5.6 Hazards and Hazardous Materials

5.6.1 INTRODUCTION

This section considers the nature and range of foreseeable hazardous materials and physical hazards impacts that would result from implementation of the proposed Project. It identifies the ways that hazardous materials and other types of hazards could expose people and the environment to various health and safety risks during construction activities and operation of proposed Project.

This section also describes routine hazardous materials that are likely to be used, handled, or processed within the Project area, and the potential for upset and accident conditions in which hazardous materials could be released. The impact analysis identifies ways in which hazardous materials might be routinely used, stored, handled, processed, or transported, and evaluates the extent to which existing and future populations could be exposed to hazardous materials.

The term "hazardous material" is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.[1]

The analysis in this section is based on the following:

- *City of Santa Ana General Plan Update*
- *City of Santa Ana General Plan Update FEIR*
- *City of Santa Ana Municipal Code*
- *Phase I Environmental Site Assessment (Phase I)* (Appendix J)
- *Phase II ESA for the northern portion of the site (Phase II North)* (Appendix K1)
- *Phase II ESA for the southern portion of the site (Phase II South)* (Appendix K2)

5.6.2 REGULATORY SETTING

Hazardous Materials Management

The primary federal agencies responsible for hazardous materials management include the U.S. Environmental Protection Agency (USEPA) and the U.S. Department of Labor Occupational Safety and Health Administration (OSHA).

Resource Conservation and Recovery Act of 1976

Federal hazardous waste regulations are generally promulgated under the Resource Conservation and Recovery Act (RCRA). Pursuant to RCRA, the USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in a "cradle to grave" manner. RCRA was designed to protect human health and the environment, reduce/eliminate the generation of hazardous waste, and conserve energy and natural resources.

The Hazardous and Solid Waste Amendments of 1984 both expanded the scope of RCRA and increased the level of detail in many of its provisions, reaffirming the regulation from generation to disposal and to prohibiting the use of certain techniques for hazardous waste disposal. The USEPA has largely delegated

[1] State of California, Health and Safety Code, Chapter 6.95, Section 25501(o).

responsibility for implementing the RCRA program in California to the State, which implements this program through the California Hazardous Waste Control Law.

RCRA regulates landfill siting, design, operation, and closure (including identifying liner and capping requirements) for licensed landfills. In California, RCRA landfill requirements are delegated to the California Department of Resources Recycling and Recovery (CalRecycle), which is discussed in detail below.

RCRA allows the USEPA to oversee the closure and post-closure of landfills. Additionally, the Federal Safe Drinking Water Act, 40 CFR Part 141, gives the USEPA the power to establish water quality standards and beneficial uses for waters from below- or above-ground sources of contamination. For the Project area, water quality standards are administered by the Regional Water Quality Control Board (RWQCB).

RCRA also allows the USEPA to control risk to human health at contaminated sites. Vapor intrusion may present significant risk to human populations overlying contaminated soil and groundwater and is considered when conducting human health risk assessments and developing Remedial Action Objectives.

Occupational Safety and Health Act of 1970

Federal and state occupational health and safety regulations also contain provisions regarding hazardous waste management through the Occupational Safety and Health Act of 1970 (amended), which is implemented by OSHA. Title 29 of the Code of Federal Regulations (29 CFR) requires special training of handlers of hazardous materials; notification to employees who work in the vicinity of hazardous materials; acquisition from the manufacturer of material safety data sheets (MSDS), which describe the proper use of hazardous materials; and training of employees to remediate any hazardous material accidental releases. OSHA regulates administration of 29 CFR.

OSHA also establishes standards regarding safe exposure limits for chemicals to which construction workers may be exposed. Safety and Health Regulations for Construction (29 CFR Part 1926.65 Appendix C) contains requirements for construction activities, which include occupational health and environmental controls to protect worker health and safety. The guidelines describe the health and safety plan(s) that must be developed and implemented during construction, including associated training, protective equipment, evacuation plans, chains of command, and emergency response procedures.

Adherence to applicable hazard-specific OSHA standards is required to maintain worker safety. For example, methane is regulated by OSHA under 29 CFR Part 1910.146 with regard to worker exposure to a "hazardous atmosphere" within confined spaces where the presence of flammable gas vapor or mist is in excess of 10 percent of the lower explosive limit. Title 49 of the CFR governs the manufacture of packaging and transport containers, packing and repacking, labeling, and the marking of hazardous material transport. Title 42, Part 82 governs solid waste disposal and resource recovery.

Hazardous Materials Transportation Act

The transportation of hazardous materials is regulated by the Hazardous Materials Transportation Act (HMTA), which is administered by the Research and Special Programs Administration (RSPA) of the U.S. Department of Transportation (USDOT). The Hazardous Materials Transportation Act provides USDOT with a broad mandate to regulate the transport of hazardous materials, with the purpose of adequately protecting the nation against risk to life and property, which is inherent in the commercial transportation of hazardous materials. The HMTA governs the safe transportation of hazardous materials by all modes, excluding bulk transportation by water. The RSPA carries out these responsibilities by prescribing regulations and managing a user-funded grant program for planning and training grants for states and Indian tribes. USDOT regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, causes to be transported or shipped, or are involved in any way with the manufacture or testing of hazardous materials packaging or containers. USDOT regulations pertaining to the actual

movement govern every aspect of the movement, including packaging, handling, labeling, marking, placarding, operational standards, and highway routing. Additionally, USDOT is responsible for developing curriculum to train for emergency response and administers grants to states and Indian tribes for ensuring the proper training of emergency responders. Hazardous Materials Transportation Act was enacted in 1975 and was amended and reauthorized in 1990, 1994, and 2005.

Federal Regulation 49 Code of Federal Regulation Part 77

The Federal Aviation Agency (FAA) is the federal agency that identifies potential impacts related to air traffic and related safety hazards. The Federal Regulation 49 Code of Federal Regulation (CFR) Part 77 establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for:

- Evaluating the effect of the proposed construction or alteration on operating procedures,
- Determining the potential hazardous effect of the proposed construction on air
- navigation,
- Identifying mitigating measures to enhance safe air navigation, and
- Charting of new objects.

FAA Federal Aviation Regulations (FAR) Part 77 includes the establishment of imaginary surfaces (airspace that provides clearance of obstacles for runway operation) that allows the FAA to identify potential aeronautical hazards in advance, thus preventing or minimizing adverse impacts to the safe and efficient use of navigable airspace. The regulations identify three-dimensional imaginary surfaces through which no object should penetrate. The imaginary surface for SNA consists of a 100:1 slope extending outward for 20,000 feet from the nearest runway. Section 77.17 (Obstruction Standards) also states that an object would be an obstruction to air navigation if it is higher than 200 feet above ground level. Exceedance of 200 feet above ground level or the 100:1 imaginary surface requires notification to FAA (per FAR Part 77). An object that would be constructed or altered within the height restriction or imaginary surface area of the airport is not necessarily incompatible (ALUP 2008) but would be subject to FAA notification and an FAA aeronautical study to determine whether the proposed structures would constitute a hazard to air navigation.

Hazardous Materials Management and Waste Handling

In the regulation of hazardous waste management, California law often mirrors or is more stringent than federal law. The California Environmental Protection Agency (CalEPA) and California Occupational Safety and Health Administration (CalOSHA) are the primary state agencies responsible for hazardous materials management. Additionally, the California Emergency Management Agency (CalEMA) administers the California Accidental Release Prevention (CalARP) program. The California Department of Toxic Substances Control (DTSC), which is a branch of CalEPA, regulates the generation, transportation, treatment, storage, and disposal hazardous waste, as well as the investigation and remediation of hazardous waste sites. The California DTSC program incorporates the provisions of both federal (RCRA) and state hazardous waste laws.

Excavated soil containing hazardous substances and hazardous building materials would be classified as a hazardous waste if they exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity (CCR, Title 22, Division 4.5, Chapter 11, Article 3). State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws and regulations are overseen by a variety of state and local agencies. The California Integrated Waste Management Board and the RWQCB specifically address management of hazardous materials and waste handling in their adopted regulations (CCR, Title 14 and CCR, Title 27).

In Orange County (including the City of Santa Ana) the Orange County Health Care Agency Environmental Health Division is designated as the Certified Unified Program Agency (CUPA) responsible for implementing the following program elements:

- Hazardous Materials Disclosure Programs;
- Business Emergency Plans;
- Underground Storage Tanks;
- Hazardous Materials Release Response Plans and Inventory Program (Hazardous Materials Disclosure or "Community-Right-to Know");
- California Accidental Release Prevention Program (Cal ARP); and
- Uniform Fire Code Plans and Inventory Requirements.

The laws and regulations that established these programs require that businesses that use or store certain quantities of hazardous materials submit a Hazardous Materials Business Plan (HMBP) that describes the hazardous materials usage, storage, and disposal to the local oversight agency (CUPA).

Hazardous Waste Control Act

The Hazardous Waste Control Act was passed in 1972 and established the California Hazardous Waste Control Program within the Department of Health Services. California's hazardous waste regulatory effort became the model for the Federal Resource Conservation and Recovery Act (RCRA). California's program, however, was broader and more comprehensive than the federal system, regulating wastes and activities not covered by the federal program. California's Hazardous Waste Control Law was followed by emergency regulations in 1973 that clarified and defined the hazardous waste program, as follows:

- Included definitions of what was a waste and what was hazardous as well as what was necessary for appropriate handling, processing, and disposal of hazardous and extremely hazardous waste in a manner that would protect the public, livestock, and wildlife from hazards to health and safety.

- The early regulations also established a tracking system for the handling and transportation of hazardous waste from the point of waste generation to the point of ultimate disposition, as well as a system of fees to cover the costs of operating the hazardous waste management program.

- Advancing the newly developing awareness of hazardous waste management issues, the program established a technical reference center for public and private use dealing with all aspects of hazardous waste management.

California Government Code Section 65962.5 (a), Cortese List

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

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

The Department of Toxic Substances Control regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law. Both laws impose "cradle-to-grave" regulatory systems for handling hazardous waste in a manner that protects human

health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other Certified Unified Program Agencies.

Title 23, Division 3, Chapter 16 of the California Code of Regulations, Underground Storage Tank Regulations

The Title 23, Division 3, Chapter 16 regulations are intended to protect waters of the state from discharges of hazardous substances from underground storage tanks. These regulations establish construction requirements for new underground storage tanks; establish separate monitoring requirements for new and existing underground storage tanks; establish uniform requirements for unauthorized release reporting, and for repair, upgrade, and closure of underground storage tanks.

Title 27 of the California Code of Regulations, Solid Waste

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

California Human Health Screening Levels

The California Human Health Screening Levels (CHHSLs or "Chisels") are concentrations of 54 hazardous chemicals in soil or soil gas that CalEPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment on behalf of CalEPA. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the USEPA and CalEPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSL can be assumed to not pose a significant health risk to people who may live or work at the site. There are separate CHHSLs for residential and commercial/industrial sites.

Occupational Safety: Title 8 – CalOSHA

CalOSHA administers federal occupational safety requirements and additional state requirements in accordance with California Code of Regulations Title 8. CalOSHA requires preparation of an Injury and Illness Prevention Program (IIPP), which is an employee safety program of inspections, procedures to correct unsafe conditions, employee training, and occupational safety communication. This program is administered via inspections by the local CalOSHA enforcement unit.

CalOSHA regulates lead exposure during construction activities under CCR Title 8, Section 1532.1, Lead, which establishes the rules and procedures for conducting demolition and construction activities such that worker exposure to lead contamination is minimized or avoided.

Compliance with CalOSHA regulations and associated programs would be required for the proposed Project due to the potential hazards posed by onsite construction activities and contamination from former uses.

Hazardous Materials Business Plans

Article 1 of Chapter 6.95 of the California Health and Safety Code (Sections 25500–25520) requires that any business that handles, stores, or disposes of a hazardous substance at a given threshold quantity must prepare a hazardous materials business plan (HMBP). HMBPs are intended to minimize hazards to human health and the environment from fires, explosions, or an unplanned release of hazardous substances into air,

soil, or surface water. The HMBP must be carried out immediately whenever a fire, explosion, or unplanned chemical release occurs.

An HMBP includes three sections: (1) an inventory of hazardous materials, including a site map that details their location; (2) an emergency response plan; and (3) an employee-training program. HMBPs serve as an aid to employers and employees in managing emergencies at a given facility. They also help better prepare emergency response personnel for handling a wide range of emergencies that might occur at the facility.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government, and private agencies. The plan is administered by the California Emergency Management Agency and includes response to hazardous materials incidents. The California Emergency Management Agency coordinates the response of other agencies, including CalEPA, California Highway Patrol, California Department of Fish and Wildlife, Regional Water Quality Control Board, South Coast Air Quality Management District, County Fire Department, and the County Health Department.

South Coast Air Quality Management District Rule 1403

SCAQMD Rule 1403 governs the demolition of buildings containing asbestos materials. Rule 1403 specifies work practices to minimize asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of asbestos containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos containing materials removal procedures and time schedules, handling and cleanup procedures, storage, and disposal requirements for asbestos containing waste materials.

California Emergency Services Act

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

Emergency Response

The City of Santa Ana has its own Police Department and contracts with the Orange County Fire Authority (OCFA) for coordination of emergency response to the City. The Standardized Emergency Management System is required under Government Code Section 8607(a) for managing responses to multiagency and multi-jurisdiction emergencies in the State. The Standardized Emergency Management System was established to standardize key elements of the emergency management system, so that mobilization, deployment, utilization, tracking, and demobilization of mutual aid resources are implemented effectively. Mutual aid is voluntary aid and assistance by the provision of services and facilities, including fire, sheriff, medical, health, communication, transportation, and utilities.

California Public Utilities Code, Section 21676, Airport Land Use Commission

Prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the Airport Land Use Commission (ALUC), the local agency first refers the proposed action to the ALUC. If the ALUC determines that the proposed action is inconsistent with the Airport Land Use Plan, the referring agency is notified. The local agency may, after a public hearing, propose to overrule the ALUC by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article, which are to protect

public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

At least 45 days prior to the decision to overrule the ALUC, the local agency governing body must provide the ALUC a copy of the proposed decision and findings. The ALUC may provide comments to the local agency governing body within 30 days of receiving the proposed decision and findings. If the ALUC's comments are not available within this time limit, the local agency governing body may act without them. The comments by the ALUC are advisory to the local agency governing body. The local agency governing body shall include comments from the ALUC in the public record of any final decision to overrule the ALUC, which may only be adopted by a two-thirds vote of the governing body.

Airport Environs Land Use Plan for John Wayne Airport

SNA is within the oversight of the Orange County ALUC. The ALUC is required to prepare and adopt an airport land use plan for each of the airports within its jurisdiction. The ALUC prepared the Airport Environs Land Use Plan (AELUP) for SNA (amended April 17, 2008). The AELUP intends "to safeguard the general welfare of the inhabitants within the vicinity of the airport and to ensure the continued operation of the airport. Specifically, the plan seeks to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable airspace."

Land uses within the AELUP planning area boundaries are required to conform to safety, noise, and height restrictions. Public Utilities Code Section 21675(c) requires that area surrounding any airport which affects, or is affected by, aircraft operations be embraced by the boundaries of its compatibility plan (i.e., AELUP). The planning area sets limits of the area within which proposed land use projects are to be referred to the ALUC for review. Planning area boundaries are determined by the location and configuration of the airport included in the plan, and the extent of the noise and safety impacts associated with that airport, with certain exceptions. The overall planning area is the furthest extent of the 60 CNEL contour, the FAR Part 77 Notification Imaginary Surface area, and the runway safety zones associated with the airport. In most instances, the airport influence area is designated by the ALUC as its planning area boundary for the airport and the two terms can be considered synonymous.

Building Height Restrictions: The ALUC has adopted the FAR Part 77 as the criteria for determining height restrictions in Orange County. These regulations are the only definitive standard available and the standard most generally used (AELUP 2008). The allowable height of structures surrounding an airport is described in FAR Part 77 as the allowable height at which safe movement of aircraft occurs. The regulation requires that notice be given to the FAA if there is a proposal to construct a structure that would exceed a 100:1 slope of an imaginary surface extending outward for 20,000 feet from the nearest runway at SNA. Beyond the 100:1 imaginary surface, FAR Part 77 requires notification to FAA for any project that will be more than 200 feet in height above the ground level.

Policies: The following policies in the ALUC Airport Environs Land Use Plan are relevant to the proposed Project:

Policy 3.2.1: Within the boundaries of the AELUP, any land use may be found to be inconsistent with the AELUP which:

1. Places people so that they are affected adversely by aircraft noise,
2. Concentrates people in areas susceptible to aircraft accidents,
3. Permits structures of excessive height in areas which would affect adversely the continued operation of the airport, or
4. Permits activities or facilities that would affect adversely aeronautical operations.

Policy 3.2.4: Noise Impact Zone "2" - Moderate Noise Impact (60 dB CNEL or greater, less than 65 dB CNEL). Noise impacts in this area are sufficient to require sound attenuation as set forth in the California Noise Insulation Standards, Title 25, California Code of Regulations. Single noise events in this area create serious disturbances to many inhabitants. Even though the ALUC would not find residential units incompatible in this area, the ALUC strongly recommends that residential units be limited or excluded from this area unless sufficiently sound attenuated. The residential use interior sound attenuation requirement shall be a CNEL value not exceeding an interior level of 45 dB. In addition, it is recommended that designated outdoor common or recreational areas within Noise Impact Zone 2 provide outdoor signage informing the public of the presence of operating aircraft.

Policy 3.2.5: Runway Protection Zone "RPZ," Extreme Crash Hazard. The severe potential for loss of life and property due to accidents prohibits most land uses in this area. Only airport related uses and open space uses, including agriculture and certain types of transportation and utility uses are permitted. No buildings intended for human habitation are permitted in the RPZ. Furthermore, because of the proximity to aeronautical operations, uses in this area must not attract birds nor emit excessive glare or light, nor produce or cause steam, smoke, dust, or electronic interference so as to interfere with, or endanger, aeronautical operations.

Policy 3.2.6: Height Restriction Zone. Any object, which by reason of its height or location would interfere with the established, or planned, airport flight procedures, patterns, or navigational systems, is unacceptable. This will ensure the stability of local air transportation, as well as promote land uses that are compatible with the airport environs. However, any object which rises above the height of surrounding development, or which is located in close proximity to any of the various flight paths, must be clearly visible during hours of twilight or darkness and must not threaten, endanger, or interfere with aeronautical operations.

Policy 3.2.7: Airspace/Airport Inconsistency. Any structure, either within or outside of the planning area, is inconsistent with this AELUP if it:

1. Is determined to be a "Hazard" by the FAA;
2. Would raise the ceiling or visibility minimums at an airport for an existing or planned instrument procedure (i.e., a procedure consistent with the FAA approved airport layout plan or a proposed procedure formally on file with the FAA);
3. Would result in a loss in airport utility, e.g. in a diminution of the established operational efficiency and capacity of the airport, such as by causing the usable length of the runway (s) to be reduced; or
4. Would conflict with air space used for the airport traffic pattern or enroute navigation to and from the airport.

Policy 3.3.6: Condition which may serve to mitigate a project/action and thus may permit the ALUC to make a finding of consistency includes providing noticing that states:

> "Notice of Airport in Vicinity. This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you."

City of Santa Ana General Plan Update

The following goals and policies from the Santa Ana General Plan Update (GPU) are relevant to the proposed Project:

Community Element

POLICY CM-3.2 Continue to support the creation of healthy neighborhoods by addressing public safety, land use conflicts, hazardous soil contamination, incompatible uses, and maintaining building code standards.

Public Services Element

POLICY PS-2.2 Require all development to comply with the provisions of the most recently adopted fire and building codes and maintain an ongoing fire inspection program to reduce fire hazards.

Noise Element

GOAL N-3: Protect sensitive land uses from airport related noise impacts.

POLICY N-3.1: Residential development within the John Wayne Airport (SNA) 65 dB(A) CNEL Noise Contour or greater is not supported.

POLICY N-3.2: Advocate that future flight path selection be directed away from existing noise sensitive land uses.

POLICY N-3.3: Require all residential land uses in 60 dB(A) CNEL or 65 dB(A) CNEL Noise Contours to be sufficiently mitigated so as not to exceed an interior standard of 45 dB(A) CNEL.

Safety Element

GOAL S-2: Protect residents and environmental resources from contaminated hazardous material sites and minimize risks associated with the use, production, storage, transport, and disposal of hazardous materials.

POLICY S-2.4 Determine the presence of hazardous materials and/or waste contamination prior to approval of new uses and require that appropriate measures be taken to protect the health and safety of site users and the community.

POLICY S-3.2 Ensure that all new development abides by the current City and state seismic and geotechnical requirements and that projects located in areas with potential for geologic or seismic hazards prepare a hazards study.

GOAL S-4 Protect the safety of the general public from aircraft hazards.

POLICY S-4.1 For development projects that include structures higher than 200 feet above existing grade, the City shall inform the Airport Land Use Commission (ALUC) and submit materials to the ALUC for review. Proposed projects that would exceed a height of 200 feet above existing grade shall be required to file Form 7460-1 with the Federal Aviation Administration.

POLICY S-4.2 Do not approve buildings and structures that would penetrate Federal Aviation Regulation (FAR) Part 77 Imaginary Obstruction Surfaces, unless consistent with the California Public Utilities Code Section 21240, such building or structure is determined by FAA to pose "no hazard" to air aviation. Additionally, under this policy, applicants proposing buildings or structures that penetrate the 100:1 Notification Surface will be required to file a Form 7460-1 Notice of Proposed Construction or Alteration with FAA and provide a copy of the FAA determination to the City and the ALUC.

POLICY S-4.3 Minimize hazards to aeronautical operations by ensuring land uses do not emit excessive glare, light, steam, smoke, dust, or electronic interference in compliance with FAA regulations and the John Wayne Airport Environs Land Use Plan.

POLICY S-4.5 Prior to the amendment of the City's general plan or a specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the Airport Land Use Commission (ALUC), and pursuant to Public Utilities Code Section 21676, the City shall first refer the proposed action to the ALUC.

POLICY S-4.6 Provide notice of airport in the vicinity where residential development is being proposed within the 60 dBA CNEL noise contours for the John Wayne Airport.

5.6.3 ENVIRONMENTAL SETTING

The Project site was historically used for agriculture until the existing commercial buildings on the site were developed beginning in the early 1970s. The Project site is currently developed with 16 commercial structures that are used for restaurants, a supermarket, banks, a dry cleaner facility, and a variety of other retail establishments that use and store a limited volume of hazardous materials. The Phase I Environmental Site Assessment (Appendix J) identified three Recognized Environmental Conditions (RECs) that include a dry-cleaning facility, a potential existing Underground Storage Tank (UST), and removal of contaminated soil in 1984 that is suspected to be associated with the removal of previous USTs (previous USTs were removed in 1984 but did not document contaminated soil). In addition, the Project site was known to previously include a gas station.

The Phase I Environmental Site Assessment also describes that gasoline-impacted groundwater has been documented at six LUST facilities adjacent to the site; one of which was listed as an open case. The Phase II Environmental Site Assessments (Appendix K1 and K2) conducted onsite soils, soil gas, and groundwater testing throughout the site, including next to the dry cleaner location. Groundwater levels ranged from 5.9 feet below the ground surface in the south-central (possibly perched groundwater) to 24.8 feet below the ground surface in the southwestern portion of the site.

The laboratory test results were compared to corresponding United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for residential use and Department of Substances Control Screening Levels (DTSC SLs) for residential use. The testing identified that onsite soil samples in portions of the Project site exceed residential screening levels and in some cases commercial screening levels for TPH-d, TPH-mo, and select semi-volatile organic compounds (SVOCs). The Phase II Environmental Site Assessments describe that the elevated concentrations are consistent with asphaltic material and are likely attributable to the asphalt parking lots on the site. In addition, soil that exhibited concentrations above residential screening levels and below commercial screening levels could be reused on the site as backfill material for non-residential and non-sensitive areas.

Soil gas samples exceeded conservative residential screening levels for benzene and tetrachloroethene (PCE). The Phase II Environmental Site Assessments describe that the elevated soil gas levels are based on a conservative attenuation factor (AF) of 0.03, which is an empirically derived AF provided as default by USEPA. However, DTSC has applied an AF of 0.001 for new residential construction, which these samples would meet. Thus, the onsite soil gas samples do not exceed the DTSC screening thresholds for new residential construction.

In addition, the Phase II Environmental Site Assessments groundwater testing identified Methyl tert-butyl ether (MTBE) that exceeded the corresponding Maximum Contaminant Level (MCL) in one sample located at the northeast corner of the Project site at approximately 23.2 feet below the ground surface, which is likely attributable to an offsite and upgradient LUST cleanup site, located northeast of the Project site. In addition, a groundwater sample from the southern central portion of the Project site identified a TPH-d concentration from an offsite source that exceeds the corresponding RSL for "tap water" (drinking water). Additional information regarding groundwater quality and related potential impacts is provided in Section 5.7, *Hydrology and Water Quality*.

Asbestos

Asbestos is a naturally occurring fibrous material that was used as a fireproofing and insulating agent in building construction before such uses were banned by the USEPA in the 1970s, although some nonfriable[2] use of asbestos in roofing materials still exists. The presence of asbestos can be found in materials such as ducting insulation, wallboard, shingles, ceiling tiles, floor tiles, insulation, plaster, floor backing, and many other building materials. The OSHA regulation 29 CFR 1926.1101 requires certain construction materials to be presumed to contain asbestos, for purposes of this regulation. All thermal system insulation, surfacing material, and asphalt/vinyl flooring that are present in a building constructed prior to 1981 and have not been appropriately tested are "presumed asbestos-containing material".

Asbestos and asbestos-containing materials (ACMs) are considered both a hazardous air pollutant and a human health hazard. The risk to human health is from inhalation of airborne asbestos, which commonly occurs when ACMs are disturbed during such activities as demolition and renovation. The buildings within the Project site were constructed between 1972 and 2004; of which nine were constructed in the 1970's when asbestos containing materials were commonly used. The Phase I identified through record searches that three structures on the Project site (3600, 3820, and 3900 South Bristol Street) have previously disposed of ACMs, and that the disposal quantities (less than 2.5 tons) suggest that the waste was associated with remodels and not complete demolition. Therefore, it is anticipated that some of the existing buildings on the Project site contain ACMs.

Lead

In 1978, the Consumer Product Safety Commission set the allowable lead levels in paint at 0.06 percent by weight in a dry film of newly applied paint. In the 1970s, the chief concern for lead-based paint was its cumulative effect on body systems, primarily when paint chips containing lead were ingested by children. Research in the early 1980s showed that lead dust is of special concern because the smaller particles are more easily absorbed by the body. Common methods of paint removal, such as sanding, scraping, and burning, create excessive amounts of dust. Lead dust is especially hazardous to young children because they play on the floor and engage in a great deal of hand-to-mouth activity, increasing their potential for exposure. Due to the age of the onsite buildings, it is possible that lead-based paint and other lead containing materials are present in some of the buildings on the Project site. The testing showed that the remainder of the constituents were below residential screening levels and/or background concentrations.

[2] Nonfriable asbestos refers to ACMs that contain asbestos fibers in a solid matrix that does not allow for them to be easily released.

John Wayne Airport

John Wayne Airport (SNA) is located approximately 1.4 miles southeast of the Project site, which is to the west of the primary aircraft approach corridor. The Project site is not located within SNA's Airport Safety Zone (shown on Figure 5.6-1). In addition, the Project site is located outside of both the airport's planned and actual (2019) 60 CNEL contours (Figures 5.6-2 and 5.6-3).

However, the Project site is located within the AELUP Notification area for SNA and the FAR Part 77 Notification Imaginary Surface area (shown on Figure 5.6-4). The ALUC has adopted FAR Part 77 as the criteria for determining height restrictions in Orange County. FAR Part 77 requires notification to FAA for any project that would be more than 200 feet in height above ground level or within the imaginary surface of a 100:1 slope extending outward for 20,000 feet from the nearest runway. As shown on Figure 5.6-4, the Project site is located within the 200-foot-high imaginary surface area for SNA. Therefore, FAA notification for the proposed Project would be required.

Because the Project site is located within the AELUP Notification area for SNA and within the SNA planning area boundary, and the Project proposes a Specific Plan and a zone change, the City is required to refer the proposed Project to the ALUC for review, pursuant to the California Public Utilities Code Section 21676, as listed previously.

5.6.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a project could have a significant effect if it were to:

HAZ-1 Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;

HAZ-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment;

HAZ-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within 0.25 mile of an existing or proposed school;

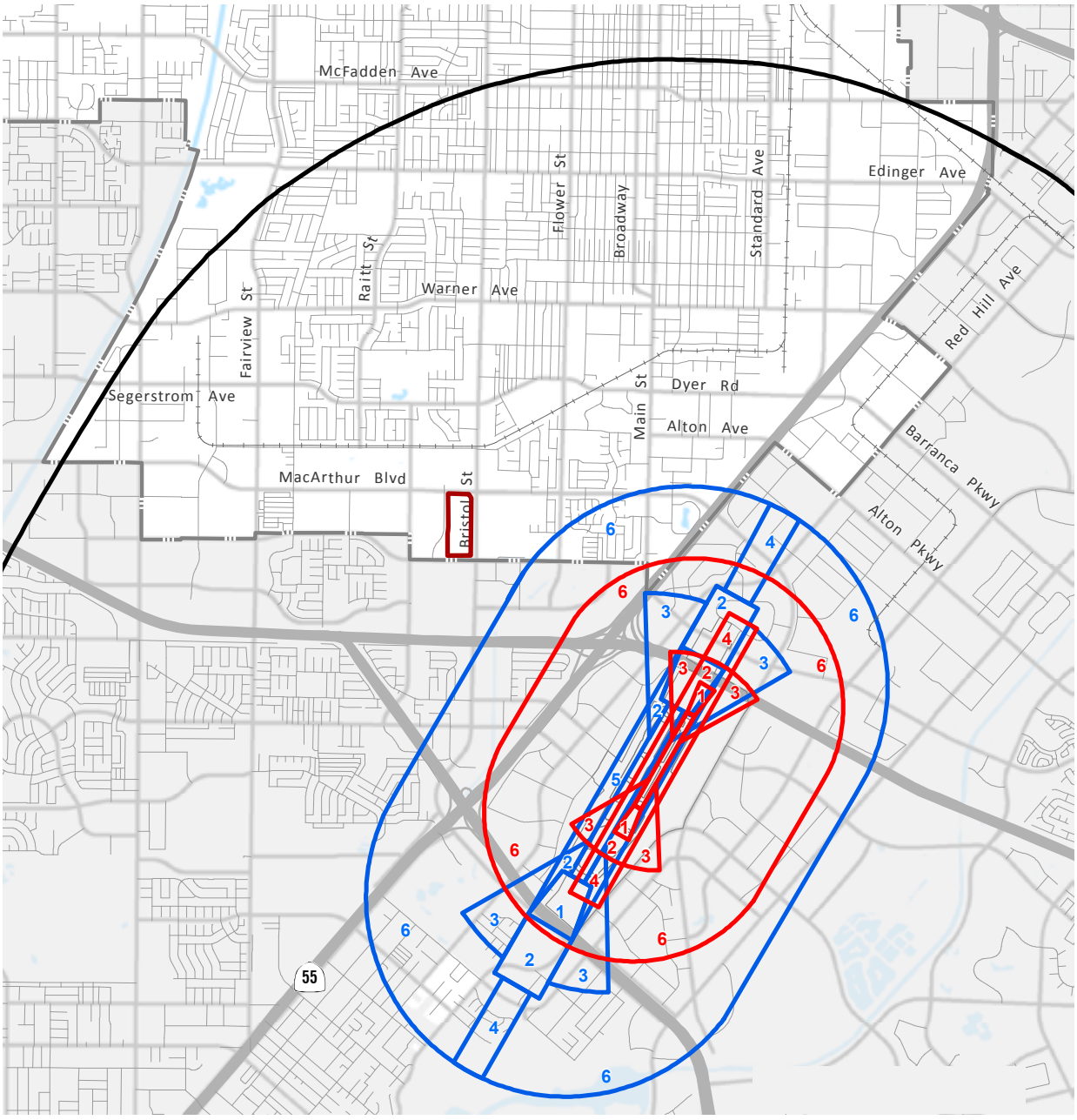
HAZ-4 Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;

HAZ-5 Result in a safety hazard or excessive noise for people residing or working in the project area for a project located within an airport land use plan or, where such plan has not been adopted, be within 2 miles of a public airport use airport or public use airport;

HAZ-6 Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; or

HAZ-7 Expose people or structures either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires.

Airport Safety Zones



1. Runway Protection Zone
2. Inner Approach/Departure Zone
3. Inner Turning Zone
4. Outer Approach/Departure Zone
5. Sideline Zone
6. Traffic Pattern Zone

1-6 Medium General Aviation Runway Safety Compatibility Zones for Runway 1L & 19R

1-6 Short General Aviation Runway Safety Compatibility Zones for Runway 1L & 19R

FAR Part 77 Notification Area

Project Site

N

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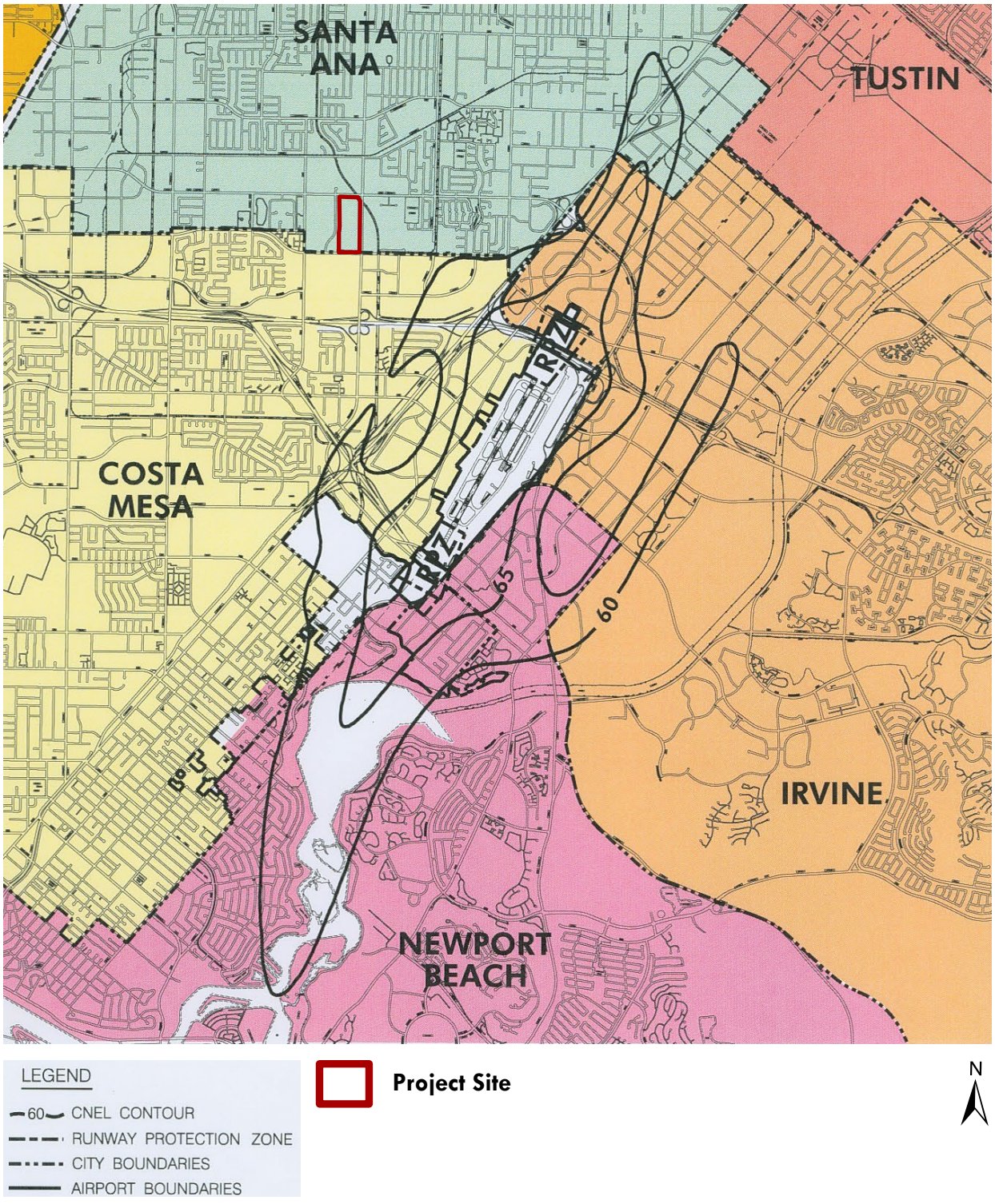
John Wayne Airport Noise Impact Zones



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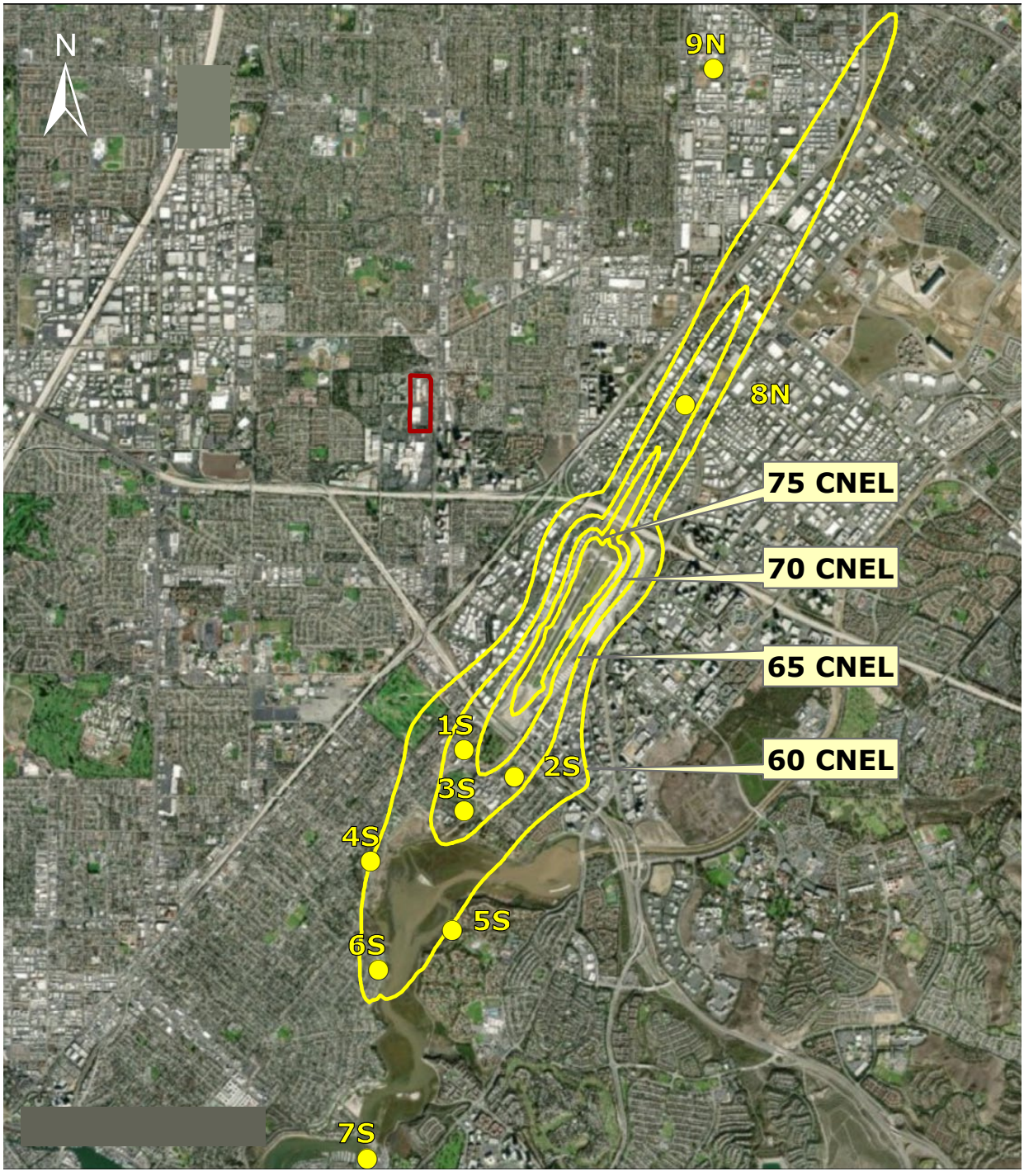
John Wayne Airport 2019 Noise Contours



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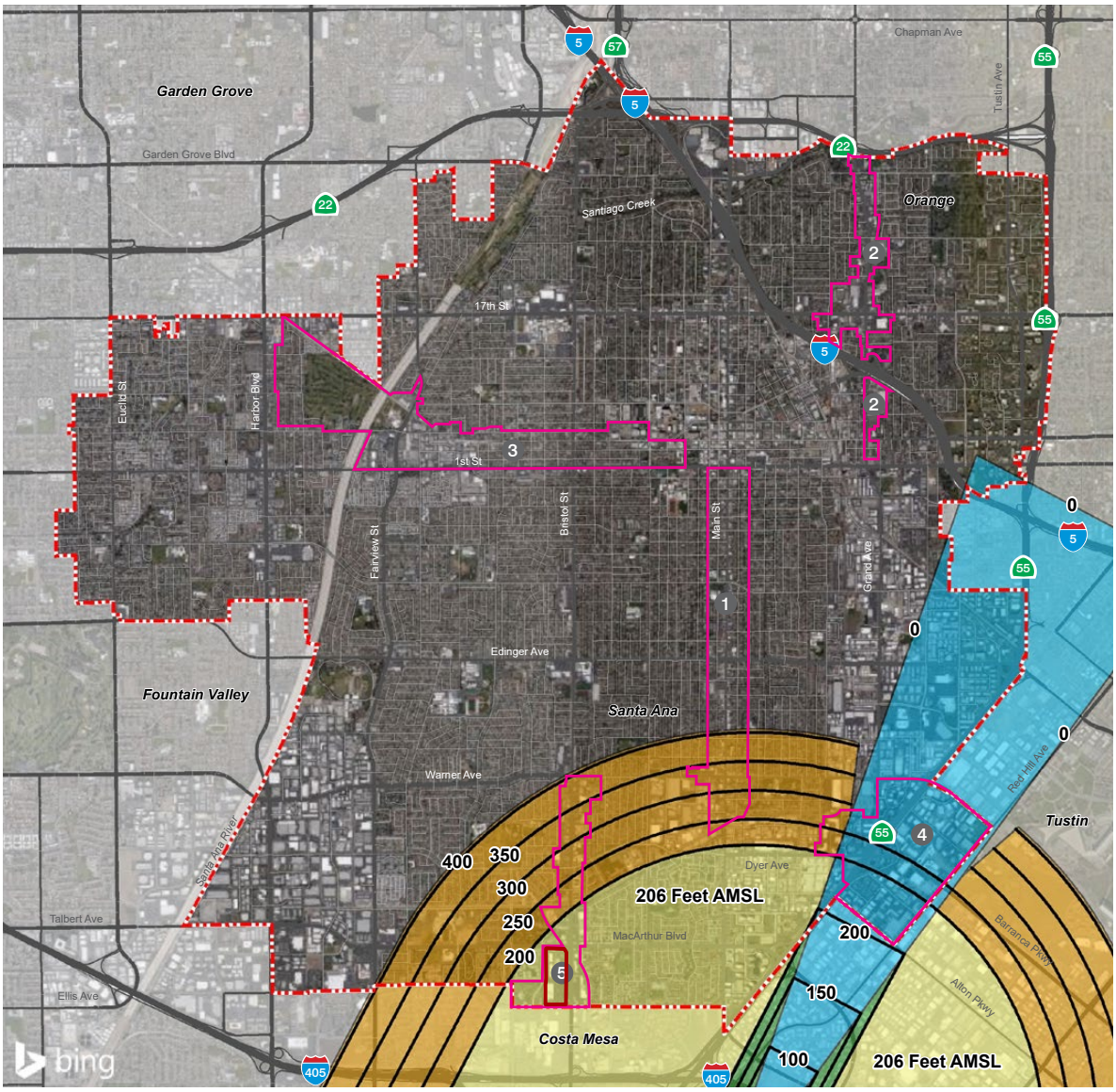
FAR Part 77 Airport Surfaces



Project Site

N

City of Santa Ana

Elevation Contours in feet above mean sea level (AMSL)

Airport Surfaces

- Horizontal Surface - Elevation 206 Feet AMSL
- Departure Surface - Slope 50:1 (Horizontal:Vertical)
- Transitional Surface - Slope 7:1 (Horizontal:Vertical)
- Conical Surface - Slope 20:1 (Horizontal:Vertical)
- Runway - Elevation 54 Feet AMSL

Focus Areas

1. South Main Street
2. Grand Ave/17th Street
3. West Santa Ana Boulevard
4. 55 Fry/Dyer Road
5. South Bristol Street

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5.6.5 METHODOLOGY

This evaluation of the significance of potential impacts related to hazards and hazardous materials considers both direct effects to the resource and indirect effects in a local or regional context. Potentially significant impacts would generally result in the loss or degradation of public health and safety or conflict with local, state, or federal agency regulations. Information for this section was obtained, in part, from the General Plan and GPU FEIR, and the Phase I and Phase II Environmental Site Assessments.

The methodology for the evaluation of potential Project impacts related to the operation of SNA focuses on potential hazards associated with development of structures on the Project site and ongoing operation of SNA. The proposed Project was evaluated for compliance with existing FAA guidelines and regulations related to siting structures near an operating airport and consistency with the policies of the AELUP for SNA that are related to implementation of the proposed Project.

5.6.6 ENVIRONMENTAL IMPACTS

Summary of Impacts Identified in the GPU FEIR

The GPU FEIR addressed impacts related to hazards and hazardous materials in Chapter 5.8. The GPU FEIR discusses that construction and operations under the GPU would involve the transport, use, and/or disposal of hazardous materials; however, compliance with existing regulations would ensure that construction workers and the general public are not exposed to any risks related to hazardous materials during demolition and construction. Furthermore, the GPU FEIR describes that strict adherence to all emergency response plan requirements set by the OCFA would be required. The GPU buildout is expected to result in an increase in the number of hazardous waste generators; however, the GPU FEIR determined that hazardous wastes would be stored, transported, and disposed of in conformance with existing regulations of the USEPA, USDOT, CalRecycle, and other agencies. Use, storage, transport, and disposal of hazardous materials in conformance with regulations would reduce both the likelihood of an accidental release and the potential consequences in the event of an accidental release.

The GPU FEIR describes that the City includes sites on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 that could create a significant hazard to the public or the environment. Any development, redevelopment, or reuse on or next to any of these sites would require an environmental site assessment by a qualified environmental professional to ensure that the project would not disturb hazardous materials on any of the hazardous materials sites or plumes of hazardous materials diffusing from one of the hazardous materials sites, and that any proposed development, redevelopment, or reuse would not create a substantial hazard to the public or the environment.

The GPU FEIR also describes that Santa Ana is in the vicinity of an airport or within the jurisdiction of an airport land use plan. Projects approved under the GPU would be required to comply with FAA airspace protection regulations using the AELUP consistency determination process. The GPU FEIR determined that buildout of the GPU would not result in substantial changes to the circulation patterns or emergency access routes and would not block or otherwise interfere with use of evacuation routes. Buildout would not interfere with operation of the City's Emergency Operations Center and would not interfere with operations of emergency response agencies or with coordination and cooperation between such agencies.

Santa Ana is not in a designated fire hazard zone, and the GPU FEIR determined that implementation of the GPU would not expose structures and/or residences to wildland fire danger.

Proposed Specific Plan Project

IMPACT HAZ-1: THE PROJECT WOULD NOT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE OR DISPOSAL OF HAZARDOUS MATERIALS.

Less than Significant Impact with Mitigation Incorporated.

Construction

The proposed construction activities, as detailed in Chapter 3.0, *Project Description*, would involve the routine transport, use, and disposal of hazardous materials such as paints, solvents, oils, grease, and caulking during construction activities. In addition, hazardous materials would routinely be needed for fueling and servicing construction equipment on the site. These types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by federal and state regulations that are implemented by the City of Santa Ana during building permitting for construction activities. As a result, hazardous material impacts related to construction materials would be less than significant.

The Phase I Environmental Site Assessment determined that ACMs and lead-based paint may exist due to the date of construction of the existing buildings. Therefore, asbestos surveys and abatement of ACMs and lead-based paint would be required prior to demolition or renovation of the existing building pursuant to the existing SCAQMD Rule 1403, CalOSHA, and the sections of the California Health and Safety Code, which are described above in the Regulatory Setting. These requirements were developed to protect human health and the environment from the hazards associated with exposure to lead based materials and airborne asbestos fibers. Compliance with these existing regulations, as ensured through the permitting process and included as PPP HAZ-1 and PPP HAZ-2, would reduce impacts related to routine transport and disposal of ACMs and lead-based paint during construction activities to a less than significant level.

In addition, as described in the Phase II Environmental Site Assessments (Appendix K1 and Appendix K2), soil within portions of the Project site exhibits concentrations of TPH-d, TPH-mo, and select SVOCs that exceed residential screening levels. The Phase II Environmental Site Assessments describe that soils with concentrations above residential screening levels and below commercial screening levels could be reused onsite as backfill material for non-residential and non-sensitive areas. However, soils that exceed both residential and commercial screening levels would need to be excavated and removed during Project excavation and grading activities as required by regulation and, as applicable, DTSC, California Integrated Waste Management Board, and/or the RWQCB.

As a result, Mitigation Measure HAZ-1 would be implemented to reduce the potential risks related to accidental release and exposure of people and the environment to the contaminated soils. Mitigation Measure HAZ-1 requires that a qualified consultant prepare and implement a Soil Management Plan (SMP) to be used during earthwork and grading to identify soils that cannot be reused onsite and offsite disposal. Mitigation Measure HAZ-1 requires handling of contaminated soils be conducted pursuant to existing DTSC standards, soil sampling to ensure non-reusable contaminated soils are removed and that applicable USEPA and/or DTSC Screening Levels are not exceeded, and that a certified hazardous waste hauler remove and transport all hazardous materials, as needed, per California Hazardous Waste Regulations to a landfill permitted by the state to accept hazardous materials. Excavated soil containing hazardous substances would be classified as a hazardous waste if they exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity (CCR, Title 22, Division 4.5, Chapter 11, Article 3). The SMP would detail hazardous materials excavation and disposal methods and requirements pursuant to the regulation of Title 8 of the California Code of Regulations (CalOSHA) and DTSC that regulates the removal, transportation, and disposal of hazardous waste to protect human health and the environment. With implementation of Mitigation Measure HAZ-1, impacts related to hazards from routine transport, use, or disposal of contaminated soils would be less than significant.

Operation

Operation of the proposed Project includes activities related to retail/service commercial, hotel, restaurant, senior continuum care, and multi-family residential development, which generally uses common hazardous materials, including: solvents, cleaning agents, paints, pesticides, batteries, and aerosol cans. Although the proposed Project would utilize common types of hazardous materials, normal routine use of these products pursuant to existing regulations would not result in a significant hazard to the environment, residents, or workers in the vicinity of the proposed Project. Therefore, operational impacts related to routine transport, use, and disposal of hazardous materials during operation of the proposed Project would be less than significant.

IMPACT HAZ-2: THE PROJECT WOULD NOT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET OR ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT.

Less than Significant Impact with Mitigation Incorporated.

Construction

Accidental Releases. While the routine use, storage, transport, and disposal of hazardous materials in accordance with applicable regulations during demolition, excavation, grading, and construction activities would not pose health risks or result in significant impacts; improper use, storage, transportation and disposal of hazardous materials and wastes could result in accidental spills or releases, posing health risks to workers, the public, and the environment. Thus, implementation of the proposed Project could potentially result in the accidental release of hazardous materials. The use of best management practices (BMPs) during construction implemented as part of a Stormwater Pollution Prevention Plan (SWPPP) as required by the National Pollution Discharge Elimination System General Construction Permit (and included as PPP WQ-1) would minimize potential adverse effects to workers, the public, and the environment. Construction contract specifications would include strict onsite handling rules and BMPs that include, but are not limited to:

- Establishing a dedicated area for fuel storage and refueling activities that includes secondary containment protection measures and spill control supplies;
- Following manufacturers' recommendations on the use, storage, and disposal of chemical products used in construction;
- Avoiding overtopping construction equipment fuel tanks;
- Properly containing and removing grease and oils during routine maintenance of equipment; and
- Properly disposing of discarded containers of fuels and other chemicals.

Contaminated Soils. As described previously, portions of the Project site contain soil that could be reused onsite as backfill material for non-residential and non-sensitive use areas. Soils that exceed applicable USEPA and/or DTSC Screening Levels would be excavated and removed during Project excavation and grading activities. As a result, Mitigation Measure HAZ-1 is included to require a Soil Management Plan (SMP) be implemented during earthwork and grading to remove and dispose of impacted soils. Mitigation Measure HAZ-1 requires handling of contaminated soils be completed pursuant to existing DTSC and RWQCB standards, soils sampling to ensure contaminated soils are removed, and that a certified hazardous waste hauler remove and transport hazardous materials per California Hazardous Waste Regulations to a landfill permitted by the state to accept hazardous materials. With implementation of Mitigation Measure HAZ-1 impacts related to hazards from contaminated soils would be less than significant.

The Phase I Environmental Site Assessment identifies a potential existing UST on the site. As detailed by the GPU FEIR (RR HAZ-3), UST removals would be conducted in accordance with the California UST Regulations (Title 23, Chapter 16 of the California Code of Regulations), which would be verified through the City's development and construction permitting processes. Any unauthorized release of hazardous materials would require release reporting, initial abatement, and corrective actions that would be completed with oversight from the RWQCB, DTSC, Orange County Health Care Agency Environmental Health Division, and/or SCAQMD. With implementation of existing regulations that would be verified through the City's permitting process and implementation of Mitigation Measures HAZ-1, potential impacts related to contaminated soils would be less than significant.

Asbestos Containing Materials. Buildings on the Project site were constructed in the 1970s when many structures were constructed with what are now recognized as hazardous building materials, such as lead and asbestos. Demolition of these structures could result in the release of hazardous materials. However, asbestos abatement contractors must follow state regulations contained in California Code of Regulations Sections 1529, and 341.6 through 341.14 as implemented by SCAQMD Rule 1403 to ensure that asbestos removed during demolition or redevelopment of the existing buildings is transported and disposed of at an appropriate facility. The contractor and hauler of the material are required to file a Hazardous Waste Manifest which details the hauling of the material from the site and the disposal of it. Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition permit until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. These requirements are included as PPP HAZ-1 to ensure that the Project applicant submits verification to the City that the appropriate activities related to asbestos have occurred, which would reduce the potential of impacts related to asbestos to a less than significant level.

Lead Based Materials. Lead-based materials may also be located within existing structures on the Project site. The lead exposure guidelines provided by the U.S. Department of Housing and Urban Development provide regulations related to the handling and disposal of lead-based products. Federal regulations to manage and control exposure to lead-based paint are described in Code of Federal Regulations Title 29, Section 1926.62, and state regulations related to lead are provided in the California Code of Regulations Title 8 Section 1532.1, as implemented by CalOSHA. These regulations cover the demolition, removal, cleanup, transportation, storage and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, monitoring, and compliance to ensure the safety of construction workers exposed to lead-based materials. CalOSHA's Lead in Construction Standard requires project applicants to develop and implement a lead compliance plan when lead-based paint would be disturbed during construction or demolition activities. The plan must describe activities that could emit lead, methods for complying with the standard, safe work practices, and a plan to protect workers from exposure to lead during construction activities. In addition, CalOSHA requires 24-hour notification if more than 100 SF of lead-based paint would be disturbed. These requirements are included as PPP HAZ-2 to ensure that the Project applicant submits verification to the City that the appropriate activities related to lead have occurred, which would reduce the potential of impacts related to lead-based materials to a less than significant level.

Undocumented Hazardous Materials. As described previously, the Project site has a history of various uses that include use and storage of hazardous materials, such as gas stations, vehicle service stations, and dry cleaners. As a result, there is the potential for undocumented hazardous material to exist on site. However, the existing federal and state regulations related to hazardous materials and construction includes procedures to follow in the case hazardous materials are uncovered during construction activities.

Excavated soil containing hazardous substances and hazardous building materials would be classified as a hazardous waste if they exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity (CCR, Title

22, Division 4.5, Chapter 11, Article 3). State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These regulations are detailed previously and include, but are not limited to, the Federal Resource Conservation and Recovery Act, the Occupational Safety and Health Act that is implemented by OSHA, and the Hazardous Materials Transportation Act. Additionally, the California Integrated Waste Management Board and the RWQCB specifically address management of hazardous materials and waste handling in their adopted regulations (CCR, Title 14 and CCR, Title 27). Furthermore, Mitigation Measure HAZ-1, specifically the preparations and implementation of a Soil Management Plan, would reduce impacts related to other soil contamination, not identified previously. Thus, with implementation of existing regulations and Mitigation Measure HAZ-1, impacts related to upset or accident conditions involving the release of hazardous materials into the environment would be less than significant.

Operation

As described above, the risks related to upset or accident conditions involving the release of hazardous materials into the environment would be adequately addressed through compliance with existing federal, state, and local regulations. Development under the proposed Project would involve multi-family, restaurant, and retail commercial uses that would use and store common hazardous materials such as paints, solvents, and cleaning products. Also, building mechanical systems and grounds and landscape maintenance could also use a variety of products formulated with hazardous materials, including fuels, cleaners, lubricants, adhesives, sealers, and pesticides/herbicides.

As described previously, normal routine use of these products pursuant to existing regulations would not result in a significant hazard to the environment, residents, or workers in the vicinity of the proposed Project. In addition, a Water Quality Management Plan (WQMP) is required to be implemented for the proposed Project (as further discussed in Section 5.7, *Hydrology and Water Quality* and included as PPP WQ-2). The BMPs that would be implemented as part of the WQMP would protect human health and the environment should any accidental spills or releases of hazardous materials occur during operation of the proposed Project. Mitigation Measure HAZ-1 requires implementation of a Soil Management Plan to ensure appropriate removal and handling of potentially hazardous materials that could be encountered during site excavation and grading. As a result, operation of the proposed Project would not result in 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, and impacts would be less than significant. Moreover, although impacts of the environment on a project do not require analysis or mitigation under CEQA and the proposed Project would not result in impacts on future users and residents, Mitigation Measure HAZ-2 is included and requires the Project applicant to conduct testing or design buildings to ensure that future users and residents of the proposed Project are not exposed to elevated levels of vapors.

IMPACT HAZ-3: THE PROJECT WOULD NOT EMIT HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES OR WASTE WITHIN 0.25 MILE OF AN EXISTING OR PROPOSED SCHOOL.

Less than Significant Impact. The Project site is located 0.5-mile west of the closest school, which is Taft Elementary School, located at 500 Keller Avenue, Santa Ana. Thus, the proposed Project would not be within one-quarter mile of an existing school.

Construction

As described in the previous responses, Project construction would involve the use and disposal of various hazardous materials. However, all storage, handling, use, and disposal of these materials are regulated by federal and state regulations that are implemented by the City of Santa Ana during construction permitting,

such as those included as PPP HAZ-1 and PPP HAZ-2. In addition, Mitigation Measure HAZ-1 would ensure that contaminated soils are not released into the environment, as described in Impact HAZ-1 and HAZ-2. Also, the hazardous materials would travel to and from the site from the I-405 freeway and South Bristol Street, which is not in the direction of the school facilities. The freeway is located to the south and the closest school is located to the east of the site. Thus, the hazardous materials handled during construction of the proposed Project would not travel past the school facilities and potential impacts to the schools related to transport of hazardous materials would not occur.

Operation

As described in response to Impact HAZ-1, operation of the proposed Project includes activities related to retail commercial, restaurant, and multi-family residential development, which generally uses common hazardous materials, including: solvents, cleaning agents, paints, pesticides, batteries, and aerosol cans. Normal routine use of these products pursuant to existing regulations would not result in a significant hazard to the environment or school facilities in the vicinity of the proposed Project. Therefore, operational impacts related to nearby schools would be less than significant.

IMPACT HAZ-4: THE PROJECT WOULD NOT BE LOCATED ON A SITE THAT 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.

No Impact. The Phase I Environmental Site Assessment that was conducted included database searches to determine if the Project area or any nearby properties are identified as currently having hazardous materials. The record searches determined that although the site has a history of various uses and identified as previously generating hazardous wastes and clean-up activities, the Project site is not located on or near by a site which is included on a Cortese List of hazardous materials sites pursuant to Government Code Section 65962.5 (Appendix J).

Also, although the Phase I Environmental Site Assessment (Appendix J) identified offsite sources of contamination, such as LUSTs, it did not identify any nearby or surrounding area sites that are included on a Cortese List of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As a result, impacts related to hazards from being located on or adjacent to a hazardous materials site would not occur from implementation of the proposed Project.

IMPACT HAZ-5: THE PROJECT WOULD NOT RESULT IN A SAFETY HAZARD OR EXCESSIVE NOISE FOR A PROJECT LOCATED WITHIN AN AIRPORT LAND USE PLAN, OR WHERE SUCH A PLAN HAS NOT BEEN ADOPTED, BE WITHIN 2 MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT.

Less than Significant Impact. As described previously, SNA is located approximately 1.4 miles southeast of the Project site, which is located to the west of the primary aircraft approach corridor. The Project site is not located within SNA's Airport Safety Zone and is located outside of the airport's 60 CNEL contours (Figures 5.6-2 and 5.6-3). Table 1 of the Airport Environs Land Use Plan for John Wayne Airport shows that residential land uses outside of the 60 CNEL contour are "normally consistent". However, the Project site is located within the AELUP Notification area for SNA and FAR Part 77 Notification Imaginary Surface area (shown on Figure 5.6-1).

The proposed Project involves redevelopment based ono the Specific Plan, which would allow up to 25-story buildings, consistent with the development assumptions set forth in the GPU. The tallest point on the buildings would be approximately 285 feet above the existing ground level, which is approximately 30 feet above sea level. Thus, the top of the tallest point on the buildings would be approximately 315 feet above sea level. Because the Project site is located 1.4 miles northwest of SNA and is not within the Airport's safety zone, the proposed Project would not result in a safety hazard. However, as shown on Figure 5.6-1, the Project site is located within the 200-foot-high imaginary surface area for SNA, and the proposed Project includes structures of 25-stories that would extend to approximately 315 feet above sea level. Therefore, FAA notification for the proposed Project is required.

As shown on Figure 5.6-3, the Project site is located outside of the actual (2019) SNA 60 CNEL noise contours, which indicates that noise from aircraft on the Project site is below 60 dB CNEL and is outside of the noise impact area related to SNA operations (also shown on Figure 5.6-2). Thus, impacts related to hazardous noise conditions from operation of SNA would be less than significant.

In addition, the proposed Project would not result in hazards related to excessive glare, light, steam, smoke, dust, or electronic interference. Exterior lighting fixtures and security lighting would be installed in accordance with Municipal Code Division 3, Building Security Regulations, which includes specifications for shielding and intensity of security lighting. In addition, the proposed Project would not use highly reflective surfaces, and does not include large areas of glass on the buildings, as shown in the Project elevations, included in Chapter 3.0, *Project Description*. Therefore, the proposed Project would not generate substantial sources of glare.

As described in Section 5.1, *Air Quality*, operation of the proposed residential and commercial uses would not generate substantial quantities of steam, smoke, or dust emissions. As described, dust emissions are regulated by SCAQMD requirements and construction related air quality emissions that could include steam, smoke, and dust emissions would be less than significant with implementation of the standard SCAQMD Rules listed in Section 5.1, *Air Quality*.

The proposed Project consists of residential and commercial uses that would include the use of typical electronics, such as computers, televisions, and other electronics with wireless capability. These types of electronics are currently being used by the existing industrial land uses on the site, and other uses in the vicinity of the site. The new residential and commercial uses on the site would use similar technology that does not cause electronic interference that could affect aircraft. Thus, impacts related to electronic interference with operations of the SNA would not occur.

Due to the nature of the required City approvals (i.e., the proposed Specific Plan and zoning amendment), the City of Santa Ana is required, pursuant to Public Utilities Code Section 21676, to refer the proposed Project to the ALUC for ALUC review. The proposed Project would comply with this ALUC notification and all other applicable rules and regulations as they pertain to SNA and airport safety. Overall, because the

proposed Project is not located within the SNA Airport Safety Zone or the SNA 60 CNEL noise contour; and it would not result in hazards related to excessive glare, light, steam, smoke, dust, or electronic interference, the proposed Project would not introduce a safety hazard associated with airport operations for people residing, working, and visiting the Project site. Thus, Project-related hazard and noise impacts associated with SNA operations would be less than significant.

IMPACT HAZ-6: THE PROJECT WOULD NOT IMPAIR IMPLEMENTATION OF, OR PHYSICALLY INTERFERE WITH, AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN.

Less than Significant Impact. The OCFA (via contract with the City) and the City of Santa Ana Police Department provide coordination of emergency response within the City.

Construction

The proposed construction activities, including equipment and supply staging and storage, would occur within the Project site and would not restrict access of emergency vehicles to the Project site or adjacent areas. As provided in the Project Description, construction of the proposed Project would be phased, and would concentrate construction within each phased area of the proposed Project, which would provide separation and or division between construction areas and operational areas and provide for emergency response to evacuation.

The proposed Project includes construction of new driveways to the Project site, new sidewalks, and utility improvements and connections that would require the temporary closure of travel lanes, but full roadway closure and traffic detours are not expected to be necessary. Construction activities that may temporarily restrict vehicular traffic would be required to implement adequate measures to facilitate the safe passage of persons and vehicles through/around any required temporary road restrictions in accordance with Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9), which requires that prior to any activity that would encroach into a right-of-way, the area of encroachment be safeguarded through the installation of safety devices that would be specified by the City's Building and Safety Division during the construction permitting process to ensure that construction activities would not physically interfere with emergency access or evacuation. Therefore, implementation of the proposed Project through the City's permitting process would reduce potential construction related physical interference impacts to emergency access to a less than significant level.

Operation

The proposed Project would include vehicular access to the site from driveways from adjacent existing roadways, many of which currently provide access to the site. As described in Section 5.13, *Transportation*, these driveways would provide adequate and safe circulation to, from, and through the Project site and would provide a variety of routes for emergency responders to access the Project site and surrounding areas.

During operation of the proposed Project, residents and commercial building tenants would be required to maintain adequate emergency access for emergency vehicles as required and verified by the City and the OCFA. Because the proposed Project is required to comply with all applicable City codes, as verified by the City and OCFA, potential impacts related to emergency evacuation or emergency response plans would be less than significant.

IMPACT HAZ-7: THE PROJECT WOULD NOT EXPOSE PEOPLE OR STRUCTURES EITHER DIRECTLY OR INDIRECTLY TO A SIGNIFICANT RISK OF LOSS, INJURY, OR DEATH INVOLVING WILDFIRES.

No Impact. The Project site is located within an urban developed area and is not located within an identified wildland fire hazard area and is not an area where residences are intermixed with wildlands. The City's GPU FEIR and the CalFire Orange County High Fire Hazard Severity Zones map shows that the site is not located within a fire hazard zone. In addition, implementation of the proposed Project would be required to adhere to the following chapters of the City's Municipal Code to reduce potential fire hazards: Chapter 8.2 Uniform Building Code, Chapter 8.4 Uniform Mechanical Code, Chapter 8.5 National Electric Code, and Chapter 14 City of Santa Ana Fire Code. Additionally, the proposed Project would be developed in compliance with any further guidelines from OCFA related to fire prevention and is subject to approval by the City's Building Division. Therefore, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death from wildfires.

5.6.7 CUMULATIVE IMPACTS

The proposed Project's contribution to cumulative impacts to hazards and hazardous was analyzed in context with past and foreseeably future projects in the City of Santa Ana and adjacent areas in Costa Mesa that are similarly affected by hazardous soil conditions, LUST conditions, asphalt contamination, and asbestos and lead containing building materials. Cumulative redevelopment and land use changes within the City would have the potential to expose future area residents, employees, and visitors to chemical hazards through redevelopment of sites and structures that may be contaminated from either historic or ongoing uses. The severity of potential hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. As shown on Figure 5-1, the closest cumulative development project is located across Bristol Street at the southeast corner of Bristol Street and MacArthur Boulevard, approximately 129 feet from the Project site. The cumulative project across Bristol Street is a renovation of the existing Chick-Fil-A restaurant and would not include extensive redevelopment of the area. It is unlikely that similar construction activities involving hazardous materials would occur simultaneously that could have the potential to cumulatively contribute to an impact. All hazardous materials users and transporters, as well as hazardous waste generators and disposers are subject to regulations that require proper transport, handling, use, storage, and disposal of such materials to ensure public safety, which are verified by the City during the construction and development permitting process. Thus, if hazardous materials are found to be present on present or future project sites appropriate remediation activities would be required pursuant to standard federal, state, and regional regulations. As detailed, Mitigation Measure HAZ-1 would be implemented to ensure that hazardous soil from the site would be handled and disposed of pursuant to existing regulations, which would reduce the potential of the proposed Project to result in a hazard that could cumulatively combine. Further, compliance with the relevant federal, state, and local regulations during the construction and operation of related projects would ensure that cumulative impacts from hazardous materials and emergency response/evacuation would be less than significant.

5.6.8 EXISTING STANDARD CONDITIONS AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

Federal

- United States Code of Federal Regulations Title 42, Sections 6901 et seq.: Resource Conservation and Recovery Act

- United States Code of Federal Regulations Title 42, Sections 11001 et seq.: Emergency Planning & Community Right to Know Act
- United States Code of Federal Regulations Title 49, Parts 101 et seq.: Regulations implementing the Hazardous Materials Transportation Act (United States Code of Federal Regulations Title 49 Sections 5101 et seq.)
- United States Code of Federal Regulations Title 15, Sections 2601 et seq.: Toxic Substances Control Act
- US Environmental Protection Agency Asbestos Hazard Emergency Response Act, 40 United States Code of Regulations Section 763

State

- California Occupational Safety and Health Administration Regulation 29, CFR Standard 1926.62
- California Code of Regulations Title 24, Part 2: California Building Code
- California Code of Regulations Title 24, Part 9: California Fire Code
- California Code of Regulations Title 8, Section 1532.1, Lead in Construction Standard
- California Code of Regulations Title 8, Section 1529: Asbestos
- Title 8 of the California Code of Regulations, Section 1532.1: Lead

Regional

- South Coast Air Quality Management District Rule 1403: Asbestos

Plans, Program and Policies (PPPs)

The following Plans, Programs, and Policies (PPP) related to hazards and hazardous materials are incorporated into the proposed Project and would reduce impacts related to hazards and hazardous materials. These actions will be included in the proposed Project's mitigation monitoring and reporting program (MMRP):

PPP HAZ-1: SCAQMD Rule 1403. Prior to issuance of demolition permits, the Project applicant shall submit verification to the City Building and Safety Division that an asbestos survey has been conducted at all existing buildings located on the Project site. If asbestos or asbestos containing material is found, the Project applicant shall follow all procedural requirements and regulations of the South Coast Air Quality Management District (SCAQMD) Rule 1403. Rule 1403 regulations require that the following actions be taken: notification of SCAQMD prior to construction activity, asbestos removal in accordance with prescribed procedures, placement of collected asbestos in leak-tight containers or wrapping, and proper disposal.

PPP HAZ-2: Lead. Prior to issuance of demolition permits, the Project applicant shall submit verification to the City Building and Safety Division that a lead-based paint survey has been conducted at all existing buildings located on the Project site. If lead-based paint is found, the Project applicant shall follow all procedural requirements and regulations for proper removal and disposal of the lead-based paint. CalOSHA has established limits of exposure to lead contained in dusts and fumes. Specifically, CCR Title 8, Section 1532.1 provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead.

PPP WQ-1: NPDES/SWPPP. Prior to issuance of any grading or demolition permits, the applicant shall provide the City Building and Safety Division evidence of compliance with the National Pollutant Discharge Elimination System (NPDES) requirement to obtain a construction permit from the State Water Resource Control Board (SWRCB). The permit requirement applies to grading and construction sites of one acre or larger. The Project applicant/proponent shall comply by submitting a Notice of Intent (NOI) and by

developing and implementing a Stormwater Pollution Prevention Plan (SWPPP) and a monitoring program and reporting plan for the construction site.

PPP WQ-3: WQMP. Prior to the approval of the Grading Plan and issuance of Grading Permits a completed Water Quality Management Plan (WQMP) shall be submitted to and approved by the City Building and Safety Division. The WQMP shall identify all Post-Construction, Site Design, Source Control, and Treatment Control Best Management Practices (BMPs) that will be incorporated into the development project in order to minimize the adverse effects on receiving waters.

5.6.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, Impacts HAZ-1 and HAZ-2 would be **potentially significant**:

Upon implementation of regulatory requirements Impacts HAZ-3, HAZ-4, HAZ-5, HAZ-6, and HAZ-7 would be either less than significant or have no potential impact.

5.6.10 MITIGATION MEASURES

GPU FEIR Mitigation Measures

No mitigation measures related to hazards and hazardous materials were included in the GPU FEIR.

Proposed Specific Plan Project Mitigation Measures

Mitigation Measure HAZ-1: Prior to issuance of a grading permit, a Soil Management Plan (SMP) shall be prepared by a qualified hazardous materials consultant and shall detail procedures and protocols for excavation and disposal of onsite hazardous materials, including:

- Any subsurface materials exposed during construction activities that appear potentially contaminated, based on either visual observation or suspect odors, shall be segregated, stockpiled, and tested for potential contamination. If contamination is found to be present per the California Department of Toxic Substances Control (DTSC) Environmental Screening Levels (ESLs) for the applicable use, and cannot be reused on the Project site, it shall be transported by a certified hazardous waste hauler to a landfill permitted by the state to accept hazardous materials and disposed of per California Hazardous Waste Regulations.
- A Health and Safety Plan (HASP) shall be prepared for each contractor that addresses potential safety and health hazards and includes the requirements and procedures for employee protection. The HASP shall also outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction.
- All SMP measures shall be printed on the construction documents, contracts, and project plans prior to issuance of grading permits.

Mitigation Measure HAZ-2: Prior to issuance of a building permit for a future building within the Specific Plan area, the Project applicant shall, at its election, undertake one of the following three activities: (1) perform a subsurface soil vapor assessment demonstrating that vapor concentrations are within established limits for vapor intrusion into future buildings; (2) prepare a human health risk assessment (HHRA) demonstrating that documented levels of soil vapor do not represent a significant health risk to occupants of the future buildings; or (3) submit plans for a vapor intrusion mitigation system (VIMS) to be installed beneath the foundation of the future buildings. The Project applicant may rely on different measures of the foregoing options in different parts of the Specific Plan area.

5.6.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measure and existing regulatory programs described previously would reduce potential impacts associated with hazardous materials for Impact HAZ-1 and HAZ-2 to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to hazards and hazardous materials would occur.

REFERENCES

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Phase I Environmental Site Assessment Report (Phase I). Revised April 2023. Prepared by ENGEO. (Appendix J)

Phase II Environmental Site Assessment Report (Phase II North). Revised April 2023. Prepared by ENGEO. (Appendix K1)

Phase II Environmental Site Assessment Report (Phase II South). Revised April 2023. Prepared by ENGEO. (Appendix K2)

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