan and Fire Protection Plan address specific fire prevention and access elements required by the City of Lake Forest Municipal Code and the California Building Code (CBC). The Fire Master Plan establishes the proper location and adequacy of fire suppression facilities as well as fire access routes on the Project site. The Fire Master Plan also identifies the locations of fire hydrants, a water supply for firefighting, and emergency access to residences and structures on the Project site. According to OCFA, adherence to the elements of the Fire Master Plan is directly correlated with the effectiveness of first responders, including fire and emergency medical personnel. The proposed Project meets or exceeds the requirements of OCFA to not hinder fire access and fire department and operations for the planned community. Further, OCFA actively enforces codes and ordinances to ensure a reasonable degree of fire safety exists in facilities and occupancies to minimize the threat to life and property. This activity is ongoing and conducted daily and would occur on the Project site during Project operation. Comprehensive pre-emergency planning, fire protection engineering, and training programs are currently in place and are designed to ensure the Department's ability to meet future service demands including service demands related to emergency response and emergency evacuation. Therefore, the proposed

Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, Impacts would be less than significant and no mitigation measures are required.

4.9.7 Cumulative Impacts

The hazardous materials study area considered for cumulative impacts consisted of the Project site and surrounding properties (i.e., structures and activities on these properties) that could directly or indirectly affect the presence or fate of hazardous materials on the Project site. In general, only projects occurring adjacent to or very close to the Project site are considered due to the limited potential impact area associated with release of hazardous materials into the environment.

In the existing condition, the Project site may contain hazardous building materials, but these materials would not present a hazard until they are disturbed, leaking, or are damaged. Mitigation Measure 4.9.1 addresses the procedures for handling and disposal of these materials prior to demolition activities. The 2018 Phase I ESA (Hillman Consulting 2018b) did not identify any current hazards associated with building materials on the Project site. In addition, the 2018 Phase I ESA did not identify any RECs for the Project site based on on-site or off-site conditions. For any site with previous commercial or industrial use, there is the potential for unknown hazardous materials to be encountered during excavation activities. Mitigation Measure 4.9.2 includes standard procedures to address handling and disposal of previously unknown hazardous materials encountered during excavation.

With the exception of hazardous materials transport, the proposed Project would not create potential significant cumulative impacts off site. Transport of hazardous materials is closely regulated and, with implementation of Mitigation Measures 4.9.1 through 4.9.3, would be adequately monitored to ensure there would be no significant impact to the environment or to human health. In addition, the California Department of Transportation (Caltrans), the California Highway Patrol, and local police and fire departments are trained in emergency response procedures for safely responding to accidental spills of hazardous substances on public roads, further reducing potential impacts.

The proposed Project would be required to comply with OCSD and OCFA requirements for emergency access and egress such that emergency response and evacuation would not be impaired.

For the reasons identified above, the proposed Project would not result in a significant contribution to cumulative hazards or hazardous materials impacts.

There are no known projects in the vicinity of the Project site that could be affected by on-site handling of hazardous materials or that could result in significant hazards or hazardous materials impacts at the Project site.

The transport of hazardous materials from and to the project site during construction and operation has the potential to combine with impacts from transport of hazardous materials from other projects in adjacent cities on the State highway system. However, the transport of hazardous materials is subject to strict regulations, and local and State agencies are trained in emergency

response procedures. Therefore, the temporary transport of existing hazardous materials and the future transport of household hazardous materials to and from the project site do not present a significant cumulative hazard.

For the reasons outlined above, implementation of the proposed Project would not result in a significant cumulative impact related to hazards and hazardous materials.

4.9.8 Level of Significance Prior to Mitigation

Potential impacts related to the routine transport, use, or disposal of hazardous materials and reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be potentially significant prior to implementation of mitigation measures. Similarly, potential impacts related to hazardous emissions and the handling of hazardous materials, substances, or waste within 0.25 mi of a proposed school would be significant prior to mitigation implementation. The Project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; therefore, no mitigation is required. Construction activities have the potential to affect emergency access by requiring partial lane closures during street improvements and utility installation or by increasing emergency vehicle response times; mitigation is required.

4.9.9 Mitigation Measures

Mitigation Measure 4.9.1: **Demolition Plan**. Prior to or concurrent with demolition permit applications, the Construction Contractor shall provide a Demolition Plan to the City of Lake Forest Director of Community Development or designee for review and approval. The Demolition Plan shall include the procedures for pre-demolition surveys and testing for hazardous building materials such as asbestos, lead-based paint, mercury, and polychlorinated biphenyls, and removal and disposal of hazardous building materials. All inspections, surveys, and analyses shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations. All identified hazardous materials shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures. The Construction Contractor shall provide documentation (e.g., all required waste manifests, sampling, and air monitoring analytical results) to the City of Lake Forest Director of Community Development or designee showing that abatement of hazardous building materials has been completed in full compliance with all applicable regulations. The City of Lake Forest Director of Community Development or designee shall document that the Demolition Plan has been approved prior to issuance of demolition permits and that the requirements of the Demolition Plan have been implemented prior to issuance of grading permits.

Mitigation Measure 4.9.2 **Construction Contingency Plan.** Prior to or concurrent with grading permit applications, the Construction Contractor shall provide a Construction Contingency Plan to the City of Lake Forest Director of Development Services or designee for review and approval. The Construction Contingency Plan shall include provisions for emergency response in the event that unidentified hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes are discovered during construction activities. The Construction Contingency Plan shall address field screening, contaminant materials testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers. The construction contractor shall implement the Construction Contingency Plan during all construction activities. During construction, the construction contractor shall cease work immediately if an unexpected release of hazardous substances is found in reportable quantities. If an unexpected release of hazardous substances is found in reportable quantities, the construction contractor shall notify the National Response Center by calling 1-800-424-8802. The Construction Contractor shall clean up any unexpected releases under appropriate federal, State, and local agency oversight. The City of Lake Forest Director of Community Development or designee shall document that the Construction Contingency Plan has been approved and that the requirements of the Construction Contingency Plan have been implemented prior to issuance of certificate of occupancy.

Mitigation Measure 4.9.3 **DTSC Oversight of School Site.** Prior to submittal of grading permits for the elementary school portion of the Project site, the Project Applicant shall provide documentation to the City of Lake Forest Director of Community Development or designee that the Department of Toxic Substances Control (DTSC) has issued a "No Further Action" letter for the school site. The steps that may be required in order to gain a "No Further Action" letter from DTSC could include: DTSC review of all Phase I and Phase II ESAs for the project site; soil and/or groundwater testing, health risk analysis, Preliminary Endangerment Assessment preparation and approval, site remediation/cleanup, and public review of prepared reports.

4.9.10 Level of Significance after Mitigation

All impacts would be less than significant after implementation of Mitigation Measures 4.9.1 through 4.9.3.

This page intentionally left blank